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A STRATEGY FOR EVALUATING NEW CURRICULA:
A CASE STUDY OF THE OHIO ELEMENTARY
SCHOOL POLITICAL EDUCATION CURRICULUM
DEVELOPMENT PROJECT

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree of Doctor of Philosophy in the Graduate
School of The Ohio State University

By
Leigh R. Chiarelott, B.A., M.S. Ed.

The Ohio State University
1975

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To them I dedicate this study.

My wife Donna and my son Erik for their love and the many happy moments of the past two years.

My mother Dorothy and father Louis whose models I will seek to emulate.

To them I dedicate a life and a career.
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A. Introduction and Statement of the Problem

During the summer of 1974 this investigator had the opportunity to work as a research associate on a curriculum development project which was creating instructional materials for elementary schools in Ohio. This project, the Ohio Elementary School Political Education Project, had been established to develop a product significantly different from previous citizenship education materials for elementary schools.

As a research associate, he was placed in the position of being both within the project supplying ideas and information for lesson development, and outside the project in the sense that he was not personally tied to the underlying instructional and curriculum theory. In this role the investigator was able to act more nearly as a participant and an observer than anyone else in the Project. It is from a participant-observer's perspective, then, that this study was undertaken.

This is an unusual position from which to investigate and record the evaluation of a curriculum development project. Since this view of evaluation is virtually untried and untested, this study is clearly heuristic in nature. It is, at times, descriptive and at other times normative. This duality is one of the potential strengths of participant-observation in evaluation. The study by itself does not represent the totality of
evaluation. It does, however, attend to some important questions and issues raised by those who are thinking about evaluation theory in the 1970s. Its contribution to knowledge rests on this claim.

B. Participant-Observation Defined

To clarify what is meant by a participant-observer's role in evaluation, a brief explanation of the concept is needed. As defined by Severyn Bruyn, the concept "signifies the relation which the human observer of human beings cannot escape - having to participate in some fashion in the experience and action of those he observes."\(^1\) For purposes of the study, this definition is broadened to include the human observation of a process when the observer is a part of that process.

As a result of this stance, the study does not seek to generate a large body of quantifiable knowledge. Bruyn points out,

\[\ldots\] the participant observer would hold that not all knowledge need be quantified to be verifiable; knowledge may be acquired without resorting to rigorous controls over variables in the traditional sense; not all scientific knowledge ought to be reduced to stimulus-response or physical orientation; and in fact, not all knowledge significant to social research can or should be derived directly from the five senses.\(^2\)

When this concept is applied to evaluation, the result is both description and prescription; that is, a recording of events and concomitant value judgments. Initially, the participant observer seeks to "apprehend, register, interpret, and conceptualize the facts and meanings which he finds in a prescribed area of study."\(^3\) The intent of this recording is to "catch the process as it occurs in the experience"\(^4\) of the phenomenon he is studying. Later, these descriptions aid in judging the relative worth of the product that results from this process.
C. Purpose of the Study

The primary purpose of the study is to illustrate a manageable approach to evaluating a small-scale, relatively short term curriculum development project. The project under study displayed the following characteristics: (a) the development staff of three persons was relatively small by most standards; (b) the staff had one year to develop, review, test, and revise four units; and (c) the original State Department of Education grant of $45,000 made no allowance for evaluation activities.

D. Statement of Problem

In the 1960s the trend was toward large-scale, federally funded curriculum development projects. This trend caused Robert Stake to call for "new paradigms, new methods, and new findings . . . to help developers create new materials." However, in the 1970s because of a depressed funding economy, the predominant trend may be toward small scale projects which are funded from a variety of sources such as small private foundations, state departments of education and the like. This trend may cause evaluators to reappraise Stake's concern and result in the creation of approaches which are easily manageable for small scale projects.

The study reflects that concern and undertakes the task of designing an evaluation strategy as a model for future endeavors of a similar nature. To accomplish this goal, the study seeks to answer the following questions:

1. Will viewing a curriculum development project historically, analytically, and politically result in an evaluation strategy
which is viable for small scale projects?

(2) Are prevailing paradigms used in curriculum evaluation adaptable to this strategy or must the strategy incorporate selected components of these paradigms?

(3) Will an analysis of the materials through a series of appraisal techniques substantiate the developers' intended outcomes and thus justify the developers' "middle range" curriculum theorizing?

(4) Finally, what implications do these findings hold for subsequent development and evaluation activities of this project, in particular, and for curriculum development in general?

In short, this statement of the problem implies an underlying concern for linking (a) the important relationship of evaluation to the curriculum development process with (b) the need to establish linkages between curriculum theorizing and developmental activities.

Establishing Linkages

One of the most difficult tasks of a curriculum development project is the translation of abstract theories into a concrete product. One clear function of evaluation is to determine how well this has been accomplished. Unfortunately, in some cases (especially textbook series) the translation is not obvious. In other cases the theoretical underpinnings are at best implied. Faced with this highly exploratory task, there is little wonder why evaluators spend a great deal of time evaluating how well the lessons reflect the materials' behavioral objectives.

Fortunately, in the Ohio Elementary School Political Education Curriculum Project (Ohio Project), the developers outlined much of the
"middle range" curriculum theory through a series of position papers. The position papers served two functions: (1) they established the framework of the development project, and (2) they provided a view of thought in progress. That is, as the thinking became more crystallized, the linkage between general curriculum theorizing and developmental activities emerged.

This linkage can be represented in the following diagram:

Figure 1. Curriculum Development Linkages
The diagram above simply serves as a schema for viewing the remainder of the study. The components of each circle will be discussed in greater detail in Chapters II, III, and IV. Its purpose at this point is to serve as a referent for the reader as the remaining chapters are outlined.

E. Overview of the Dissertation

Chapter II traces the emergence of an Ohio Project evaluation strategy as recommended by the investigator. This strategy is based upon the information needs of the project and a review of salient evaluation models and strategies. Through the review of relevant evaluation literature, certain irreducible elements of evaluation design are identified. The explication of the suggested Ohio Project strategy illustrates how those elements might be viably incorporated into a strategy for a small-scale curriculum development project. The elements of the strategy which have already been applied are described. In addition, this limited strategy is extended by prescribing activities which might logically evolve from it.

Chapter III implements the first level of the evaluation strategy: a description of the product's historical and conceptual framework. The chapter begins with a history of the Ohio Project and then moves into an extensive investigation of the learning, instructional, and curriculum theories that underpin the project. This investigation describes how children learn about politics and how this natural phenomenon can be translated into structured classroom activities. In the translation process, the "middle range" curriculum theory which underlies the development process is presented including the primary assumptions, generalizations,
and content areas. This presentation of the conceptual framework follows Hilda Taba's model of curriculum product development.

In Chapter IV, the first unit of the curriculum materials is analyzed. This analysis suggests possible methods for collating the data received from critical appraisers, pilot teachers, and students. The analysis is both descriptive and judgmental as the ten lessons are first described based upon what the developers intended the learning outcomes to be, and then judged based upon what the evaluators perceived to be happening in the lessons. The review of the lessons demonstrates the interface between quantifiable perceptions and intuitive impressions.

Chapter V explores the concept of curriculum development as a political process and suggests a calculus for evaluating the political effects of curriculum adoption. The investigator illustrates how a small-scale project might evaluate key political actors' predispositions toward the materials and the effect of those predispositions upon curricular decision-making. The chapter concludes with a summary of the questions investigated and findings discovered in the study. The implications of these discoveries for curriculum development and evaluation design are also discussed.
FOOTNOTES


Chapter II

A STRATEGY FOR EVALUATING CURRICULUM

A. Introduction

In this chapter, the task is to create an evaluation strategy which meets two criteria:

(1) The strategy must meet the information needs of a small-scale development project of the type represented by the Ohio Project.

(2) The strategy must incorporate certain essential, irreducible elements of evaluation.

The task is accomplished by first describing the information needs of the project and then, after a review of relevant evaluation literature, presenting essential features which an evaluation strategy should incorporate.

In applying the strategy, the evaluator is faced with three problems. He must analyze and empirically evaluate the product. He must document, as a participant-observer, the development process's history and conceptual framework. Finally, as Hulda Grobman points out, "if the goal of the curriculum innovator is to change the face of education, he must know not only whether his materials are academically, educationally, and psychologically respectable and that some students can learn them from some teachers, but also whether they will be acceptable and are being accepted
by some or all school systems. In short, the evaluator appraises the product historically and conceptually, analytically, and politically.

An evaluation strategy which seeks to confront these problems incorporates a number of tactics. These tactics evolve from two primary sources: (1) the exploration of pertinent models and strategies which have already been employed in a variety of situations and under a variety of conditions; and (2) the evaluator's best sense of the limitations and constraints (financial and temporal), information needs, and potential audiences of the curriculum developers.

In the early stages, those primarily under scrutiny in this study, the evaluation is clearly heuristic. As the materials are being tested and revised, so are the evaluation tactics. For that reason, this study is, by its very nature, exploratory.

B. Information Needs and Constraints

A situation encountered early in the design of an evaluation strategy concerns the degree to which one limits the collection of data. In large part, the solution is dictated by the information needs and constraints of the project.

Primarily, the constraints evolve from the limitations of the project itself. For the Ohio Project, the constraints were temporal (information needed to be collected and interpreted within a six-week period), financial (there was virtually no funding earmarked for evaluation activities in the original grant), and physical (the three-member staff was involved in both developing and evaluating materials concurrently).

However, despite these constraints, the project needed essentially
the same type of evaluative information that a large-scale project would. Clearly, the suggested strategy had to identify that information which was most pertinent to the success of the materials. In effect, what information did the developers absolutely need to make changes in the product and decisions on future activities.

Briefly, the information needs included:

I. Conceptually
   A. Description of Project
   B. Description of Product
      1. Diagnosis of individual, societal and discipline needs
      2. Goals
      3. Content
      4. Learning experiences
      5. Methods of learner evaluation

II. Analytically
   A. Critical Appraisal
      1. By evaluator
      2. By expert consultants
      3. By teachers users
   B. Testing
      1. Reports from pilot teachers
      2. Interviews with selected student users
      3. Reports from field test teachers
      4. Interviews with selected student users

III. Politically
   A. Assessment of current curriculum policy
1. In field test sites
2. In selected districts
3. From key political decision-makers

B. Assessment of curriculum goals
1. In field test sites
2. In selected districts
3. From key political decision-makers

C. Assessment of value orientations
1. In field test sites
2. In selected districts
3. From key political decision-makers

Through the collection of limited, but essential information, the evaluator can meet the needs of the project in a manageable fashion.

C. Defining Evaluation

In the late 1950s, a new process—using the curriculum project—became an accepted medium for preparing classroom materials and for speeding up the innovative process in curriculum. Providing a major stimulus to the curriculum project movement was the granting of substantial federal funds by the NSF. These funds were earmarked for the preparation of materials to improve the teaching of high school mathematics and science. In 1956 the first such grant was given to PSSC, with grants to SMSG, CBA, BSCS, and CHEM Study following soon after. By the mid-1960s, the use of NSF monies was extended and other funds became available from U.S.O.E. Additional funding came from private foundations so that funding for curriculum projects covered virtually all subject
areas and grade levels. By 1967 there were over seventy such projects in science alone.²

The emergence of these large scale curriculum development projects accounts for two disparate events which occurred in the mid-1960s. These events provided the impetus for the design of new evaluation strategies which broke from the traditional evaluation models. The first of these was the release of two watershed publications: The AERA Monograph on Evaluation and the ASCD Yearbook Evaluation as Feedback and Guide. Both represented divergent points of view as to the roles and goals of evaluation and yet both helped shape subsequent thinking about evaluation. The second, and perhaps historically more significant, event was the passage of the Elementary and Secondary Education Act of 1965 (ESEA). Given the normal educational lag, by 1967 educational evaluators were quite concerned with the proviso that called for each project receiving federal money to be evaluated and that evaluation to be filed with the federal government.³

Thus, by 1967, defining evaluation had become a complex task. Early evaluation literature viewed the process of evaluation as synonymous with measurement. As the need for university accreditation developed, an evaluation model calling for the use of professional judgment emerged. Finally, as a result of the Eight Year Study, the Tylerian model of evaluation became the archetype for later curriculum development projects. This orientation defined evaluation as "the process of comparing performance data with clearly specified objectives."⁴

Current views of evaluation tend to center around evaluation as "the process of identifying and collecting information to assist decision
makers in choosing among available decision alternatives (Stake, Pross, Stufflebeam, etc.), and evaluation as a systematic process of obtaining judgments as to the merit or worth of an educational program (Scriven, Worthen and Sanders, etc.). While this second view would also include decision-making, it casts the evaluator into a more central role in the evaluation process. Rather than simply providing information to aid the developer in decision-making (as in Stufflebeam's CIPP model), the evaluator uses the information gathered to make judgments along with the developer as to the relative worth of each alternative.

Gene Glass adopts a similar tack in his summary of evaluation methodology. He identifies four models of educational evaluation, the Tylerian Model, the Accreditation Model, the Management-Systems Model, and the Summative-Composite Model, and defines them in the following way:

**The Tyler Model**

1. Formulates objectives (determines broad goals of the program).
2. Classifies objectives (develops a typology of objectives so an economy of thought and action may be achieved).
3. Defines objectives in behavioral terms (specifies exactly which behaviors will be elicited).
4. Suggests situations in which achievement of objectives will be shown.
5. Develops or selects appraisal techniques (standardized tests, ad hoc tests, questionnaires, etc.).

**The Accreditation Model**

1. Uses expert judgment on the worth of various components of an educational program.
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5. Develops or selects appraisal techniques (standardized tests, ad hoc tests, questionnaires, etc.).

**The Accreditation Model**

1. Uses expert judgment on the worth of various components of an educational program.
2. Is highly subjective although inter-judge agreement is sought.
3. Tends to be descriptive and impressionistic in its reporting of results.
4. Looks for merits as well as defects in educational programs.

The Management-Systems Model—

1. Views evaluation as a process of obtaining and providing useful information for making educational decisions.
2. Describes process as a particular and continuing activity subsuming many methods and involving a number of steps or operations.
3. Describes obtaining as making available through such processes as collecting, organizing, analyzing, and reporting and through such formal means as statistics and measurement.
4. Describes providing as fitting together into systems or subsystems that best serve the needs or purposes of the evaluation.
5. Describes useful as appropriate to predetermined criteria evolved through the interaction of the evaluator and the client.
6. Describes information as descriptive or interpretive data about entities (tangible or intangible) and their relationship.
7. Describes educational decisions as a choice among alternatives for action in response to educational needs or educational problems.

The Summative-Composite Model—

1. Views the Tyler Model as relevant to formative evaluation (i.e., evaluation at intermediate stages of a program)
2. Is comparative in nature.
3. Establishes composite criteria of worth.
4. Utilizes goal selection, value rating, and goal weighting.
5. Is used primarily to make final judgment about adoption or support.

Clearly, each model has its limitations and drawbacks which Glass believes are closely related to their growth potential. For example, Glass argues that the Tyler Model has achieved almost full growth because of
its rigidity and non-comprehensiveness.

The Accreditation Model has likewise reached its final stage of development because it has (a) remained unchanged for a number of years and (b) has become institutionalized. In addition, it lacks objectivity and validity since it eschews empirical justification of the standards used to judge worth.

The most damaging argument against the Management-Systems Model is their emphasis on the roles of evaluation rather than striving to achieve goals. Thus, these models tend to support administrators rather than raise questions of relative value.

The shortcoming of the Summative-Composite Model which may prove to be its greatest asset is its lack of definable characteristics in a variety of settings. In short, it is as yet untested and thus is open to further growth.

As helpful as Glass' and Worthen and Sanders' categorizations are, the predominant models still skirt the real issue of evaluation. That is, they tend to be either comparative or non-comparative, product-oriented or process-oriented, decision-centered or judgment-centered, valueless or value-laden, or in some cases, combinations of two or three of the above orientations. However, none addresses itself to all of the above dialectics. Lacking is a view of evaluation as it presents an historical perspective of an educational event. Previously described models of evaluation view educational events out of context, thus negating the entire process orientation. Such a strategy results in evaluation "in stages" as though the event progresses in stages rather than a continuous evaluation of a continuous process.
Illuminative Evaluation Model

One method of dealing with this quandry, involves the use of illuminative evaluation. As presented by Parlett in a recent Trends in Education article, illuminative evaluation seeks to understand and to document an innovation rather than test it. This is accomplished primarily through examining its background, its organization, its practices, and its problems, in addition to its outcomes.¹⁷

As described by Parlett, illuminative evaluation is biographical in nature with apparently little empirical verification of the evaluator’s perceptions. However, he does go on to develop five phases which do address the issue of empiricism. These phases are:

(1) Setting up the evaluation—this constitutes a strategy.

(2) Open-ended exploration—includes visits to schools and talks with those concerned.

(3) Focused inquiries—asks questions about the innovation itself.

(4) Interpretation—constitutes the illumination phase.

(5) Reporting the study—aims for a number of audiences.¹⁸

As is evidenced in the research cited above, current evaluation paradigms have made a clear break with the thinking that made evaluation synonymous with measurement and research design. This break was largely the result of a dissatisfaction with the outcomes of these early strategies and such severe deficiencies as: (1) their unreasoning emphasis on measurement which reduced evaluation programs to the search for appropriate measures; (2) their preoccupation with behavior stemming largely from the definition which asserts that evaluation determines the congruence of behavior and objectives; (3) their terminal focus which is the result of their being retrospective; and (4) their tendency to rely on the research
paradigm for methodology which meant the use of experimental designs that are inherently unnatural. These weaknesses permitted little, if any, generalizability to other innovative efforts. 19

D. Examination of Evaluation Strategies

Before turning to the exploration of specific strategies of evaluation, an explanation of the organization of this undertaking is in order. The eight strategies to be presented all represent some form of either Worthen and Sanders' or Glass' definitions of evaluation. While each contains attributes necessary for successful evaluation, none in and of itself presents a viable strategy which could be adopted for the Ohio Project. In addition, none clearly represents what Parlett termed illuminative evaluation.

The exploration of these strategies has two purposes. The first is to acquaint the reader with the sources from which the author's suggested evaluation strategy for the Ohio Project is drawn. The second is to tease out those aspects which appear to be highly adaptable to the Ohio Project given the financial and temporal constraints identified earlier. The resulting strategy must be judged not only for its "fit" with respect to the Ohio Project, but also, for its wider use elsewhere.

The eight strategies are derived from Worthen and Sanders' excellent review of evaluation theory and practice. While hardly exhaustive, these eight strategies do present the evaluator with an overview of the current state of evaluation methodology. As Worthen and Sanders suggest, designing a strategy should be an eclectic activity. 20 As these strategies represent the "best thinking" in the field of curriculum evaluation, the
review and summarization of them highlight aspects pertinent to the design of an Ohio Project strategy. However, the strategies described, in conjunction with post-1967 evaluation literature, raise questions relevant to the design of evaluations for new curricula. The questions act as a link between previous trends in evaluation and future directions.

The Stake Strategy

The evaluation strategy presented by Robert Stake may be categorized generally as a design for making judgments. The activities engaged in by an evaluator are primarily those of describing and judging. To do this adequately, the evaluator seeks information on antecedent conditions, transactions between student and teacher, student and materials, parent and student, etc., and outcomes resulting from an educational experience. This may be illustrated in the following matrices.

Figure 2. The Stake Strategy

Stake describes intents, observations, standards, and judgments as a record of what educators intend, of what observers perceive, of what patrons generally expect, and of what judges value the immediate program to be. Intents in this case may be viewed as synonymous with objectives.
or goals. As one begins receiving information concerning the educational innovation, Stake suggests processing the descriptive and judgmental data in the following way:

**Figure 3. Descriptive Data**
As one can see from the illustrations, Stake is particularly concerned with comparative data which results in a judgment of both absolute and relative worth of a program or product. This is clearly a formalistic approach to evaluation, and it makes a serious effort to remove the onus of subjectivity. Whatever subjectivity is allowed is placed within the perspective of comparative data, thereby calling for inter-judge agreement.

**The Scriven Strategy**

Although Michael Scriven's evaluation strategy contains a great deal of information concerning evaluation roles and goals, values and costs,
and intrinsic vs. payoff evaluation, the crux of the strategy rests upon
the important distinction between formative and summative evaluation. As
defined by Scriven, this model is primarily judgmental, although it does
imply concomitant decision-making.

To review briefly these concepts, formative evaluation usually re-
sults in an internal feedback loop within the development agency and seeks
to improve the product. It has an obligation to determine to what ex-
tent it matters whether the criteria used are an adequate analysis of the
proper goals of the curriculum. It should not only tell whether goals
are achieved, but whether the goals are worth achieving. It seeks out
and indicates program deficiencies and discrepancies and is the point at
which major revisions are made.

Summative evaluation, on the other hand, seeks external data usually
from an outside source. The purpose is primarily comparative and most
often comes at the end of a development process. In an elaborate field-
test, however, summative evaluation can be carried out on early forms of
the new curriculum. The data gathered present the consumer with clear
evidence as to the superiority of one product or program over another.
Perhaps the most objective way to do this has been developed by Crane and
Abt. They suggest a rating system whereby major categories of coverage,
appropriateness, motivational effectiveness and cost are weighted and,
depending on the result of the rating, the materials are accepted or re-
jected. The major drawback to this procedure is its lack of adaptability.
It is better suited for textbooks or "hard" technology. At present, there
are considerable methodological problems concerning the treatment of the
weighted data, but this has not altered the impact of Scriven's
delineations on evaluation thinking. 31

The Provus Strategy

The evaluation strategy developed by Provus is based on a system approach to evaluation. Although primarily designed for program appraisal, it does have applicability to product development. Like Stufflebeam's CIPP model, the Provus strategy calls for a continuous process of decision-making. Unlike Scriven, there is no allowance for partial evaluation; the entire system is continually assessed and modified from beginning to end.

Within his strategy, Provus contributes the concept of a team approach to evaluation, a concept which closely parallels the thinking behind a development team. The teams, working closely with the developers, constantly feeding information to them. This feedback helps the developers to make decisions concerning alternative courses of action, while at the same time they are producing new alternatives which need to be tested and evaluated. This obviously calls for constant communication between the program staff and the evaluation staff. 32

In this approach, as in any systems approach, there is a definite need for explicitly stated objectives, enabling, terminal and ultimate. As discrepancies are noted in objectives or subsequent activities, the decision is made either to terminate or to go back for revision. 33 The discrepancies are discovered by asking questions at various stages of the process. The answers to those questions determine the fate of that stage.
The Hammond Strategy

The Hammond Strategy represents another decision-management approach to evaluation. Its purpose is similar to that of Provus' strategy and Tyler's model. As such, it is behavior-description oriented. It seeks to answer questions about entry and exit behaviors, the effects of instruction, and the institutions which affect or will affect the innovation. This interaction may be seen in the following diagram:

Figure 5. The Hammond Strategy

Although designed primarily for program evaluation, the cells in the matrix could provide valuable information for product development at either the formative or summative phase. It would appear to have special utility at the institution level for viewing the product as educational
policy in a number of settings and then teasing out predominant value orientations of those institutions. This approach could allow the evaluator the opportunity of considering the kinds of instruction as they are likely to be reacted to by the various publics.

The Stufflebeam Strategy

The Stufflebeam CIPP Model of evaluation has been referred to earlier in this study and was described briefly in the discussion of Glass' definitions of types of evaluation. In this section, the interface of types of decisions and types of evaluation in Stufflebeam's strategy are presented and summarized. The following diagrams illustrate his contention that evaluation studies are closely related to management procedures and decision-making, and that the nature of evaluation is such that it does not go on in a vacuum, but, instead, is influenced by many diverse contextual factors.

Figure 6. Types of Decisions

<table>
<thead>
<tr>
<th>INTENDED</th>
<th>ACTUAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENDS</strong></td>
<td></td>
</tr>
<tr>
<td>Planning Decisions to determine objectives</td>
<td>Recycling Decisions to judge and react to attainments</td>
</tr>
<tr>
<td><strong>MEANS</strong></td>
<td></td>
</tr>
<tr>
<td>Structuring Decisions to design procedures</td>
<td>Implementing Decisions to utilize, control, and refine procedures</td>
</tr>
</tbody>
</table>
Stufflebeam's model is obviously designed for a large-scale, detailed program evaluation. It does make a significant shift from the definition of evaluation as an assessment of how well a program achieves its objectives. More importantly, it gives priority to decisions which are affected by contextual factors. In short, it, like Stake's model, provides information prior to development, during development, and after development.

**The Alkin Strategy**

The evaluation model posited by Alkin is quite similar to Stufflebeam's in that it is decision centered, management-systems oriented, and alternative conscious. However, where Stufflebeam develops a broad range of activities in process evaluation, Alkin separates them into sub-areas of program implementation and program improvement.  

Alkin identifies five evaluation areas for information gathering. They are:

1. Systems Assessment (similar to context evaluation)
2. Program Planning (similar to input evaluation)
3. Program Implementation (similar to process evaluation)
(4) Program Improvement (similar to process evaluation)

(5) Program Certification (similar to product evaluation)

What Alkin's differentiations do effectively is to blend Stufflebeam's CIPP model with Scriven's concept of formative and summative evaluation. His program implementation and improvement components clearly allow for formative activities, while program certification serves the function of formal comparative summation.

The Personal Judgment Model/Strategy

The personal judgment or accreditation model has been discussed earlier in this study. To recapitulate, this model is best exemplified by doctoral oral examinations, review groups empaneled to review proposals, site visits to evaluate federally-supported programs, review panels or advisory boards to review curriculum materials, and such organizations as NCATE and the North Central Association. This methodology provides an aura of self-study by judges of some expertise who can report on their observations and give expert testimony on the pros and cons of a program or product. Since the criteria for judging are clearly spelled out, the empirical base, although weak, is primarily inter-judge agreement.

The Tyler Model/Strategy

The Tyler Model has been explained in some detail earlier in this chapter. To review, evaluation, as Tyler defined it, is:

... a recurring process: evaluation feedback may be used to reformulate or redefine objectives, and information derived from previous evaluation studies may be used to further develop plans for assessment and interpretation. Modifications of the objectives and of the program being evaluated will result in corresponding revisions of the plan and program of evaluation.
As Worthen and Sanders point out, Tyler's model is simplistic. It is noteworthy, however, because it has been such a pervading force in evaluation thinking for the past thirty-five to forty years.

Summary of Essential Features

The review and description of the prevailing models of evaluation and eight exemplary strategies derived from them yields the following:

(a) Much of the thinking is highly contradictory and dependent upon the value orientations of the evaluator.

(b) There is confusion over terms with different interpretations of the same term and several terms used to describe the same phenomenon.

(c) The collection of information appears to be governed more by "what is interesting to know" as opposed to "what is needed to know."

(d) There is no common agreement on the role of the evaluator or the goals of evaluation.

From this quagmire of relevant evaluation literature emerge certain essential, irreducible elements upon which there is general agreement. These elements should be incorporated in any evaluation strategy. They are:

1. The evaluation strategy should attempt to determine the kinds of educational settings or contexts within which the program or product will be employed.

As Seymour Saranson points out, "... people who have a role in, or concern for, educational planning and change possess no intimate knowledge of the culture of the setting they wish to influence and change."
effect of this analysis is primarily one of discovering what changes or threats of change will result from the implementation of this new educational policy. This could mean a redefinition of the existing structure or, if the existing structure is highly resistant, modifications in the product or program.

In his experience in evaluating the "new math," Saranson discovered that it was introduced into the schools without taking into account their structural and cultural characteristics, and without any discernible theory of how change was to be effected and the criteria by which its effects were to be evaluated. He thus argues for an "ecological approach" in which one deals with behavior settings as opposed to psychological or sociological variables (social class status, I.Q.). These behavior settings are essentially the structural and organizational systems or sub-systems, both behavioral and non-behavioral, in which the students in that classroom are likely to come in contact.

2. An evaluation strategy should yield information which facilitates judging the worth of the product and which provides an accurate description of the development process.

In the 1967 AERA Monograph on Curriculum Evaluation, Stake explains that a full evaluation results in a story, supported perhaps by statistics and profiles. It tells what happened. It reveals perceptions and judgments that different individuals and groups may hold. It tells of merits and shortcomings. It may offer generalizations for guidance of subsequent educational programs. Two main kinds of data are collected: (1) objective description of goals, environment, personnel, methods, content, and outcomes; (2) personal judgments as to the quality and
appropriateness of the goals.\textsuperscript{45}

These strategies call for what James Macdonald has termed "thick descriptions" or generalities as opposed to "thin descriptions" or specificities. This is the difference between a description of an eye blinking and a description of all the eye movements in the blink of an eye.\textsuperscript{47} Thus, thin descriptions should be used to supplement thick descriptions. While this may appear to be a highly impressionistic style of evaluating, the resultant data from a variety of perspectives gives a more illuminative view of the process than data collected only for decision-making or judging.\textsuperscript{48}

3. The evaluation strategy should collect information which indicates both achievement of objectives and value of objectives.

Evaluators often become involved with the real problem of untestable abstractions, those statements of objectives that cannot be measured in some observable fashion.\textsuperscript{49} These "expressive objectives," as Elliot Eisner calls them, grow out of a shared experience and are expressed by the students subsequent to the experience. The question arises as to whether a developer can, or should, anticipate these objectives and whether an evaluator needs to concern himself with their emergence. During the revision cycle of development, this would appear to be valuable information. However, it is not easily discovered through strict adherence to the developers' stated objectives. So, the issue of evaluator flexibility in working with the objectives may provide some sense of the long term and private learning activities that tend to be lost by strictly using behavioral objectives.\textsuperscript{50}

4. The strategy should incorporate a variety of methods for
collecting information. These include standard procedures such as testing, but also include such procedures as formal and informal observations, formal and informal interviewing, longitudinal and experimental studies, unobtrusive data collection and other such processes.

Earlier in this chapter, certain of the problems associated with making evaluation synonymous with tests and measurement were identified. And yet, as much as evaluators deplore these methods, the predominant mode for data collection continues to be questionnaires, pre- and post-tests, Likert-type measures, and semantic differentials. While much information is generated through these methods, its value in comparison with the time and money spent gathering it becomes problematical for a small-medium scale development project.

5. In the evaluation strategy, there should be a clear distinction between those activities which are considered formative and those that are considered summative. In other words, there should be a distinction between information generated for the developers and information generated for the consumers.

Scriven observes two essential groups of activities operating during formative and summative evaluation. They are the intrinsic and pay-off strategies which interact with both the formative and summative stages of evaluation. This relationship can be seen in the chart on the next page.

Essentially, as Donald Cunningham indicates, formative evaluation is interim and internal while summative evaluation is terminal and external. Hulda Grobman points out that "the entire purpose of the
formative, tryout period is for feedback to the authors to improve the materials being developed. During summative evaluation assessment is of a finished product; here the purpose may be to compare the results with those of other projects, to describe to schools the uses of the project materials, or to satisfy academic curiosity.57

The formative period of evaluation may create an adversary relationship between the outside evaluator and the developer. In an effort to be objective, the evaluator may use data gathering instruments which provide useless information to the developer. On the other hand, if he accedes to the wishes of the developer, the outside evaluation no longer serves as an independent check.58 Thus, it may be more useful to have an evaluator who has been a participant in the development process. This "staff evaluator" can provide information and ideas about what is happening in the field, and through timing his comments appropriately—and spacing out his criticism judiciously—so that it is not overwhelming—may be more effective than an outside evaluator.59

In the summative period, there is continuing project need for information on how and when the materials work and what the strengths and weaknesses are, in terms of the project's own concerns.60 A useful
summative activity is the longitudinal study (a study of the same population over a period of time). Such a study can determine the extent to which learnings from a curriculum are retained and used in later years, a crucial test for any curriculum. In contrast to formative evaluation, much of the summative evaluation work can be done by outside investigators. Thus, formative evaluation seeks to make revisions and improvements while summative evaluation seeks to make judgments of relative worth.

E. A Strategy for Evaluating the Ohio Project

The Ohio Project has, at this stage of development, adopted a limited evaluation strategy. As a participant-observer, the investigator has experienced the application of this strategy. The evaluation strategy suggested in the study incorporates the limited strategy. In addition, it extends the strategy by (a) documenting the historical background and conceptual framework of the product for purposes of (b) analyzing and comparing the product's performance with what it purported to accomplish. Finally, the investigator's strategy proposes a plan for gauging the political effects of the product once it reaches the schools. The suggested strategy thus advances three distinct levels of evaluation. A model explicating the three levels and the interactions which occur among them is depicted in a Venn diagram on the next page.

Level 1

The thinking inherent in Level 1 closely parallels Parlett's description of illuminative evaluation. It documents the historical context within which the materials were developed. From the conceptual
Figure 9. Levels of Evaluation

Level 1 - Includes the history, background, and conceptual framework of the development process.

Level 2 - Includes an analysis of the product from a number of perspectives for purposes of revision.

Level 3 - Includes an analysis of the effect or probable effect of the materials on various audiences--creation of a "battle plan" for implementation of materials as public (educational) policy. Develops a framework by which these audiences may judge worth of the product.

In the case of the Ohio Project, the historical perspective traces the formulation of the project staff, the project's acquisition of support from the Ohio Department of Education, and the stages of the curriculum development process. Conceptually, the development process is outlined as it relates to (a) general curriculum development theory; (b) theories of learning inherent in the child's development of political consciousness; and (c) instructional theories which guide the creation of classroom materials.

Level 1 interacts with Level 2 as it provides a basis of comparison for product analysis. It interacts with Level 3 as the history of a product often indicates directions for political analysis of policies.
goals, and values. That is, the Ohio Project's tie with the State Department presents certain political questions but eliminates others. Also, the essence of the materials, political decision-making, presents important political considerations, namely the current status of political education in the elementary school.

Level 2 interacts with Level 3 as the analysis of the materials themselves can be a focal point for answering political questions. While the materials are being analyzed formatively, the primary concern is with the interaction of Level 1 and Level 2. While they are being analyzed summatively, the primary concern is with the interaction of Level 2 and Level 3. In the former, analysis affects change in the product; in the latter analysis determines how the product may affect change in the school.

Finally, all three levels interact when, for example, it would be politically unwise to analyze an aspect of the materials because historically it was evident that the information would be misused. In the Ohio Project, it would have been useless to suggest a comparative analysis of the political decision-making units with extant civic education curricula in the elementary school. Because the units include experience-based activities which draw from the natural political world of the child, they would probably not have fared well against materials which teach the adult political system. This information could then be used by groups inimical to the project to "prove" that the materials do not teach children about the democratic system of government.

**Level 2**

The second level of the evaluation strategy fits Scriven's definition
of formative evaluation. As suggested for the Ohio Project, the analytical level would consist of four distinct phases.

**Figure 10. Phases of Analytical Evaluation**

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Phase 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Critical Appraisal</strong></td>
<td><strong>Pilot Testing</strong></td>
<td><strong>Field Testing</strong></td>
<td><strong>Validation Testing</strong></td>
</tr>
<tr>
<td>1. Lesson Reviewed by Teacher Reactors.</td>
<td>1. Lessons Revised through Critical Appraisal tested by pilot schools.</td>
<td>1. Lessons and Instruments revised through pilot testing are tested throughout the state in salient districts.</td>
<td>1. Testing of materials after publication.</td>
</tr>
<tr>
<td>2. Lessons Reviewed by Subject Matter Specialists.</td>
<td>2. Instruments used to Gather Information Tested.</td>
<td>2. Final Revisions sent to Publisher.</td>
<td>2. Longitudinal and Experimental studies designed to test effects of curriculum.</td>
</tr>
<tr>
<td>3. Lessons Reviewed by Evaluator(s).</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The reporting of the results of Phases 1 and 2 will be the focus of Chapter IV. The third and fourth Phases have not, as yet, been carried out; therefore, there are no results to report. However, it may be useful to discuss how these phases would, in all probability, proceed.

In Phase 3, the sampling procedure for field-testing would be similar to the one used in pilot testing. The pilot test sampling matrix shown on the next page sought to provide a broad spectrum of situations within the financial and temporal constraints. Not all cells were filled for two reasons: (1) it was assumed that, in some cases, if the materials worked at the 4th and 6th grade levels, they would most likely work at the 5th grade level; and (2) there was some horizontal overlap among central city, suburban, and rural schools.
Although this particular matrix served well for pilot testing, in a field test every cell would be filled with a cross section of teachers from the state. This allows for some flexibility in the instance of sampling mortality (which even happened during the pilot testing).

The field test serves four purposes. First, it broadens the sampling base upon which the final publication revisions are made. Second, it further tests the evaluation instrument revisions made after pilot testing. Third, it provides a bridge between evaluation and diffusion by involving previously unused school districts. Fourth, it can provide access to contexts from which the political effects of the materials can be projected.

The fourth phase of analytical evaluation calls for validation of the materials after they have been in the classrooms for at least one school year. Because experience has shown that there is often a discrepancy between what the developers turn over to the funding agency or
the publishers and what actually reaches the classroom, a validation phase becomes a valuable function of evaluation. It also provides a secondary function of generating additional input for subsequent printings of the materials (if any are needed).

Validation evaluation can be conceived of as action research by adopting standard research designs of longitudinal studies and experimental studies. In the case of the Ohio Project, a longitudinal study of the effects of the decision-making materials on later performance in political situations would provide useful data for determining the efficacy of the outcomes sought.

Experimental studies could be used to compare student performance using the Ohio Project materials with students using no political education materials at all. In addition, the effect of the materials on teacher style and performance or the effect of teacher style and performance on the outcomes sought in the materials could be measured. Obviously, many other research studies could be designed based on the use of these materials, but their primary focus should be on the validation of the definition of citizenship education posited by the Ohio Project.

Analytical evaluation, then, centers on four essential activities with one basic purpose. Through the use of expert consultants, a core of interested teachers, a broad base of testing conditions and solid research methodology, well-conceived and well-executed materials can reach the classroom teacher.

**Level 3**

The third and final level of evaluation involves prognostication of the effects of the curriculum product on educational policy, school and
classroom goals, and value priorities of key actors. This is perhaps the most difficult information to ascertain and thus is often left unexplored by curriculum development projects. Recent controversy over curriculum materials throughout the country, however, underscores this vital need. In essence, the political level of evaluation can indicate to the developers those areas where the materials in their present form may be unacceptable to the predominant value orientations of the school and/or community. Armed with these data, the developers can then choose to modify the materials to fit different structures or issue a caveat with the materials indicating those areas where they may prove to be inappropriate.

In the Ohio Project, the primary focus of this policy analysis would center around the political context of the school and community. Given one of the stated objectives of the project, to raise the level of political consciousness of children, the effect of this consciousness-raising on the classroom, the school and the community would need further description. In addition, since these materials are primarily teacher oriented, some notion of teacher predisposition toward politics, political education, and political education curriculum materials would need to be assessed.

Harold Lasswell and Allan Holmberg have sketched out a method for viewing policy decision-making which is pertinent to this kind of evaluation. While specific instrumentation for measuring this has not been applied to product evaluation, the theoretical framework offers some possible avenues for the evaluator.

They state that "A satisfactory theoretical system will guide the
policy adviser or decision-maker in inventing and evaluating the net advantages of policy options." To do this, Laswell and Holmberg describe five intellectual tasks:

<table>
<thead>
<tr>
<th>TASKS</th>
<th>APPLICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Clarification of goal.</td>
<td>What do you expect the materials to do?</td>
</tr>
<tr>
<td>2. Discovery of salient trends</td>
<td>What has happened in the past with materials like these or ones with similar content?</td>
</tr>
<tr>
<td>3. Progressive analysis of conditioning factors</td>
<td>What is the current milieu in regard to the acceptability of the materials?</td>
</tr>
<tr>
<td>4. Projection of futures</td>
<td>What events are likely to happen in the future to impinge on or facilitate the adoption of these materials?</td>
</tr>
<tr>
<td>5. Invention, evaluation, and commitment to value maximizing policies</td>
<td>What are the major actors' value preferences in terms of Laswell's eight social values (to be described later) and how do they see those values being distributed in a classroom?</td>
</tr>
</tbody>
</table>

Social Values and Political Evaluation

Harold Lasswell has described eight social values and concomitant costs which he has discovered to underpin all major societies across history. These values are:

1. Well-being—good health, security, safety
2. Rectitude—trustworthiness, dependability, and responsibility.
4. Enlightenment—having information and knowledge.
5. Wealth—riches and property.
6. Skill—being good at doing something.
7. Power— influence over others.
8. Affection— love, friendship.

Since the school's primary function is to allow children to acquire skills, the various audience predispositions to the skills presented in the political education curriculum would need to be gauged. But, since the school and classroom are also power structures, feelings toward the shaping and sharing of power implied in participatory decision-making would need to be determined. For example, if a teacher felt little or no responsibility for engaging the students in shared decision-making or if she viewed the activities suggested in the materials as a threat to her classroom power structure, then the success of the lessons would be seriously in doubt. The same analysis of institutional pressure can be expanded upon for the school district and the community. Many of these concerns would be dealt with during the field-testing phase when problem spots could be identified throughout the state.

By viewing curriculum development as a political process, Level 3 evaluations could satisfy what Lasswell terms the "intelligence phase," which "functions appropriately when it supplies a flow of realistic information about trends, conditions, and projections which foster the clarification of overriding goals, and the invention and evaluation of policy alternatives" (or alternative curricula). It also would satisfy many of the arguments concerning ways to determine contextual problems, a concern shared by Saranson, Stufflebeam, Cunningham, and others. In the larger sense, though, the political level of evaluation provides the link between evaluation as history and evaluation as analysis by placing them in the perspective of their political roles in the development process.
F. Summary

This chapter presented a strategy for evaluating political education curriculum materials. It emanated from the information needs of the Ohio Project and the study of salient models and strategies of evaluation. Certain irreducible elements of evaluation were presented. The purpose of this presentation was two-fold: (1) to summarize important characteristics of the evaluation models and strategies, and (2) to provide a framework for the design of the suggested Ohio Project strategy. The chapter concluded with a discussion of three proposed levels of evaluation: historical/conceptual, analytical, and political. The following chapters illustrate the application of this strategy.
FOOTNOTES


2 Ibid., p. 3.


4 Ibid., p. 20.

5 Ibid.

6 Ibid., p. 21.

7 Ibid.


9 Ibid., p. 3-4.

10 Ibid., pp. 9-10.

11 Ibid., p. 10.

12 Ibid., p. 11.

13 Ibid., pp. 12-16.

14 Ibid., p. 18.

15 Ibid., p. 22.

16 Ibid.


18 Ibid., pp. 16-17.


20 Worthen and Sanders, op. cit., p. 41.

22 Ibid., p. 113.

23 Ibid., p. 114.

24 Ibid.

25 Ibid., pp. 118-121.

26 Worthen and Sanders, op. cit., p. 62.


28 Ibid.


31 Worthen and Sanders, op. cit., p. 42.


33 Ibid., p. 179.

34 Robert Hammond, "Evaluation at the Local Level," in Worthen and Sanders, p. 158.


37 Ibid., pp. 151-155.

38 Ibid., p. 127.

39 Ibid., p. 156.

40 See Appendix D, p. 221.

42ibid., p. 12.
43ibid., p. 19.
44ibid., p. 93.
45ibid., p. 94.


47James Macdonald, address given at 1975 AERA Conference, Washington, D.C.
48ibid.
49Saranson, op. cit., p. 25.


51Guba and Horvat, op. cit., p. 21.
52ibid., p. 25.

53Worthen and Sanders, op. cit., p. 20.


56Cunningham, op. cit., p. 115.
58ibid., p. 16.
59ibid.
60ibid., p. 17.

61ibid.
62ibid.
63ibid.

65 ibid.
66 ibid., p. 395.
67 ibid.
Chapter III

THE HISTORICAL/CONCEPTUAL LEVEL

A. Introduction

This chapter illustrates an application of the historical/conceptual level of evaluation. It is designed to accomplish two tasks: (1) to trace the history behind the development of the Ohio Project materials and (2) to delineate the Project's conceptual framework as it exemplifies "middle range" curriculum theory.

The first task establishes some of the reasons why the materials took the form they did, why they were geared for the intermediate grades, and why the development process progressed in the manner it did. The second task expands on the first by defining substantive areas to be included in the material. That is, conceptualization defines clearly the macro-areas to be included in the materials and presents guidelines for defining the micro-areas (lesson objectives, lesson activities, etc.).

In addition, the conceptualization provides a comparative referent for the analytical level of evaluation. What the documentation of the material's conceptual framework does most notably is to state what the developers hope to accomplish. This, in turn, provides the basis for the internal evaluation of the materials.

This chapter, then, proceeds in the following manner. First, the
history of the Ohio Project is presented. This section documents how the project was established, why it was located at the Mershon Center at Ohio State University, why it was designed to meet the needs of Ohio elementary school teachers, and why it was funded by the Ohio Department of Education.

Second, the conceptual framework which guided the creation of the Unit I materials is presented. This section is organized in the following fashion: (a) Hilda Taba's model for curriculum development is described as it reflects "middle range" theory, and (b) the Ohio Project's conceptual framework is described as it progressed through Taba's stages of product development.

B. History of the Ohio Project

The story behind the creation of the Ohio Elementary School Political Education Project actually begins some three years before the first lesson was written. In 1971, the American Political Science Association's Committee on Pre-Collegiate Education established a Task Force on Elementary Education to assess the state of political education in elementary schools. The Task Force was supported by a small grant from the National Science Foundation. The results of the Task Force's work provided a base for the conceptual framework which will be examined later in this chapter. This was largely the responsibility of Professor Richard Remy, the director of the Ohio Project. Since two members of the Task Force, Professors Remy and Snyder were located at the Mershon Center at Ohio State University, the Center served as the headquarters and clearinghouse for the study project.
The Mershon Center is in a particularly unique position on the Ohio State University campus. It is actually comprised of a number of social science research and development centers around the campus. These centers employ the services of political scientists, psychologists, sociologists, historians, educators, etc. in a number of capacities. The Political Education component of the Mershon Center is only one small part of one center on the campus. Thus the Project enjoys the enviable position of being able to draw on a variety of valuable, readily available resources while remaining relatively small. This, coupled with the intellectual leadership of Professor Richard Snyder, made the Center a natural locus for the curriculum development project.

Central to the success of the political education program was the notion that it should link the world of the university with the world of the schools as is shown in Figure 12. In this way the Ohio Project attempted to translate academic theories into educative experiences as a way of serving both the university community and the school community. In essence, the Project itself would be a viable example of the middle range "linkage" theory concept which will be explored later in this chapter.

Needs Assessment Phase

Certainly the determination of consumer need is a key element in devising an action program of educative experiences. In terms of individual classrooms, a multitude of instruments for measuring student interest, classroom climate, individual differences, and other need areas exist. However, for purposes of this project, needs assessment was operationally defined to include teacher curriculum needs. This was done for two
reasons:

(1) The tentative structure of the materials was to be that of a sourcebook of classroom activities to be employed by teachers, and this notion needed to be verified by determining teachers' feelings about such a structure.

(2) Since the materials were to be teacher-oriented, the project
needed to know if teachers felt their present materials were adequate, if they needed new materials, if they had the opportunity to use them, and what kinds of alternative forms political education materials might take.

Eva Baker's reticence in siding with evaluation zealots who include needs assessment within formative evaluation notwithstanding, the Ohio Project's needs assessment early on established the commitment to teacher input for both development and evaluation purposes. In fact, a portion of the questionnaire asked teachers if they would be willing to test new materials. The response was quite positive (82.5% responded "yes").

The Ohio Project used a questionnaire developed by the Task Force on Elementary Education to conduct a survey of Ohio Elementary school teachers. One questionnaire was sent to every elementary school in Ohio (over 3000), and the return rate of 778 responses (22.6%) was considered acceptable by the developers. The data yielded the following information:

1. 56% of the respondents felt there was a greater opportunity for political learning in the elementary grades than had been generally recognized.
2. 69% of the respondents felt there was a greater need for political learning in the elementary classroom than had been generally recognized.
3. Only 24% of the respondents felt their present materials were more than adequate to very good for promoting political learning.
4. When asked what they felt they needed most to promote political learning, 25% of the respondents selected flexible, brief
teaching units from a list of eleven choices. The second most important need perceived by the respondents was for classroom exercises that incorporated group participation in decision-making and problem solving activities (21%). Interestingly, only 6% of the respondents wanted teachers' guides, 4% wanted resource units, and 2% wanted a new textbook. Since development projects generally produce these kinds of materials, a needs assessment of this sort may prove useful as a market analysis.

The results from the questionnaire thus substantiated the developers' best sense of what teacher mediated materials should look like. The data also supported the developers' underlying commitment to experienced-based materials as opposed to the more vicarious activities found in textbooks and guidebooks. So, by early 1974, the project staff was ready to negotiate with the State of Ohio Department of Education as to the specificities of the product. This particular relationship between the University and the State Department is significant because it marked the first time in many years that such an undertaking had been attempted.

Mershon and the Department of Education

During the winter of 1973 the Mershon Center decided to ascertain whether the Department of Education would be interested in supporting the development of elementary school political education curriculum materials. The Mershon Center hoped to gain support for the development of curriculum materials which:

1. Were organized around three political phenomena in the everyday world of the child: decision-making, authority, and conflict.
2. Incorporated many theories of learning and used a variety of teaching strategies and tactics.


In early January of 1974 a meeting was arranged with the Department's Assistant Superintendent for Curriculum and Instruction and the proposal for such a project was made. After considerable discussion, it was clear that while there was basic agreement over the theories and methods to be employed, the Department was not enthusiastic about a total K-6 approach. Rather, the Department felt that an intermediate (grades 4-6) program would better fit their needs, and that it would garner stronger response from the schools. It was also felt that their initial commitment would be to units on political decision-making, and the results of that effort would dictate further action on units for authority and conflict. Because the State Department did not want to get into the textbook publication business, they believed a sourcebook of instructional activities would generate more enthusiasm among teachers and serve as a tool for in-service education.

This January meeting led to the development of a formal written proposal which was submitted to the Department of Education in late January, 1974. That proposal called for the development by Mershon of curriculum materials on political decision-making for use by intermediate grade teachers. These materials were to be comprised of originally developed instructional lessons set in the larger context of a Sourcebook which also contained an orientation to political life for teachers, an introduction to decision-making as a phenomenon, and a wide range of supporting bibliographic resources. Rather than supporting the development of a complete
Sourcebook, however, the Department of Education, wished to proceed step by step. This was due in part to the Department's inability to enter contracts which crossed fiscal years and in part to the Department's distrust of the Mershon Center's ability to "deliver a product." Hence, in March of 1974 the Department awarded the Mershon Center a contract for the development of a set of original instructional packets (later to be called Units) but not for the development of the Sourcebook to accompany these packets. In part this contract read:

This agreement is made by and between the State of Ohio, Department of Education, hereinafter termed the "State" and the Mershon Center of The Ohio State University, hereinafter termed "Center."

The State desires to have prepared two instructional packets on decision-making geared to the intermediate grades (4-6). Each of these instructional packets is to provide opportunities on decision-making for differentiated instruction to meet the needs of children with varying skills and abilities working in different types of educational settings. In addition, the packets are to utilize a number of learning experiences such as role-playing, simulation, filmstrips, flat pictures, observations, case-studies and travel seminars. Each packet is to be developed to conform with the overall model of the source book which has been outlined in the document entitled "A Source Book for Teaching About Politics and Government in Elementary Schools" which is attached hereto and made a part hereof by reference.

The Center agrees to produce said instructional packets by October 1, 1974.

During the period March to June, 1974, the Mershon Center "geared up" in preparation for actually developing materials during the summer of 1974. The development team was recruited and organized, relevant curriculum materials were collected and, most importantly, detailed conceptual planning was undertaken. During this period it was decided to design the "instructional packets" in the form of Units comprised of short lessons. On June 3, 1974, Professor Remy completed a Position Paper for the Project outlining the format of the materials to be developed as well as criteria
to be met by those materials.

Many of the ideas in this paper had their roots in Remy's earlier work with the APSA's Committee on Pre-Collegiate Education. However, the application of these ideas in this context was original and grew out of a May meeting of Remy, Byron Walker of the Department of Education, Lee Anderson, a professor of Political Science and Education at Northwestern University, and Richard Snyder. In the Position Paper Remy outlined the Project's task as follows:

The Ohio Project is developing political education learning packets for use in the intermediate grades. Each of these packets will take the form of a mini-unit. The first unit developed will provide an integrative framework and is intended ultimately to be the first in a series used by teachers. This unit will provide both teachers and children with an orientation to the phenomena to be studied (tentative title, "Unit I: Political Decisions and You: An Overview"). Several additional mini-units will represent elaborations of basic themes introduced in Unit I. Each of these units will revolve around one of three decision roles or decision situations. The tentative titles of the additional units are:

- Unit II: You Make and Will Make Political Decisions
- Unit III: You Influence and Will Influence Political Decisions
- Unit IV: You Are Affected By and Will Be Affected By Political Decisions

In June of 1974 the project staff which included the director, assistant director, State Department liaison, instructional materials designer, and research associate formally convened to begin the actual development of Units I and II. This task was completed in September of 1974 and copies of the Units were delivered to the Department of Education.

In the meantime, during July of 1974, conversations began with the Department of Education about additional support for the development of Units III and IV, and the Sourcebook to accompany these Units. As a result of these conversations, the Mershon Center submitted a new proposal
to the Department in August of 1974. In November of 1974, the Department of Education issued a new grant to the Mershon Center. The contract for that grant read in part,

This agreement is made by and between the State of Ohio, Department of Education, hereinafter termed the "State" and the Mershon Center of The Ohio State University, hereinafter termed the "Center".

The State desires to have prepared two additional instructional packets (III and IV) on decision-making geared to the intermediate grades (4-6). Each of these instructional packets is to provide opportunities on decision-making for differentiated instruction to meet the needs of children with varying skills and abilities working in different types of educational settings. The packets are to utilize a number of learning experiences such as role-playing, simulation, flat pictures, observations, case studies, and travel seminars. Instructional packets III and IV will be combined with instructional packets I and II (produced pursuant to a combined March 29, 1974, contract) in a "Sourcebook" which is designed to serve as a larger instructional resource package to be completed at a time subsequent to the production of packets III and IV as specified above.

These services will be provided between October 1, 1974, and June 30, 1975.

It is important to note that this new contract called for the preparation of the Sourcebook "at a time subsequent to the production of packets III and IV." Thus, the Department again did not provide support for the actual production of the "Sourcebook" referred to in the contract. An attachment to this new contract in the form of memo from the Mershon Center to the Department did set forth the understanding that the Department would support the development of the Sourcebook during the period June 30, 1975 - September 30, 1975.

During the period February to June, 1975, Units I and II went through an evaluation process which included pilot-testing. Also during this period the development and evaluation of Units III and IV was completed. At no time during this period did the Department express any
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Figure 13. Project Timetable
interest in completing the Sourcebook continually referred to in contracts and numerous conversations since the inception of the Project. In the spring of 1975 the Mershon Center decided to not ask the Department to honor its commitment to support the development of the Sourcebook during the summer of 1975.

Perhaps at this point it would be useful to sketch out a visual representation of the time allotments of the significant events in the history of the Project. Figure 13 shows the sequence from the groundwork activities of 1971 through the implementation activities of 1974 and 1975.

C. Conceptualizing the Curriculum

In order to adequately examine the conceptual framework of the Ohio Project materials, that framework must be placed in perspective. In effect, it represents the specific components of the middle range curriculum theory which guides the development of the product. As Hilda Taba indicates:

The demands and needs of the culture, the growth and development of children, the principles of learning, the fundamental ideas in the various areas of content and the unique modes of thought represented in them need to flow into one coherent stream. The fact that this stream must yield a development of ideas, forms of thought, feelings, habits, and skills only makes the task of integrating the complex of learning processes we call the curriculum more difficult. This task requires a conceptual framework which spells out the crucial elements of curriculum and their relationship to each other.

To achieve that end, Taba outlines a systematic schema for developing curricula. This schema is essentially an extension of the Tyler rationale for curriculum development. It does, however, add two important categories, organizing content and organizing learning experiences. These
additions allow for a more ordered process of conceptualizing curricula than does Tyler's rationale. Taba's schema is graphically represented below:

Figure 14. Taba's Stages of Curriculum Development

Taba's model illustrates the development of an educational product. Thus, its linearity it meant to depict the logical planning stages through which the materials pass. It is not meant to capture the essence of the curriculum development process, however. That would more appropriately call for a cybernetic model. For purposes of discussing the creation of the specific Ohio Project materials, the Taba model serves well.

In discussing curriculum development theory as a form of middle range theorizing, it is generally considered that its purpose is to link the criterion of classroom experiences to curriculum theory which formulates value statements about the nature of man, the nature of society, and the nature of the specific disciplines. Thus, the lines which lead into the diagnosis of needs component in the model are meant to indicate prior consideration of those value areas. For purposes of the presentation of the Ohio Project's middle range theory, those value statements will, for the
time being, remain latent. As the examination of the Ohio Project's conceptual framework progresses, the value orientations will become manifest.

The remainder of this chapter traces out Taba's model of curriculum development. In the diagnosis of needs section, the need for new thinking about elementary political education is discussed. In addition, the historic task of the schools to promote citizenship education is presented along with a section on how children learn about politics.

Next, the goals and primary assumptions of the project are described as they emanate from the diagnosis of needs. Finally, the specific content area of political decision-making is outlined, and the generalizations which guided the design of learning experiences presented.

The Need for Political Education

Whether one views the political role of the average citizen as non-participatory or sees the development of conscientizacao as essential to the creation of effective political actors, the need exists for an exploration of the role of the school in barring or encouraging political participation. Do elementary school children develop a knowledge of politics, in the Piagetian sense, or do they primarily model and imitate the behaviors and attitudes of parents and significant others? Does this learning come through experiences in the family circle, through peer group interaction, through structured learning situations in the school, or through a growing awareness of large political spheres of influence at

*Paulo Freire has defined conscientizacao as learning to perceive social, political, and economic contradictions, and to take action against the oppressive elements of reality.
the various levels of government? Given that the school provides a pro-
tective, ordered, learning situation, how can this atmosphere be ex-
ploited to develop political self-consciousness, political competence,
and political knowledge? Finally, given Paulo Friere's call for the
development of political, social, and economic conceptual lenses, what
might an effective elementary school political education curriculum in-
corporate to help focus the political lens?

The need for political education has long been recognized, and the
role of the school in fostering citizenship education has been a concern
of educators since the beginning of public education in America. In the
late 1800s, Horace Mann expressed his opinion of the need for early poli-
tical learning:

In order that men may be prepared for self-government, their
apprenticeship must commence in Childhood. The great moral
attribute of self-government cannot be born and matured in a
day; and if school children are not trained to it, we only
prepare ourselves for disappointment.

Lawrence Cremin, in his history of the American progressive movement
in education, explicitly outlines the progressive schools' socialization
function implying that a major part of this socialization was political. This implication is further explored by Joel Spring who argues that poli-
ticalization was largely for the purpose of maintaining the "corporate
state" and its political ramifications.

The positive and negative effects of politicalization notwithstanding, the American school's role in promoting citizenship education has
always been a constant. Given that role, the issue then becomes how to
best structure learning experiences to increase the child's awareness of
his natural political world, not only in the school but in the home, the
peer group, the community, the state, and the nation. The American Political Science Association's Committee on Pre-Collegiate Education addressed itself to this issue in a position paper exploring the possibilities for improving political education in the elementary schools.

The committee felt that before undertaking a project to develop curriculum materials certain important conditions needed to be determined. They were:

A. New political education materials would not be needed for elementary school if there were no general, overall need to improve the quality of political education in American society.

B. New political education materials would not be needed for elementary school if childhood were not a critical and important phase in the process of political learning.

C. New political education materials would not be needed if elementary schools had no opportunity to improve children's political education.

D. New political education materials would not be needed if elementary schools had no responsibility to concern themselves with children's political education.

E. New political education materials would not be needed for elementary school if existing instructional materials were adequate.12

Concerning the first condition, the committee found that study after study indicated most Americans had little commitment for translating accepted tenets of democracy into patterns of behavior.13 They discovered that this lack of commitment was even prevalent among teen-agers and young adults.14 Social science evidence also shows large percentages
of the American citizenry to be politically uninformed and inarticulate. Cleary found that among junior high school students few understood the role of political parties, how to influence or participate in the formation of public policy, or the role of the individual in a democratic system. The committee concluded that the majority of Americans had not engaged in meaningful, educative political experiences. In short, Americans lacked basic political problem solving skills necessary in a functioning democracy.

The second condition was approached from the hypothesis that if political learning began in adolescence, then there was no need for political education in the elementary school. This hypothesis proved to be false. The research clearly indicated that the process of political learning begins early in life.

Whether one chooses to accept a cognitive-developmental approach or a social learning approach to a child's political learning, it becomes apparent that neither approach adequately explains all political learning. One concerns intellectual processes while the other concerns patterns of behavior. Clearly, both are relevant to the understanding of how a child learns about his political world. As the committee concluded:

Childhood political learning is critically important because it presents valuable, never-to-be repeated opportunities on which to build a guided and systematic political education. During this period in children's intellectual, emotional, and social development, their political selves are still being formed. When we postpone overt attention to political education until the high school years—as we often tend to do—we run a two-fold risk. First, by failing to expose children to systematic political education experiences when they can most benefit from them, we run the risk that our instruction in later years will be less than maximally effective. Second, we run the risk that, if ignored, children's crucially important early political learning will occur in a willy-nilly fashion likely, at best, to turn out only randomly functional for either the individual or society.
The committee's third consideration is interesting in that without it, the previous two are meaningless. It was hypothesized that a natural political world of the child existed and that the school provided a plethora of opportunities in which to explore that world. In their everyday functionings with the various levels of awareness (parents, teachers, friends, etc.), children constantly are confronted with decision-making, cooperation and conflict, influence and power, authority and legitimacy, and rules and compliance. The school is, in effect, a laboratory for the child's experimenting with and experiencing these phenomena. More importantly, the school can provide the child with the analytic and conceptual tools necessary for understanding political life. Thus, in both structure and substance the school is a primary source of opportunities for political learning.

Given these previous conditions, could and should the school accept the responsibility for political education? In exploring this fourth condition, the committee concluded that both historically and legally the schools have been charged with the maintenance of the political order. Under the guise of civics, American history, principles of democracy, American government, etc., citizen education has long been the responsibility of the schools. That the schools have the responsibility is not of primary importance. The committee's concern was the form that responsibility would take in the elementary school.

Finally, assuming that all these previous conditions existed, there would still be no need for new materials if extant curricula were sufficient. In reviewing current instructional materials designed either specifically or tangentially for political education, the committee found
that they fell into three major areas. The first were programs designed primarily to inculcate children into the ideals of American democracy. The second were programs designed primarily to transmit to children a core of basic factual information about American Government. The third were programs concerned with introducing children to the concepts, intellectual issues, and modes of inquiry of the discipline of political science. Although each area contained important aspects of political education, they did not, either in part or en toto, provide what the committee felt was a fully adequate political education. This was especially true at the elementary school level.

Through this inquiry into the state of the field of political education and the state of the elementary school, the committee reached a number of conclusions. These conclusions established the need for a new curriculum development project whose focus was substantially different than previous projects of its genre. The committee determined that:

1. There is a pressing and widespread need to improve political education in American society.

2. Childhood is an important phase in the process of political education.

3. Elementary schools have an opportunity to guide and shape children's political education.

4. Schools have a special responsibility for children's political education.

5. Existing instructional materials are inadequate.

How Children Learn About Politics

In designing instructional materials, an assessment of curriculum
needs is a necessary, but not sufficient, criterion upon which to base the creation of a new course of study. More importantly, before embarking on the development process, a knowledge of how human beings learn must provide the basis for designing instruction. Thus, before political education materials can be produced and evaluated, the question of how children learn about politics must be answered. To assess student development in relation to a set of systematically designed political experiences, the evaluator must ascertain ways in which students learn, intellectually and attitudinally, in relation to politics in general.

Much in the same way as the developer bases the materials on existing political learning theory, the evaluator employs these theories to first critically appraise the product and later to interpret information received from his sources of data.

The major problem of identifying ways in which children learn about politics is one which is inherent in all forms of social science research—can the responses of young children, often in forced choice situations, be relied upon as an accurate indicator of subsequent behavior? Coupled with the natural tendency of the researchers to search for causal and correlational explanations for these responses, these data became highly suspect. When these data are further used to predict future adult political behavior and orientations, the results may be dysfunctional.

In examining the systems versus individual approach as a method for explaining political learning, Patrick noted a dichotomy between political socialization as a function of the political system and political socialization as a function of the individual's political attitudes, values and behavior. He concluded that systems researchers base their inquiries on
how the political system seeks to perpetuate itself while those focusing on the individual level of analysis base their inquiries on how the individual acquires and learns political orientations.

There does appear to be general agreement among political socialization researchers that early childhood learning has a crucial effect upon later learning, however. As Easton and Hess point out:

... it is apparent that the elementary school years rather than the high school years present the crucial time for training in citizenship attitudes and the wider range of behavior we have called political socialization.

Greenstein also relates the resistance to change political orientations acquired early in childhood to early political learning. This conclusion tends to be supported by research done on retroactive inhibition by Ausubel and others. It also raises the issue of selective perception on the part of the child as he perceives primarily those stimuli which support prior assumptions of how the political system works or doesn't work for him.

Greenstein's hypothesis may also be used to explain the importance of parent's voting records (or lack of voting records) to their children's political preferences. At about age nine or ten, children begin to choose models from the wider environment. These models are most likely to be derived from reading the mass media, and school teachers. This movement from familial models to role models approximates the age at which Piaget reports a shift from egocentrism to sociocentrism. The most profound effect of these early learnings is the development of attitudes and values toward the political system. Later learning tends to be the process of gathering and storing information and the refining of inchoate discriminations.
Hess and Torney attempted to explain the development of political attitudes in children through their explication of four predominant models. They are:

(1) The Interpersonal Transfer Model which is most useful for understanding the child's first approach to the political system through interacting with parents, peers, and schoolmates;

(2) The Accumulation Model which presumes the acquisition of units of learning by the child, usually through teachers;

(3) The Identification Model which explains the child's inadvertent modelling of the behavior of parents or significant others especially as it pertains to party affiliation or candidate preference;

(4) The Cognitive-Developmental Model which is useful for explaining how the child grasps some of the more complex and abstract concepts of political processes.35

Hess and Torney are quick to point out that these are not formal explanatory models but rather descriptors of how children appear to acquire political attitudes which they bring to the socialization process.36 Each model is relevant to factors which may vary according to time and situation.

Torney has extended this four-part model to include the interaction of the curriculum and the child. The interactive or multiplicative model she suggests includes a threshold effect and a structural effect which may provide more significant political learning when coupled with the classical location models discussed above. Basically, the threshold
effect is defined as that point at which interactions (in a classroom, for example) become dysfunctional and impede the progress of the group. The structural effect is defined as the effect of not necessarily having an attitude but being part of a majority or minority holding that attitude. It also includes the existence of a comparison group which shares that attitude. The implications these models hold for classroom structure as a politicizing agent are clearly related to the entire concept of political learning.

Norah Rosenau follows more classical psychological constructs of learning when she delineates an eclectic model of political learning. She first defines a political event as a phenomena "which occurs not only in relation to government and formal institutions, but also to varying extents in all social systems where people must share a common pool of scarce resources." These phenomena can occur in family situations, in the school, among peers, and in the larger community. She further explains:

We consider learning to be the outcome of the interaction between two events, an environmental event and the individual's response to that event. Political learning is the outcome of the interaction between a political event and the individual's response to that event.

The resultant accumulation of political schema produces a configuration of modes of relating to political events and these presumably shape the individual's attitudes, beliefs, and range of behaviors in responding to political events.

Rosenau then presents her eclectic model which is derived from four components of political learning: (1) classical conditioning, (2) reinforcement, (3) observational learning or modeling, and (4) cognitive
assimilation and accommodation (cognitive development in the Piagetian sense). These four components as defined in political learning theory are essentially the same as those in classical learning theory and do not require additional explanation.

The components do not surface separately nor sequentially, but are constantly manifest in their various forms, at times simultaneously. Through a series of examples (children deciding on the particulars of a field trip, a new government leader deciding whose advice to follow) Rosenau illustrates how these components constantly interrelate. Through these four components students learn political concepts such as leadership, authority, influence, and legitimacy, while formulating configurations concerning the processing and use of information, the allocation of social values, and the clarification of personal value predispositions.

As Greenstein points out, very often, at least in the United States, early political learning has a preconscious quality. The child absorbs political information and attitudes without being particularly aware that he is doing so although what he has absorbed is readily capable of being brought into consciousness. Some learning is unconscious in the sense of being repressed and unaccessible to waking awareness. The child thus surfaces those perceptions of political events that reinforce his assumptions of how political systems operate.

Early political learning is largely undifferentiated as the child's nascent schema tend to be accommodative rather than assimilative. That is, the child tends to change his existing configurations to fit the political events he finds himself encountering. This is why early childhood
is viewed as a prime age for political socialization. As the child experiences disequilibrium with his predominant schema and the events he encounters, he engages in the process of progressive differentiation.\footnote{43}

A particularly traumatic experience with an authority figure at a time when a person's learning and behavior are largely undifferentiated would have a more profound effect on subsequent encounters with authority figures than if that event had occurred later in life. This one experience can result in rebelliousness, submissiveness, or apathy depending on how the subsequent experiences reinforce or repress this prior learning. The result is a form of branching which can best be explained in a quote by M. Brewster Smith:

... a view of causation in personal and social development as inherently circular or spiral, rather than linear in terms of neatly isolable causes and effects. As the very concept of interaction implies, developmental progress or deficit is typically a matter of benign circles or of vicious ones, not of persistent effects of clear-cut single causes. In social life, there is much bitter truth to the biblical maxim, "To him who hath shall be given; from him who hath not shall be taken away even that which he hath." Launched on the right trajectory, the person is likely to accumulate successes that strengthen the effectiveness of his orientation toward the world while at the same time he acquires the knowledge and skills that make his further success more probable. His environmental involvements generally lead to gratification and to increased competence and favorable development. Off to a bad start, on the other hand, he soon encounters failures that make him hesitant to try. What to others are challenges appear to him as threats; he becomes preoccupied with defense of his small claims on life at the expense of energies to invest in constructive coping. And he falls increasingly behind his fellows in acquiring the knowledge and skills that are needed for success on those occasions when he does try.\footnote{44}

The concept of progressive differentiation in political learning is amply supported by the political socialization research conducted by Greenstein\footnote{45}, Hess and Torney\footnote{46}, Easton and Hess\footnote{47}, Andrain\footnote{48}, and Connell\footnote{49}. At various times and in various locations these researchers...
have described the child's acquisition of party and candidate preference, of knowledge of the substantive and procedural structure of levels of government, and the identification of the responsibilities of various political figures.

Torney has made the most substantial effort in translating political learning theories into a strategy for developing educative experiences. Like Rosenau, Torney has derived her conclusions from the work of Piaget, Berlyne, Bruner, Gagne, et al. coupled with her familiarity with studies on political learning. Although she stops short of developing a middle-range theory for the creation of political education curriculum materials, she does devise a list of recommendations that incorporate a broad spectrum of possibilities for subsequent middle-range theorizing. Her recommendations are summarized as follows:

1. Begin presentations at the most concrete (enactive) level but as quickly as possible give children an appreciation of the complexity of political phenomena. This is to counteract the natural childish tendencies to overintegrate and oversimplify as well as to modify the inclination to believe in primitive efficacy and to wish for simple, positive international relationships which will insure peace.

2. Replace the generalized concept of political efficacy in the elementary curriculum with training in support of diversity and study and discussions of the functions of dissent, even if this must at first be done in a relatively unintegrated fashion.

3. In order to help children relate to political processes both in and outside of school, make use of the role-transfer model in devising ways to encourage them to feel that the school rather than being just a
hierarchy of authority figures like the principal and the teachers is a dynamic system in which many different people (including children) meet and interact. Make certain, however, that such generalization is carefully guided and not random. Consider also the use of potentially relevant material in other curriculum content areas.

4. Recognize alternatives to linear relationships in designing and evaluating programs. One concept of interaction suggests that a program may be useful in a given type of situation (with a given type of student) and not useful at all in another; the effectiveness of any given set of principles will be dependent upon various other factors. Prospective teachers need training in the ability to assess the instructional situation, to identify the factors which will influence interactions between students and material, and to recognize such phenomena as the latent dimensions of communication. This is primarily a matter of making teachers sensitive to these issues and of devising ways of measuring these factors which teachers may employ.

5. Give teachers structured tasks for determining the readiness of children to learn, cope with, and assimilate different points of view. Do not aim for a test battery which yields a composite score which will rank children from high to low on a single dimension. (As Anastasi /1972/ has noted, multidimensionality of human ability requires assessment in terms of trait patterns rather than global ranks.) Rather, try to determine through structured interviews the kinds of assumptions the child makes and what kind of cognitive structure he is likely to use in filtering the information which comes to him.

6. Make teachers aware of the necessity of discussing out-of-class
experiences in the classroom--this to include particularly what is seen on television. The contrast between what is experienced in school social studies classes and what is seen in the media is a potential source of growth in the student's grasp of politics. Too often this conflict is denied or ignored. The teacher may need to be trained as a "decipherer of information" and a director of creative conflict.

7. In general terms, I would phrase the problem as one of making the curriculum effective as well as realistic in the sense of capitalizing on the known characteristics of the child's development and learning potential. Effectiveness is defined in terms of the potential for multiplicative effects of school, family, and media. A curriculum such as the one proposed will effect schools most directly but must with deliberate purpose involve other socialization agents.50

Assumptions and Goals

The diagnosis of needs, societal, individual and disciplinary, led the Ohio Project developer to devise a set of primary assumptions. The purpose of these assumptions was to guide in the formulation of goals and in the selection and organization of content and learning experiences. For that purpose, four primary assumptions of the Ohio Project were made explicit. They were:

(1) Children experience political phenomena in their everyday life.
(2) Personally meaningful curriculum materials must be rooted in the experiential political world of the child.
(3) Elementary school (K-6) political education curriculum materials should not attempt to make children mini-political scientists in the narrow sense of simply introducing them to the structure of the political science discipline.
(4) Elementary school curriculum materials ought to be designed to promote teacher as well as student political learning.51
Concerning the first assumption, there is no doubt that children early on in their school experience have verbal and tacit knowledge of political phenomena such as authority, rules, compliance, justice, conflict, etc. By that time strong positive and negative attitudes, although often undifferentiated, have already taken hold. As Torney points out, the "new focus" of political socialization is on the idea of interaction between curriculum and the experience of the child, in short Phillip Jackson's "hidden curriculum". These phenomena, then, can easily be identified through the child's primary interactions in his home, on the playground or street corner, and in the functionings of the school. Secondary interactions could be drawn from the media and serve to refine the child's inchoate sense of the political system.

The second assumption simply underscores an oft-repeated phrase in this study: that there is a natural political world of the child and that world can be brought into the classroom. The numerous studies cited earlier and Robert Coles' soon-to-be-released study of "what children know about politics" present an impressive compendium of these experiences and the varying levels of awareness at which children view them. Through the use of such instructional tactics as advanced organizers (Ausubel) and concept formation (Woodruff) and such strategies as simulations, role-playing, and case studies, it is assumed that these experiences can be directed and structured so as to be educative.

The third assumption illustrates a clear and hopefully significant move from the curriculum thinking of the 1960s. The materials should not seek to establish a bailiwick within the schools in an effort to promote a "way of thinking about political science." Ideally, the materials
should provide a fairly well defined set of cognitive maps with which the child can view his political world in an orderly fashion. Realistically, they can provide an organizational framework for the teacher which can be easily integrated with other discipline structures.

The fourth assumption reflects the educational aphorism that "the best way to learn something is to teach it." While the validity of that statement has not been proven conclusively, the self-reports of pre- and in-service teachers seem to indicate that their knowledge of subject matter increased after teaching in their field. That incomplete evidence notwithstanding, it would be unrealistic to expect elementary school teachers whose training is rather broad-based to be experts in the field of political science. Therefore, the units should be designed in such a way as to require a modicum of background experience on the part of the teachers. Through their use of the materials, however, the teachers would be experiencing a type of inservice education voiced in the above aphorism.

These guiding assumptions, in concert with the knowledge gained from investigating societal, individual and disciplinary needs, provided the basis for the Project's goal statements. These goal statements were broadly stated and designed to provide a framework for the units. They do not represent the specific objectives for each lesson. For the development of the political education curricula, the statements are at this point sufficient.

The goals themselves were derived from three fundamental questions which directed the creation of the materials. They were:

(1) What kinds of self-consciousness do we want children to develop toward decision-making?
(2) What kinds of competencies do we want children to develop in regard to decision-making?

(3) What kinds of knowledge do we want children to acquire about decision-making.

These three questions led to the formulation of the three general objectives or goals for the unit:

* The students will develop an awareness of the interaction between themselves and political decision-making.

* The students will develop basic competencies as makers of decisions by themselves and with others, as influencers of decisions, and as judges of decisions.

* The students will acquire a basic knowledge of the primary features of political decision-making.

To enable the students to develop basic decision-making competencies, it was concluded that the students should make, influence, and judge political decisions at a number of levels including within the home, the school, the peer group, the community, and the state and federal governments. The students' knowledge of basic features of political decision-making would be expanded by having them experience and examine (a) what kinds of political decisions are made by individuals and groups, (b) how are decisions made, (c) what constitutes good and bad decisions, and (d) why do individuals and groups make the decisions that they do.

The students would thus engage in classroom activities in which they would make, judge and influence political decisions individually and in groups. Figure 14 illustrates the relationship of these decision roles and the goals of the materials.

Selection and Organization of Content

The content of the four Units of instructional materials was organized around the concept of political decision-making. Along with authority
Figure 15. Roles and Goals of Political Learning

and conflict, decision-making was determined to be one of three primary phenomena which children encounter in their natural political world. Thus, the content was selected and organized on the basis of its relationship to the theme of political decision-making. Guiding this process were the working definitions of that phenomenon.

Early in the project, two basic working definitions were presented. A decision was labelled as "a selection of one course of action after conscious deliberation." Decision-making involves "an entire sequence of activities by which goals are set, tasks defined, options searched for, choices made and plans developed." Decision-making phenomena, then, would include "a decision, a decision-making unit (an individual, a group, an organization, a nation, etc.) and an occasion for decision (the operating environment of the decisional unit and the immediate situation, problem, or stimulus calling for a decision along with possible decision
constraints such as resources, precedents, and the like).  

How does a political decision differ from any other decision? Essentially the difference is one of scope. A political decision is (1) a decision about the management of a social unit which is designed to be collectively binding on the members of the unit, and (2) decisions made by members of a social unit about or in relation to collectively binding decisions. Illustrative types of political decision-makers and types of political decisions may be seen in the graph below:

<table>
<thead>
<tr>
<th>Individuals</th>
<th>Non-individuals (Groups, collectivities, the Social Unit.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. Principal starts school earlier.</td>
<td>e.g. PTA writes letter to newspaper protesting school board decision.</td>
</tr>
<tr>
<td>e.g. Parent raises allowance for all the children.</td>
<td>e.g. Congress increases social security tax.</td>
</tr>
<tr>
<td>Collectively binding decisions related to the management of the social unit.</td>
<td>e.g. Teachers refuse to honor non-strike agreement.</td>
</tr>
<tr>
<td>e.g. Seniors do away with class trip.</td>
<td>Decisions about or in relation to collectively binding decisions.</td>
</tr>
</tbody>
</table>

One final term, decision situation, must be defined. A decision situation is a problem of a stimulus whose solution is not immediately apparent. The decision maker is thus confronted with at least two choices of alternative action. The probable sequence of activities...
through which a thoughtful decision-making individual or group would reach a solution would involve the following five factors:

1. Confrontation with the need for choice (decision situation)
2. Determination of the goal involved in the decision situation (these may be reflected in the value priorities of the individual or group).
3. Identification of alternative courses of action.
4. Evaluation of alternatives by exploring their consequences.
5. Selection of one course of action—a decision.

In some decisions each step may be arduous and highly reflective. In others, some steps may be more obvious than others and thus require less conscious deliberation. As in any paradigm, the initial and final steps are most important with the intermediate steps serving at varying levels of impact.

Selection and Organization of Learning Experiences

While goal statements are a necessary first step in the categorization of learning experiences, it is difficult to translate them into specific lessons without transition statements, or generalizations. Generalizations also serve the purpose of introducing substantive elements of the discipline as interpreted by political scientists. Later, these elements will become the organizing concepts upon which the lessons are built.

The generalizations which are presented in the study are from the first unit of the four unit sequence on decision-making. This is done for two reasons. First, the remainder of the study concentrates on the intensive analysis and formative evaluation of Unit 1. Second, the
presentation of the generalizations and the discussion of the lessons comprising the first unit provides a conceptual framework which is followed in the remaining three units, Making Political Decisions, Making Judgments About Political Decisions, and Influencing Political Decisions.

The ten lessons that comprise the first unit, Decisions and You are derived from seven generalizations. They are:

1. You make decisions when you choose among two or more alternatives.
2. You belong to groups that make decisions affecting you.
3. Political decisions make rules for you.
4. Political decisions affect who gets what is important.
5. Political decisions concern group goals.
6. Political decisions are made because there is usually not enough of things everybody needs and/or wants (resources are scarce).
7. Political decisions are made because members of a group often disagree or want different things.

Briefly, these generalizations introduce the student to a number of concepts that exist both in the political science literature and in the political world of the child. The purpose of this unit is to heighten the child's awareness that (a) he is a decision-maker individually and in groups, (b) he encounters political decisions all the time (in the form of rules, value allocations and concommitant costs, and the setting of goals), and (c) he or his group makes political decisions primarily because of scarcity or conflict.

The learning experiences were organized into lessons which engaged the students in structured experiences. The lessons were organized into units whose titles were noted above. The criteria for the selection of
learning experiences are summarized in this long quote from Remy's June 3 position paper:

The titles indicate an important thrust of the Ohio Project; namely, that we are concerned not only with the child's present learning, but with his future behavior as an adult. That is, we are concerned with the fact that the 6th grader, for example is now a political actor and also an adult political actor-to-be. Thus, as 6th graders, Billy Jones or Patty Smith make political decisions, influence political decisions, and are affected by political decisions. In addition, Billy Jones and Patty Smith are developing personalities who in a few years will be Mr. Bill Jones (auto mechanic, father, etc., etc.) and Ms. Pat Smith (neurosurgeon, mother, etc., etc.) who will make, influence and be affected by political decisions.

All four instructional packets should exhibit a number of characteristics which in effect constitute a set of criteria for the design and production of the mini-units. These are:

1. The instructional packets to be developed will take the form of mini-units. Each mini-unit should be approximately three weeks in length.

2. Each mini-unit will be comprised of lessons. A lesson is a self-contained instructional activity designed to cover particular content and help students achieve one or more objectives. A lesson may be a role-playing exercise, a case-study, a simulation, a picture analysis exercise, a field-trip, or the like.

3. A lesson should use no more than a 30 to 45 minute block of time in any one school day. A lesson, however, may take longer than one day to complete.

4. Short, simple lessons easily expanded upon by teachers if they so desire are preferred to long complex lessons. Thus, any single lesson should not take longer than two or three days to complete (at 30 to 45 minutes per day). For example, a brief, simple simulation taking two class days is generally to be preferred to a more complex simulation occupying five class days.

The idea is to create simple lessons focused on one or two key ideas. Once teachers become familiar with our approach, such lessons could serve as models to help them create their own new lessons in the future. This is an explicit alternative to a highly complex lesson which could only be replicated by the professional developer who first created it.

5. Lessons should use familiar resources (e.g., the local fire department) and artifacts (e.g., the community newspaper) which the teacher can easily obtain from...
the immediate environment.

(6) To the extent possible every lesson should simultaneously attempt to promote self-consciousness, knowledge and competency—the three basic objectives. Ideally, a lesson which has activities that embrace all three objectives is preferred to a lesson which has, for instance, only knowledge-acquisition activities.

(7) To the extent possible, the substantive content of the learning exercises should include both the everyday world of the child and the world of adults. Every lesson should be based upon, and attempt to dramatize, carefully drawn parallels and comparisons between examples of decision-making embedded in the child's personal life and examples which illuminate the politics of the larger world of which the child is now a part and in which he will play a later adult role.

This key criterion has several purposes. One purpose is to help make the physically and psychologically distant world of politics and government (especially politics related formal governmental institutions such as the city council, Congress, the courts, the Highway Commission, the school board, etc.) more personally meaningful to children by highlighting comparisons and analogs between decision-making in their immediate lives and the world of adults. A second purpose is to help children prepare, in ways which will have lasting effects for the citizen role they can or will occupy as an adult. Implicit here is what could be a "career education" approach to political education. A third purpose is to enrich learning about the child's immediate (natural) political world by drawing upon the political world "out there." For instance, we hope working through a case-study on how a city councilman uses persuasion to influence the decisions of others could help the child see that he/she also uses persuasion to try to influence others' decisions.58

It was also determined that the learning experiences would be iterative and mutually reinforcing. The purpose of this was to allow students to recognize patterns of lesson activities. This enabled them to focus on the experience rather than directing their energies toward figuring out what they were supposed to do.

The conceptualization process thus resulted in ten Unit 1 lessons
which bore the following descriptive titles:

1. You Make Decisions
2. Deciding Among Alternatives
3. Political Decisions Make Rules for You
4. Political Decisions and Social Resources
5. Political Decisions and Group Goals
6. Political Decisions are Everywhere
7. Scarcity and Political Decisions
8. Conflict and Political Decisions
9. Climbing a Decision Tree
10. Summary Exposition

These titles indicate the learning experiences which are derived from the body of content, political decision-making.

Methods of Evaluating

Since the materials are designed to be experience-based, evaluation is curriculum-embedded. That is, each unit does not end with a testing situation which is meant to measure student performance. Rather, in participating in the activity, the students experience, and thus achieve, the objective.

For purposes of teacher comfort, however, application/evaluation lessons are included mid-way through and at the end of the first Unit. These lessons are primarily designed to summarize the core activities in the ten unit lessons. The evaluation exercises are thus designed to meet the following criteria:

1. Evaluation of student performance should act as feedback and guide.
2. Evaluation of student performance should be criterion-referenced not norm-referenced.

3. Evaluation should insure student mastery and feelings of success.

D. Summary

This chapter tested the applicability of an historical/conceptual level of evaluation to the Ohio Project. First, the history of the Ohio Project was presented. Second, the conceptual framework, which emanated from the Project's history, was examined. The Project's conceptual framework was placed in the context of Hilda Taba's model of curriculum development and outlined following her step-by-step procedure. The chapter's purpose, then, was to relate the thinking which undergirded the development of Unit I. This framework will be referred to again in Chapter IV where the actual product is analyzed.
FOOTNOTES


4 Ibid., pp. 3-7.


6 Ibid., p. 12.


12 Lee F. Anderson, Richard C. Remy, Richard R. Snyder, "Improving Political Education in Elementary Schools: Challenges and Opportunities" (Position Paper of the Task Force on Elementary Education of the APSA Committee on Pre-Collegiate Education), pp. 2-3.

13 Ibid., p. 3.

14 Ibid., pp. 3-4.

15 Ibid., p. 4.

16 Ibid.

17 Ibid., p. 6.
18 Ibid., p. 8.
19 Ibid., p. 9.
20 Ibid., p. 10.
22 Ibid., p. 15


24 Ibid.


26 Ibid., p. 11.


31 Greenstein, *op. cit.*, p. 81.

32 Ibid., p. 148.

33 Ibid.


36 Ibid., p. 19.


43. Rosenau, *op. cit.*, p. 64.


45. Greenstein, *op. cit.*

46. Hess and Torney, *op. cit.*

47. Easton and Hess, *op. cit.*


52. Torney, *op. cit.*, p. 33.


54. Richard Snyder, "Decision-Making Key Variables: A First Approximation" (Columbus, Ohio: memo), p. 5.

55. *Ibid.*


58. Remy (June 3, 1974, paper), *op. cit.*, pp. 9-12.
Chapter IV

THE ANALYTICAL LEVEL OF EVALUATION

A. Introduction

The analytic level of curriculum evaluation most closely approximates what has come to be known as formative evaluation. It, too, has many phases all of which focus on one goal: the improvement of the original product. As was shown in Chapter II, the process of analytic evaluation includes critical appraisal, pilot-testing, field-testing, and validation testing. Since the field-testing and validation testing of Unit I has not yet been implemented, it would be difficult to discuss data generated except in the abstract. Thus, this descriptive analysis of data will be limited to the information gathered through critical appraisal and pilot testing. This description will have three goals: (1) to further illustrate how the strategy operates; (2) to test out concepts of how a small-scale project can most efficiently gather information; (3) to present the developer with a "thick" description of the product to aid in making decisions and judgments. In effect, this description serves as a case study of one phase of curriculum development.

Viewing a curriculum development product from a number of perspectives is not unique to this study. Most serious evaluation efforts, like the one employed by Man: A Course of Study, include formal and informal
observations, achievement testing, review panels, interviews, and student and teacher reaction questionnaires. However, temporal and financial constraints often restrict smaller projects resulting in a truncated evaluation. The dilemma facing the Ohio Project, then, was how to gather needed information with limited resources of time, money, and people.

This need was met in three ways: (1) by prevailing upon collegial consultants who would read and review the units for minimal honoraria; (2) by involving classroom teachers in the review and testing of the lessons. This involvement was assured through a small but direct reward and through reinforcing the feeling that their suggestions were an integral part of the success of the project by including them in the revisions; (3) by encouraging research related to the project by graduate students on the staff. This three-pronged strategy created a great deal of useful information with a relatively low cost-factor.

Panel Review and Pilot Testing

One of the critical issues that faces a development project early in its life involves deciding when to begin evaluation and what activities will generate the needed data. For the Ohio Project, evaluation began almost as soon as the first lesson was written. Since the bulk of Units I and II were written during the summer of 1974, it was impossible to begin any meaningful classroom testing immediately. This may have been an advantage, however, since it postponed dealing with the ethical issue of introducing an untried, untested approach to citizenship education into the classroom until it had been sanctioned by a number of professional educators and classroom teachers.

Critical appraisal as a sanctioning function served two purposes:
(1) It provided suggestions for "tightening up" the materials in areas where teachers felt there might be a problem with their students, and (2) it gave "third party" input as to the efficacy of concepts, strategies, and tactics incorporated into the lessons. This first phase of evaluation proceeded in the following way:

(1) A cross-section of elementary school teachers (grades 3-7) in Franklin County were identified and asked to read the lessons and react to them as though they were going to teach them to their class. They were asked to record their reactions on a teacher reaction form. (See Appendix A.) The form posed questions about each of the lesson components.

(2) At approximately the same time a small group of educators, political scientists, and social scientists were asked to review the materials and respond in any way they felt appropriate to theoretical questions of conceptualization, appropriateness of instructional methods and the logical flow of objectives and instructional sequences. In effect, they were asked to evaluate what was to be learned.

(3) Between the completion of the first draft of the lessons and the pilot testing phase, a state-wide teacher reaction panel was convened. The purpose of this panel was to broaden the base of reactions much as field-testing broadens the base of pilot testing. However, it suffered from two flaws. First, since it was arranged by the State Department of Education, it was designed primarily to meet their needs. Second, the reaction panel was under a great deal of pressure to review sixteen lessons within
a two week period. This was not particularly conducive to reflection and analysis.

The results of these activities were compiled and analyzed. Suggestions were weighed in relation to the overall goals of the materials and the values of the developers and, where feasible, revisions were made. It was clear that although a vicarious review of the units was helpful, actual classroom experience with the lessons was needed before some suggestions could be taken seriously.

The process was reminiscent of how a play's success or failure is determined. In reality, "the play is the thing" by which relative worth is judged. Many plays are beautiful in the reading but are virtually uninterpretable by actors. Others appear lifeless at first reading only to have their essence brought out through human action. Thus to make final judgments about the product based only on critical appraisal would be analogous to closing or heralding a play because the reviewer had read but not seen it.

Empirically, this phenomenon was verified in a study done by L. E. Frase by comparing the results of panel review and pilot testing in determining product validity. Frase found that although review panels were half as expensive, there was a lack of substantial evidence to support the hypothesis that a panel review board is a suitable substitute for pilot testing. Among the specific findings were:

(1) Panel review boards were consistently more critical of the units than the pilot test team.

(2) Problems identified by panel did not manifest themselves in "the real classroom."
(3) Panel review boards were more concerned with moralizing factors of the instructional products, whereas pilot test teams directed their concern toward teacher and student behaviors.

(4) On the positive side, panel review took only 1/5 the time required by pilot testing and could be conducted without the pressure of impinging classroom responsibilities.²

Toward Systematic Analysis

Since appraisal provides a necessary but not sufficient evaluation of the materials, a more systematic way of analyzing instructional activities is needed. This may be accomplished in two ways: (a) by using current procedures for content analysis, or (b) by creating a method designed specifically to meet the needs of the project. In considering methods through which systematic analysis might be accomplished, it became apparent that extant methodologies provided a useful but inadequate frame of reference from which to approach instructional materials. Although well-grounded in the fields of testing and measurement, these models failed to provide insights into the important questions of learning theory, i.e., questions related to learned capabilities, sequence of learning, sequence of instruction, and optimal conditions for learning.

Models posited by Morrissett and Stevens³ and Eash⁴ proved valuable in thinking about content analysis and structure of instructional materials, but the most suggestive model proved to be the one presented in the Handbook of Formative and Summative Evaluation.⁵ It, too, had shortcomings, however. Primarily, the model dealt with the analysis of instructional activities within the cognitive domain of Bloom's Taxonomy. Beautifully simple, its simplicity provided its greatest weakness. By
not attending to the behavioral and attitudinal aspects of human learned capabilities, it limited its usefulness to materials which fostered cognitive goals. Clearly, what was needed was a more complete model which could analyze materials with respect to various kinds of learnings gained from various kinds of experiences. From this, questions of optimal sequences of instruction and conditions for learning could be more adequately dealt with.

Analyzing Learning Experiences

An experience-based political education curriculum project, such as the Ohio Project, should create materials that can be analyzed on two levels: (1) the quality of the experience, and (2) what is to be gained from the experience. As to the role of experience in education, Dewey notes that:

(1) Educational experiences should not be merely defined as activity, but as activity which is reflected back to us as change promoted through the consideration of consequences.  

(2) Learning from experience involves looking backward and forward to make a connection between what we do to things and what we suffer or enjoy from things as a consequence.

(3) Experience is an active-passive affair. It is not primarily cognitive. As Robert Slack points out in a discussion of Project English, conceptualizing comes after the experiencing.

(4) The measure of the value of an experience lies in the perception of the relationships or continuities to which it leads up.

(5) Thinking about experiences not only involves intellectual activity but sensory activity as well. This sensory activity
especially employs the eye and the ear. In short, experience in education involves active problem solving and decision-making and passive reflection upon the consequences of these activities.

Dewey's concern over the quality of educational experiences marked an important step in defining purposeful classroom activity. However, recent research has broadened this view somewhat by attending to the question of the quantity of experiences. The neo-Piagetian work of Pascual-Leone indicates that the basic intellectual limitations of children dictate the number of schemes, rules, or ideas they can handle simultaneously, a capacity that increases with age. Thus, because children may forget 80% of the information they encounter, what is left is a general impression of what is going on. These general impressions provide a schema for incorporating new knowledge and attitudes. The implication for instructional design, then, is the structuring of an experience or series of experiences that reinforce an optimal amount of rules, definitions, or concepts without overloading the child's intellectual circuitry.

One method for predicting the effectiveness of an activity in promoting learning is the use of Edgar Dale's "Cone of Experience." Depending upon the age of the students and their relative capabilities, one can determine which kind of activity will be most efficient in terms of time and quality of learning. In general, the younger the child, the lower one would go on the scale. Dale's categories are:

12. Verbal symbols
11. Visual symbols-signs; stick figures
10. Radio and recordings
 9. Still pictures
Thus on the one hand, an analysis of these materials must attend to the larger question of the quality of experience while on the other hand attending to the more specific issue of the structure of the experience.

To accomplish the second goal, an adaptation of the Handbook matrix has been combined with Gagne and Briggs' view of learned capabilities (See Appendix B.) to create a more complete matrix for the analysis of learning activities. Briefly, a synopsis of Gagne and Briggs' categories is presented below:

1. **Intellectual Skills:**

   (A) *Response Chains* - includes motor chains such as the drawing of perpendicular lines, and verbal chains such as verbal associations (boy-girl, summer, winter, etc.).

   (B) *Discriminations* - Distinguishing one thing from another by virtue of their characteristics. Includes multiple discriminations.

   (C) *Concrete Concepts* - identifying concepts because of physical properties such as color, shape, etc. Children may be asked to identify those characteristics to see if they have
grasped the concept. 17

(D) **Defined Concepts** - demonstrating that he knows a concept by defining it. Demonstrates an application of that concept as defined. Shows relation between it and other concepts. 18

(E) **Rules** - demonstrates knowledge of rules by showing one or more instances of the relation of component concepts to one another (e.g., grammar rules, punctuation rules). 19

(F) **Problem Solving** - invents more complex, higher-order rules for purpose of solving a problem. Applies these new rules to physically different but formally similar situations. 20

II. **Verbal Information:**

(A) **Labels** - learns the name of an object or an abstraction. 21

(B) **Facts** - shows relation between two or more named objects or events. Child is asked to state that relation. 22

(C) **Organizing Information** - learns set of related facts, e.g., a body of information about a period in history. Can relate this to other bodies of information. 23

III. **Cognitive Strategies:**

(A) **Original Problem** - originates novel solutions to problem situations; neither the class of solution nor specific manner of solution are specified. Shows child's level and style of thinking. 24

IV. **Motor Skills:**

(A) **Part Skills** - learns component parts necessary to achieve whole. Requires bodily movement.
(B) **Executive Sub-routines** - puts together parts skills into a whole. Requires cognitive operation. 25

V. **Attitudes:**

(A) **Direct Method** - results because of experience in which response caused attitude (e.g., the feel of a snake causes feelings of aversion). Also includes contingencies of reinforcement such as direct reinforcement which causes attitudes toward behavior to be acquired.

(B) **Indirect Method** - includes modelling behaviors and imitation. 26

In using Gagne and Briggs' descriptive categories to analyze instructional activities, two things must be kept in mind. First, the analysis is meant to be descriptive; it does not make judgments as to whether an activity is appropriate or inappropriate. It does, however, aid in decision-making when taken in concert with reports from pilot-testing.

Second, the learned capabilities indicated on the chart (See Appendix B) are marked where they appear to be the learnings intended in the activity. No doubt, a number of learned capabilities are present in any activity, but in these descriptions only those learnings which appear to reflect the outcomes intended by the developer are germane.

**Characteristics of the Materials**

To fully understand the intended outcome of the materials, they must be placed within the context of their important characteristics as viewed by the instructional developer. This is analogous to planning a trip by mapping out the routes necessary to get you where you want to go. Some of those "routes" include:
(1) The incorporation of a mixture of cognition, feelings, and behaviors into every lesson recognizing that each does not in reality exist by itself.

(2) The use of examples of political decisions from the world of the child not only from formal institutions.

(3) The use of advanced organizers to indicate to students where they are going. In effect, completion of the lesson involves everyone in performing the objective, i.e., mastery learning.

(4) The building of lessons around activities - group work, questionnaires, games, simulations, experiments, etc. High reading level is not a prerequisite for learning.

(5) The organization of lessons in an easily followed, consistent format providing for both teacher structure and teacher creativity.

(6) The recognition that the materials must appeal to a broad spectrum of students. This necessitated the design of brief, flexible lessons which included a number of options for high adaptability.

(7) The relating of the lesson activities to other subject areas thus encouraging discipline integration by the students.

(8) The guiding principles of competence, knowledge and self-consciousness interwoven into each of the lessons.

(9) The attention to major social issues of concern to teachers and students such as ecology, energy, crime prevention, etc.

(10) The incorporation of tasks and concepts appropriate to the developmental levels of the students.27
How the Materials are Analyzed

The section which follows details the process by which Unit I, Decisions and You, is analyzed. Within this framework all ten lessons are reviewed. The reader will note that Lessons 1, 2, 3, and 9 in Unit I have more feedback than other lessons in the Unit. This is because all the pilot teachers taught Lessons 1, 2, 3 and 9, while the remainder of the lessons were tested by one-half of the sample. The other half of the sample tested Unit II.

The discussion of the data is presented in the following way:

(1) The author will describe the activities and what kinds of learned capabilities appear to be intended by the developer. The logic of the sequencing will be discussed by referring to standards presented by Gagne and Briggs, Bruce Joyce, Elliott Eisner, and others.

(2) The reactions of the teacher reactors, critical appraisers, and the review panel will be summarized. (See Appendix A for examples of the instruments used.) A summary of their suggestions will be included.

(3) The responses of the pilot teachers will be described. (See Appendix A for examples of the instruments used.) A summary of their suggestions will be included.

(4) The results of interviews with fifteen students (three from each of five different, representative schools) will be described. The students were selected according to the teacher's perception of their level of enthusiasm for the lessons—one high, one medium, one low. This highly-impressionistic summary
will also include their suggestions for lesson revision.

(5) Finally, one member of the development team, the instructional materials designer, will be interviewed. The purpose of the interview is to allow him to present his reactions to the perceptions of the author, the reviewers, the pilot teachers, and the students. The designer's reactions are presented in their entirety. The logic behind including this information primarily rests upon Scriven's concern for value and goal weightings. It thus allows the reader to understand why some suggestions were included in the revisions and others ignored.

B. Analysis of the Materials

As in any good set of instructional materials, the Ohio Project lessons employ a number of principles of learning. Among these are the time-tested principles of contiguity, repetition, and reinforcement. As Gagne and Briggs point out, however, in light of recent research in learning, one must also attend to the principle of previously learned capabilities, i.e., what the learner brings with him to the experience, and the corollary principle of anticipated learned capabilities, i.e., what the learner is expected to gain from the experience. It may be argued that diagnosing the former is the responsibility of the teacher and providing for the latter is the responsibility of the developer, but the developer can and should aid the teacher in fulfilling her responsibility through the design of flexible, highly adaptable materials.

Defining Goals of Instruction

Certainly an important step in incorporating learning principles into
the materials is the definition of course goals. In the Ohio Project, the ultimate goals are:

1. Competence - the acquisition of the ability to make, influence, and judge decisions through the application of cognitive strategies to occasions for decisions.

2. Self-consciousness - the acquisition of attitudes which will affect an individual's choice of action toward some object, person, or event.

3. Knowledge - the acquisition of information and the ability to use it in a larger meaningful context.

Thus, in translating these goals into purposes for the course, the developer should be concerned with expressing what the student will be like after the lesson, not what he will be doing during the lesson. In other words, the statement of purpose should be expressed in terms of current outcomes not long range goals no matter how exciting those may be. So, verbs such as understands, knows, learns, etc., are too ambiguous to adequately communicate what the student is likely to acquire from a classroom activity(ies). If one chooses to state objectives, as the Ohio Project did, they should be judged in terms of how well they communicate the capabilities to be learned.

In evaluating the statement of purpose and objectives of the lessons in the Project materials, three things need to be kept in mind:

1. Whether the original intention about the lesson's purpose has been overlooked or inadequately represented;

2. Whether the lesson has a suitable "balance" of expected outcomes; and
(3) Whether the approach to instruction is matched to the type of objective in each case. 

Matching Activities and Goals

The final area of concern in analyzing the materials is the determination of how well the activities match the stated or implied goals, and how well those activities are sequenced. In these materials, there is a clear distinction made among activities that introduce the lesson, those that develop the lesson, and those that conclude the lesson. The core instructional sequence of the materials is divided into three phases: "Opening the Lesson," "Developing the Lesson," and "Concluding the Lesson."

This type of sequencing implies a "learning hierarchy" in each lesson. Such an arrangement allows for a "spiraling" of the curriculum in such a way that previously learned knowledge is reviewed to improve retention and then elaborated upon when reintroduced to broaden understanding and transfer of learning. This transfer can be further assured by allowing for application in a variety of tasks that differ from the conditions under which it was previously learned.

Data to be Sought

To adequately analyze the effectiveness of the materials for purposes of making judgments about them, the author will seek the following information:

From the author's lesson analysis:

1. How clear are the intended outcomes of the lessons?
2. How well do the activities reflect those outcomes?
3. What judgments can be made about the quality and quantity
of experiences incorporated into the lessons?

From the teachers and critical appraisers:

1. What practical difficulties are encountered in conducting the lessons?

2. What is their estimate of the degree of interest or absorption of the students in the lesson?

3. What difficulties were encountered in carrying out the intended teacher procedures?\(^{38}\)

4. What are the teachers' judgments in reference to the lessons' adaptability to their class?

From the students:

1. What are their overall impressions of the lessons?

2. What are their overall feelings about the activities used in the lessons?

On the basis of this description, a summary of judgments derived from the author's perceptions of Unit I are presented. This summary will take the form of questions for the instructional materials designer. The responses to these questions provide some valuable insights into the value and goal orientations of the designer.

Descriptive Summary of the Lessons

**Unit I: Lesson 1: Description.** Since this lesson introduces the units on political decision-making and the concept of decision-making to the teachers and students, one would expect a fairly structured, simply executed series of activities. This is pretty much the case. The lesson includes four major activities with the objective of having students demonstrate that they make decisions. As is shown in the chart in
Appendix B, the lesson begins with a brief discussion which includes questions designed to help students identify the fact that they make decisions.

To further develop the notion that they make decisions, the students are asked to fill out a "Decision Questionnaire" which illustrates the types of decisions children are likely to make (who to play with, what to read, what to wear) and whether or not they make them. These examples provide concrete referents through which the child defines what a decision is. These decisions are then graphed on the blackboard by the class to aid them in discriminating how their decisions may often differ from the decisions of others. They are also introduced to a rule about decisions, e.g., that decisions involve choices.

Finally, the students are asked to individually list decisions that they make which aren't included in the list. This activity involves the application of the facts and rules they learned about decisions to further define the concept of decision-making.

Reactions of Critical Appraisers. The general reaction to Lesson 1 was positive. On the whole, the appraisers felt the questionnaire was a useful tool for defining what decision is. There were some reservations over introducing the lesson with a discussion. A number of reactors noted this and three indicated they would probably begin with a simulation or student-generated problem situation to introduce the fact that everyone makes decisions. The primary reservation associated with beginning the lesson with a discussion was the feeling that it would generate little enthusiasm among the students. Several reactors commented on specific questions on the questionnaire indicating that deciding what to wear or
what to eat might not be relevant to certain socio-economic groups. Again, the notion of student generated decision-situations was brought up.

The listing of decisions students make to conclude the lesson met with mixed reviews. While many felt it was a useful exercise, some indicated that their students would have difficulty in writing the decisions and that they would have the students tell them and then write it on the blackboard. There was also some concern that fourth graders and slower students couldn't handle the bar graph. Finally, some reactors indicated that the concluding activity did not provide adequate closure for the students on the definition of what a decision is.

Pilot Teachers' Reactions. In general, the pilot teachers' reactions to the activities in Lesson 1 were positive. This feeling was shared by teachers in classrooms across grade levels, reading levels, and socio-economic levels. In terms of gauging student interest, for example, with 4 being a strong 'YES' and 1 being a strong 'NO', the mean response for all fourteen teachers was 3.07 for the opening activity and 3.64 for the developing activity. (See Appendix B.) The mean response for whether students enjoyed the activities was 3.78 and the mean response for whether the concluding activities drew attention to the purpose of the lesson was 3.57. The lowest overall mean response by a teacher to all questions on the evaluation form was 2.75 while the highest was 4.0.

The generally positive trend was reflected also in the teachers' specific comments. Some of the concerns voiced by the reactors did not surface while others were voiced as potential problems. Teachers from the higher grades and higher socio-economic status schools had less of a
problem with the opening discussion than teachers in lower grades and lower SES schools. Some teachers indicated that they overcame this problem by soliciting suggestions from the class in lieu of asking the questions provided. Two teachers expressly pointed out that their students had fun doing the lesson while others felt their students exhibited a high level of interest in the activities. One teacher thought the lesson was too simple while another explained that decision-making was already familiar territory for her students. The latter teacher, however, reported high student interest in doing the questionnaire.

Student Reactions. Of the fifteen students interviewed, twelve had done Lesson 1. After talking about the lesson with them, the investigator was left with the impression that they genuinely enjoyed doing the lesson and were surprised that they made decisions at all, let alone so many. They all expressed positive feelings about the questionnaire, although specific questions gave two students some problems. For example, they had difficulty in determining why deciding when school will start is a decision. Two students also suggested including questions that illustrate decisions they will make in the future.

On the issue of discussions there were mixed reactions to their use in the lessons. Some students enjoyed discussions and found them useful while others thought activities which engaged them in physically doing something provided more enjoyment.

Summary. A review of the various reactions presents an interesting array of suggestions and recommendations. It also reinforces the research findings presented earlier in this chapter concerning panel review vs. pilot testing. In essence, problems perceived in reading a lesson often
never materialize either in teachers' or children's perceptions of what happened. It also shows that revisions based on critical appraisal must weed out "party line" statements from genuine pedagogical and substantive concerns. Some suggestions did seem to thread their way through all the perspectives, however. These recommendations include:

1. Making the opening activity more flexible by suggesting ways to make the discussion less teacher-directed.

2. Reviewing the questions in the questionnaire to include a wider spectrum of decisions children would make under a variety of environmental conditions. For example, students had trouble dealing with decisions made by the school administration.

3. Continuing the use of activities that require students to actively pursue a goal. Comparing experiences appears to hold student interest and allows them to reflect on their ideas and the ideas of others.

The first lesson does not appear to have any serious pedagogical or substantive flaws. Its focus is clearly awareness building, and the instructional moves from establishing the fact that children make decisions to discriminating and defining the kinds of decisions they make seems logically sound. The experiences encountered in the lesson appear to be at the appropriate level for these students as evidenced in the teacher evaluations and the student interviews.

The one shortcoming of the lesson format that seems to recur in later lessons concerns the statement of objectives. If the developers opt to include performance objectives in the lessons, and there is no evidence to indicate that these were particularly helpful to the teachers, then they should be stated in terms of what the student should learn from
the experience. Rather than saying that students will demonstrate they make decisions by completing a decision questionnaire, it would be more appropriate to state that students will (1) recognize that they make decisions, and (2) identify decisions that they make every day. In effect, demonstrate connotes that students have already learned something, and they are showing how well they have learned it.

Lesson 2: Description. Having introduced in Lesson 1 the fact that a decision is a choice from among alternatives, Lesson 2 further elaborates on and defines the concept of an alternative. By having students fantasize on how they might spend a million dollars or what other historical age they might choose to live in, students discriminate alternatives from non-alternatives. Through a comparison of responses with other students, the students are confronted with a wide range of alternatives.

The developmental section of the lesson involves the students in reading a brief story about Peter Potsenhopper who faces a number of alternatives in a single day. As the students search the story for alternatives Peter faces, they are discriminating from among a number of possibilities further defining the concept of alternatives. This is reinforced by then placing the alternatives found on a list and then indicating the decision Peter made.

To conclude the lesson, students examine their own day to develop a "Decision Notebook" which chronicles the alternatives they face and the decisions they make in a single day. Again, the purpose of all the activities is to focus the child's attention on the fact that in any decision, there are a number of alternatives to consider.
Critical Appraisers' Reactions. Although the critical appraisers were generally more enthusiastic about this lesson, there were some comments that bear consideration and/or discussion. The primary issues appeared to be the concern for "realism" vs. "fantasy" in the activities, and with the children's conception of time and space. Several appraisers commented that fourth, fifth, and sixth graders need realistic examples and situations in order to fully grasp the relevance of a concept. Also, because children at that age are just beginning to understand a rough concept of time, imagining some other location to live in might be a more suitable exercise.

These suggestions merit some further discussion. First a great deal of a child's time is spent in fantasizing. Just as Piaget has shown that play is a child's work, so also is his construction of reality guided by fantasies. As more and more educational critics are pointing out, perhaps more time in schools needs to be spent in exploring fantasies. Second, there is often a misconception that because a child does not have full understanding of a concept, it is better to avoid it. Again, as Piaget has pointed out, it is through the cognitive operation on incoherent concepts that fuller understanding is gained.

The suggestions that bear consideration are those related to the story. Peter never does make a decision that causes any problems. The story is a little choppy, and good readers may see it as too simply written. Finally, since some students may have trouble writing the alternatives and decisions, it should be suggested that the teacher use the blackboard to create a giant notebook as a model.

Pilot Teachers' Reactions. The overall teacher response to this
lesson was excellent. When asked if the fantasy activity engaged the students' interest, the mean response was 3.64. The same question concerning the Peter Potsenhopper story received a 3.71 mean response rate. The concluding activity of compiling a decision notebook was felt to have adequately drawn attention to the purpose of the lesson (3.57). The teachers, on the whole, felt the students were successful in the activities (3.61). Four teachers gave 4.0 mean responses to all the questions while the lowest overall response was 3.0. This was the same teacher who gave the previous lesson's questions a 2.75 mean response.

The teachers' specific comments again did not reflect the serious concerns of the critical appraisers. One teacher commented that her students were more excited about deciding how to spend the million dollars than they were in deciding what historical age they would like to live in, but the comments generally indicated that the students enjoyed fantasizing. A teacher whose students had a great deal of experience in decision-making felt that her students' enthusiasm waned subsequent to reading the story. Several teachers commented, however, that their students found the story realistic and indicative of the kinds of decisions they make. The activities were again well-received across grade and reading levels and socio-economic ranges. This was largely because the story could be read to students since it was brief, and the Decision Notebook could be put on the blackboard. In other words, the teachers were able to easily adapt the exercises to meet their own peculiar class needs.

Student Reactions. After interviewing 12 of the 15 students about the lesson, this investigator was again struck by their positive feelings toward the activities. It was surprising to discover that some students
remembered details from the story although it had been two to four weeks since they had read or heard it. Several students commented that they enjoyed the name Peter Potsenhopper although they thought it a little strange. They especially enjoyed reading about someone who had a day somewhat like theirs. A student from the high SES school indicated that Peter was not like anyone he knew because he was lazy and never seemed to do any work. He thought Peter was abnormal.

A number of interviewees said that they had problems remembering what they had done that day and what alternatives they faced so the Decision Notebook was hard to do. However, none seemed particularly distressed by this and still felt it was a useful experience. No one indicated that he absolutely disliked the lesson.

Summary. Of the first two lessons, this one appeared to have more appeal to both teachers and students. The use of fantasy situations and imaginary case studies seemed to pique the students' interest and made it easier to discriminate between alternatives and decisions and thus reinforce the definition of each concept. The sequencing seemed particularly strong as the activities moved from total use of imagination to a mix of fantasy and reality and finally to a reconstruction of the child's real experiences. In reviewing the lesson activities, they appear to match the level of experience needed to achieve the lesson's implied objectives, and it would be difficult to point out any substantive or pedagogic flaws. As in Lesson 1 if objectives are necessary, they should state what the student will learn, not what he will do.

Lesson 3: Description. In this lesson, the students encounter the concept of rules as one type of political decision. They are thus faced
with two new facts about decisions: (1) that political decisions are
decisions about the management of groups and that they are collectively
binding on the members of the group, and (2) rules help manage groups.
Since the first fact is presented again in subsequent lessons, the pri-
mary focus is on rules. The objective of this lesson, then, is to have
students be able to identify rules as political decisions.

To accomplish this goal, the lesson engages the students in four
activities. In the first activity, the students are asked to apply what
they already know about alternatives and decisions to a problem solving
situation. They are to assume their spaceship has crashed on an aster-
oid and they are to make rules concerning the allocation of food, water
and air.

In the developmental activities, the move is again from fantasy
situations to examples of decisions in the political world of the child.
First, the students are asked to work in small groups to identify rules
made by families, friends, school, and the community or state. The
groups then report on their examples so that, in sharing, the entire class
sees how rules permeate the entire social structure. This places their
individual bits of information into a larger meaningful context.

Finally, the students are given a list of decisions, some political
and some non-political, and are asked to discriminate between those de-
cisions which are political and those which are not.

Critical Appraisers' Reactions. In analyzing the appraisers' reac-
tions, it became obvious that there was some confusion over background
information which is designed to provide information for the teacher
alone. Several people commented that children would have trouble
understanding some of the examples used, not realizing that the students
will never encounter them unless the teacher uses the examples in her
introduction.

Four other concerns also surfaced which appear to be valid. One
is the introduction of the word political into the lesson's vocabulary
without attending to its value laden implications. It is presumed that
as the students experience the various components of political decisions,
they will discover that the word political encompasses a spectrum of
group activities.

The second concern may be more problematic. In the activity in
which students identify rules made by various groups, the reactors felt
they might have trouble finding decisions made by the community and/or
the state. The confusion could result from equating rules with laws or
from simply not recognizing that which is obvious to an adult. This
does appear to be a valid criticism.

The third concern may be dealt with successfully only by leaving it
up to the individual teacher. Some reactors felt that students might
have difficulty in defining what constitutes a group—is a family a
group? is a gang? a club? The distinction may be clear to an adult, but
a child may have trouble differentiating. As was suggested, this would
probably be most exactly dealt with by the individual teacher who pre-
sumably knows her students.

The final concern, which is valid but not particularly serious, in-
volves the length of the lesson. A number of reactors felt it was too
long and too rich for one day. The solution here is easy. Simply sug-
gest to the teachers that they take as long as they need and divide the
activities as they see fit for their individual needs. What is perceived as a weakness is in fact a strength of the materials. They are, in short, highly adaptable.

**Pilot Teachers' Reactions.** The activities in this lesson went over quite well in the pilot classrooms. Many teachers felt they could have spent two or three days talking about rules and how they affect the students. The students liked to talk about unfair rules (the issue of unfairness is dealt with more fully in later units). Rather than feeling silly doing the opening spaceship activity, as some teacher reactors felt they would, the pilot teachers indicated that it provided an interesting and enjoyable approach to solving a problem. The two negative comments came from the one teacher whose students had extensive background in decision-making and from a city teacher (third-fourth grade) who felt her students didn't grasp the concept of a spaceship.

The mean response of all teachers as to whether the opening activities engaged student interest was **3.72.** Regarding the success of the activity in introducing the lesson, the mean response was **3.69.** One teacher reported surprise at how well her students took off on the exercise to discuss how rules are needed to set group goals. Another teacher noted that her students were beginning to become more facile at group work.

The developmental activity of identifying rules made by various groups created some surprising responses. Whereas the appraisers felt the students would have problems finding rules in the community, several pilot teachers indicated that their students had trouble thinking of rules friends make and in seeing the family as a group. One teacher
suggested giving one starter example for each group. Concerning the success of the activity in engaging interest and in helping achieve the objective, the mean response was 3.69 and 3.67 respectively.

In the concluding exercise, there were some problems reported with differentiating between political decisions and non-political decisions. Several teachers noted that the students had difficulty in understanding how one person could make a rule for a group. Some of the choices in the handout were not clear and caused a great deal of discussion and disagreement. (These were later changed in the revision.) In relation to this, the teachers commented that the distinction between political decisions and other decisions was not made clear in this lesson and that perhaps one or two activities were needed to simply focus on that objective.

**Student Reactions.** The activities in this lesson met with varying levels of enthusiasm in the students interviewed. The spaceship activity proved to be the most popular with somewhat mixed reactions to the other two activities. Not that the students disliked the other activities, but rather that some students reported that they experienced problems in finding rules and in finding political decisions. The essential difference, however, appeared to be that they enjoyed using their imaginations to solve the spaceship problem.

Another area where the students' opinions diverged was over the role of discussion in the activities. Some students felt very comfortable with discussions and found them helpful, while others thought they weren't very useful. A great deal seemed to depend on whether it was a full class activity or a small group activity. One group of students
commented that some members of the class would "goof-off" in small group discussions but would show more control when the whole class shared opinions. Since later lessons have a number of small group discussion activities, it will be interesting to note if this trend holds up or if clearly defined task goals alleviate this problem.

**Summary.** While this lesson engaged the students in several interesting and enjoyable activities, it also introduced some new problems. Two were noted by the reactors and the pilot teachers, but the third, perhaps because of its subtlety, was only noted in passing by a teacher reactor. The first two problems are pedagogic; the third relates to the quality of the experience.

Since this is the first lesson in which the students face the concept of a political decision, and that rules are one type of political decision, it would appear that at least one activity would be needed to make that differentiation. This need was underscored by the difficulty some students had in deciding if one person could make a rule for a group, or if virtually every decision made by a politician was a political decision, including deciding to go for a swim. What actually needs to be determined is if this kind of questioning will lead to meaningful discovery or to frustration. Since it could be argued that the concept of political decisions is reintroduced throughout all the first unit lessons and that the activities are iterative, the investigator will forego any judgments until the analysis of the Unit is finished.

The second problem relates to the introduction of group work as an integral part of the activities. In some cases, students are quite facile at working in groups while in others the only experience has been
in groups with very clearly defined goals and examples of what was to be done. Perhaps an introductory option to the group rules activity should be included so that if the teacher feels it is necessary, she can do an exercise with the class on how small groups function in solving a problem. This goal may also be accomplished through special directions to the teacher on how to get groups organized and started in completing a task.

The final concern, which is a reaction to one of the reviewers' comments, relates to the quality of the experience in the developmental part of the lesson. If we assume that the purpose of the opening activity is to establish a mental set for the students as to what rules are and why they are needed, then the spaceship activity appears to do this. If we assume that the purpose of the concluding activity is to focus on the distinction between political and non-political decisions, then the identification exercise appears to do that. If we further assume that the purpose of the developmental activity is to bridge the idea of why rules are made with the notion that rules are political decisions, then having the students think of rules in various groups to which they belong (family, friends, school, etc.) does not seem to do this. A more meaningful exercise might be one that showed how rules are used to manage these groups and who usually makes those rules. In other words, the developmental part of the lesson should move the students from the why to the what by showing the how and the who.

Lesson 4: Description. Lesson 4 introduces the students to the concept of decisions about social resources or social values as being political decisions. Because much of what has been done in "values
education" has come under fire of late, it was important to present social resources as a manageable concept. This was done by taking the stance that values describe what people need or want. Lessons in later units would go into greater detail about the specific "eight social values" defined by Harold Lasswell. Because of this, it was felt that if students were able to identify situations in which people were demonstrating that they needed or wanted something, then this would be an adequate indication that the students were aware of what a social resource is. This appears to be a sound, manageable goal for an awareness-building unit.

To accomplish this goal, the opening activity has the students look at a cartoon and, using the information they have learned in previous lessons, identify who made the decision, what did they decide, how might people feel about the decision, and why is it a political decision.

The developmental exercise has the students engage in an alternative decision simulation in which small groups decide "Can Judy Play." The groups are given the incident and a number of choices and are asked to organize what they know about political decisions to solve the problem. They are then shown what would probably be the best choice(s) given the conditions and the social resource involved (affection-friendship).

In light of what the students have just learned about social resources, the concluding activity has them identify decisions made by groups because they want or need something. The teacher is given several examples (including "Can Judy Play") to get the teams started. It is assumed that by brainstorming in small groups, they can come up with more examples. By doing these three activities, the student further defines
the concept of political decision-making by adding another dimension to it.

Critical Appraisers' Reactions. The reviewers' reactions to this lesson were neither particularly edifying nor suggestive. This could be because the whole issue of values, social or otherwise, is so ill-defined. Because of this, many comments were either not applicable or inactionable.

Part of the problem is defining Lasswell's orientation toward social values to the teacher so that they, in turn, could clarify the students' thinking. The background information provided for the teachers appears to do this quite well with numerous examples. It is possible that the reactors did not read the background information carefully enough, and if this is the case, it could be a potential trouble spot for the success of the lesson. In this lesson in particular, it will be interesting to note if the pilot teachers found the background information useful in teaching the lesson.

As to the specific activities, the only comment that seemed to appear with some regularity was the concern over telling the students what another way of managing groups was by determining what the group wants. The opinion was that students should discover information as opposed to having it come from the teacher during the opening discussion. While discovery has been shown to be a powerful means for promoting learning, deductive learning can be equally effective when supported by strong examples and reinforcing activities. Again, it will be useful to note if pilot teachers experienced problems in introducing the lesson this way.

Pilot Teachers' Reactions. The pilot teachers' reactions to this
lesson were generally quite favorable. For the remainder of Unit I (with the exception of Lesson 9) there will be seven teachers testing the lessons. The remainder will be doing Unit II. Five of the seven teachers commented their classes' reactions to this lesson were positive. One teacher who was consistently negative remained true to form while the other who indicated a lack of enthusiasm toward piloting the lessons noted a concommitant lack of enthusiasm on the part of her students.

Concerning the usefulness of the background information, the mean response was 3.42 with several teachers commenting that they found it enlightening and helpful in presenting examples to aid student understanding. As in earlier lessons when concern was shown over the amount of discussion by critical appraisers, this difficulty did not manifest itself in piloting. The problem seems to be that in reading, the discussion appears to take more time than in actual doing. Two teachers also commented that the activities reinforced the opening bit of information sharing and tied the lesson together well.

The method of using a cartoon and an alternative decision simulation in the activities drew generally positive response. The pilot teachers found these activities engaged the students' interest (3.42 and 3.41 respectively) and were enjoyable for the students to do (3.57).

The closing activity, however, was not as successful as the others in terms of drawing attention to the purpose of the lesson. The mean response was 2.42 which could indicate that a more "active" activity than small group discussion might be needed. Some teachers indicated that their students either had difficulty in expressing what they knew or were "talked out" by the preceding "Can Judy Play" activity.
Student Reactions. In the student interviews in which this lesson was discussed, two points came out consistently. First, the students thought cartoons were an effective way of illustrating examples of political decisions and in facilitating discussion. Second, the students felt the "Can Judy Play" example was realistic and that in seeing and talking about alternatives they were better able to make decisions when similar situations occurred on their playground.

Once again, the subject of discussion activities in the lessons came up. In general, the feeling was that discussion was necessary and useful in sharing ideas and opinions. Even in the alternative decision simulation, when the individual had to convince the group of the "rightness" of his decision, one student thought it was frustrating but still necessary.

Summary. This lesson is perhaps one of the three best in Unit I. It employs activities that are attractive to students and teachers. This is fortunate because social values are potentially one of the more complex concepts in the unit. The sequencing move from concept identification through the organization of previously used information to the solving of a problem by applying that information is both logical and sensible.

The only weakness in the lesson was noted by the pilot teachers. The concluding group discussion activity could be somewhat of a letdown after the alternative decision-simulation. In this case, a simulation debriefing based on the "Can Judy Play" scenario would appear to focus the lesson and cause a less radical shifting of gears for the teacher and the class. Within the debriefing discussion, questions concerning how other groups decide what they want could be brought in. A more structured activity could involve a "Social Resource Checklist" in which situations
where political decisions were made could be presented, and the students would have to determine if the situation involved deciding what the group wanted and/or needed

Lesson 5: Description. This lesson introduces the concept of setting goals as a third type of political decision. In many ways, the sequencing in this lesson is similar to that of Lesson 4. The specific activities are substantively different, however, and this makes for a tighter, more logical flow.

In the first activity the students are asked what they might set for goals if they could plan the last half hour's activities for the day. The alternatives listed are then labelled possible class goals. In the discussion, the students organize information they have learned thus far to solve the problem.

The developmental activity follows a similar pattern. This activity has the students act as legislators deciding how money will be spent in Ohio. As in the previous lesson they are given alternatives which they decide on individually and then in groups. Again, the groups are able to compare their responses to a list of "right answers." The essential difference in this activity is that the answers are based upon what the legislators actually did so that in the concluding activity the students can discuss both their priorities and the priorities of the legislators. This allows them to place these facts in a more structured and tightly focused concluding activity.

Critical Appraisers' Reactions. As might be expected, the reactors' comments centered around the use of "Goals for Ohio." Some felt that several class sessions on state government would be needed before they
could do this activity. Their impression was that it might be too sophisticated for fourth, fifth, and sixth graders with the exception of the "top" students. Two reactors thought it might create misconceptions about how the state legislature works.

On the whole, the teachers felt it was a more tightly structured, better sequenced lesson than Lesson 4, but that the move from setting class goals to setting goals for Ohio would not be clear to the students. The comment was made several times that the issue of setting goals in the class would be a good take-off point for discussing goals set by families (budgets), friends (what to do with free time), and communities.

One suggestion, in relation to the Goals for Ohio activity, had some good possibilities. The idea concerned taking the amount Ohio spends on education and comparing it with that spent in other states based on state earnings. This comparison in the form of a bar graph could provide for some interesting discussion on one state's priorities versus another's.

Pilot Teachers' Reactions. This lesson resulted in overwhelmingly favorable comments. Three of the six teachers remarked that this was the best lesson so far. Even the unenthusiastic teacher expressed enthusiasm. The negative teacher was still somewhat negative, but her comments were not very helpful since they centered around an instructional option. One class was so involved in discussing group goals that they sent a seven-foot letter to Senators Taft and Glenn indicating their alternatives on the gasoline issue.

The introductory activity was sufficiently enticing to the students resulting in a mean response of 3.3. The transition problem indicated by the reviewers was also noted by the pilot teachers with a mean response
of 2.83. The general feeling was that it was fun for the students and that it resulted in some good discussion, but that they didn't see its relationship to the rest of the lesson.

The developmental and concluding activities both received excellent responses from the pilot teachers with only one noting that some background in the machinations of state government would be helpful in understanding the lesson. Apparently in teaching the lesson, the focus on group goals came through rather than Ohio's goals. In reading the lesson, the purpose appears to be showing how the state legislature operates while in the teaching, the objective of comparing group goals stands out. In some ways, this outcome dispels the reactors' criticism that the lesson creates misconceptions about how state government operates. Concerning the use of the alternative decision-simulation again in this lesson, four of the six teachers felt it was helpful to have had the experience of doing it in Lesson 4.

**Student Reactions.** In these interviews, the reactions tended to parallel those of Lesson 4. The students liked to debate their choices with the priorities of others and then compare with what actually happened. Although they often disagreed with the point allocations for each alternative, they didn't appear to feel they were as useless as the teacher reactors did. At no time did the pilot teachers or the students comment on the competitive aspect of awarding points for each alternative.

Several students commented that the comparison with how the money was actually spent led to discussions which sometimes became heated. Again, a few students noted that trying to convince people to accept a differing point of view was often difficult. Since later lessons deal
with making decisions by consensus, voting, or authority, and ways to
influence political decisions, the lack of closure in this lesson may
generate more interest in those lessons.

**Summary.** It would be difficult to talk about this lesson without
comparing it to Lesson 4. It is sounder pedagogically with the sequence
of activities flowing more rhythmically from one to another. Substan-
tively, the activities are not as strong in quality as those in the pre-
vious lesson. The "Can Judy Play" activity is much closer to the poli-
tical world of the child than is the "Goals for Ohio" activity. The use
of the cartoon to introduce Lesson 4 generates somewhat more interest
than the opening discussion in Lesson 5, at least superficially. The
pilot teachers' reports do show a high degree of success for both, how-
ever.

Because these materials are designed for use in Ohio schools and
because the project is in part supported by the State Department of Edu-
cation, the need for using "Goals for Ohio" is apparent. One possible
way to move this activity closer to the world of the child could be to
have the students suggest alternative goals that they might opt for in
relation to what the state legislature has allocated. That is, given X
number of dollars for education to be spent in their school, or better
yet in their class, what goals would they set and why would they choose
these priorities. This would be one way of linking the opening activity
to the concluding activity.

**Lesson 6: Description.** This lesson is labelled as a "summary/
exposition" of concepts and facts presented in the first five lessons.
It is not designed to evaluate students in the sense of testing, but
rather attempts to establish closure by having the students demonstrate that they can apply what they have learned to new situations. It is an excellent example of what Gagne has called curriculum embedded evaluation.

The predominant learned capability employed in this lesson is that of making discriminations. In the introductory activity the students have to organize what they know about political decision-making to identify the political decisions in a story. In the "Betsy Bingo" story, a girl walks to school unmindful of the political decisions in her environment. The students are asked to help her by identifying the decisions she missed.

In the developmental activity, the students apply the identifications they made in the previous activity. By cutting out and labelling pictures in newspapers and magazines, the students demonstrate that they can find evidence of political decisions in their environment. The class may then organize the pictures thematically on construction paper.

As in Lesson 4, a cartoon is used to engage students in the activity of finding political decisions. In the cartoon, the students discriminate between political and non-political decisions and then discuss what the decision is and who made it. The activities in this lesson have as their objective the application of what the students have previously learned about political decisions to the locating of political decisions in their environment. In terms of the learned capabilities employed and the sequence in which the activities are presented, this goal should be attained in this lesson.

Critical Appraisers' Reactions. While the reviewers' reactions to this lesson were mixed, it was difficult to determine a trend of concern
throughout. The city teachers said their students might have problems in finding the political decisions, and the suburban teachers said the identification activities might be too easy for their students. One teacher felt his students would derive more meaning from a trip around the neighborhood, but since this was included as one of the instructional options, the criticism may not be valid. It may be best to hold recommendations for this lesson in abeyance until the reactions of the pilot teachers and students are reviewed.

Pilot Teachers' Reactions. The pilot teachers' reactions to this lesson were again extremely positive. The mean response to all the lesson components' questions were above 3.0. They ranged from 3.16 for whether the introductory activity engaged interest and adequately introduced the lesson to 4.0 for whether the students enjoyed doing the picture cut-outs and had their attention drawn to the purpose of the lesson by the concluding cartoon.

The comments tended to support the numerical responses. Generally, it appeared that the teachers and students appreciated the variety of activities and the level of involvement elicited. Two city teachers indicated that their students had some problems, but by going more slowly and providing supportive examples, the students were able to achieve the objective. The comment was made by one teacher that the large number of political decisions in the Betsy Bingo story confused her students, but the subsequent activities made it easier for her students to grasp the purpose of the lesson. Since her class is a third and fourth grade combination class, such confusion is understandable.

The picture cutting and collage making activity received excellent
response. The teachers reported high student involvement and, in one case, noticeable pride in the artwork they produced. In observing this particular group of students subsequent to this lesson, the pride was still evident. The investigator was ushered up the classroom by the students and shown how well they could create collages of political decisions.

Students' Reactions. In general, the students' reactions tended to parallel the pilot teachers' perceptions of the activities. They enjoyed the cartoon and found it easier to work with than the story for identifying political decisions. The primary difficulty as voiced by one student, appeared to be that the students were not familiar enough with groups like the Federal Communications Commission to understand its relationship to radio and television. In this case an example closer to their realm of experience, such as a particular television network (ABC, CBS, NBC) might be more appropriate.

Summary. At first glance, this lesson appears to be highly repetitive of the previous lessons. However, based on the reports of the pilot teachers and the students, it did an excellent job of providing closure for the first five lessons. As such, it is a good example of how planned repetition can be used successfully. As the pilot teachers indicated, its strength seems to lie in the variety of action oriented activities presented. Its strong points seem to be (a) the above-mentioned activities, and (b) the flow of the sequence of activities toward an easily definable goal.

The only weakness, if it can indeed be considered a weakness, is the lack of direct, purposeful experience in any of the activities. As indicated earlier, there is an instructional option which suggests that the
teacher take the class for a walking tour of the neighborhood to find examples of political decisions. However, if this were elevated to the level of an instructional activity, it could be structured in such a way that it could provide more reinforcement than the "Betsy Bingo" story. This would especially be the case if it were the final activity. The sequence could then be (a) the cartoon, (b) the picture cut-outs, and (c) the walking tour. Because of a natural teacher reluctance to take students outside the school (a concern voiced by the developer), this activity could take the form of an optional activity as opposed to an instructional option.

Lesson 7: Description. This lesson introduces the notion that political decisions are often made because there is a scarcity of some resource. There are three major activities in this lesson: (1) an experiment in which students have to devise new rules in order to play a game, (2) a role playing simulation in which students acting as Physical Education teachers have to decide who gets to use a baseball field when two teams want to use it at the same time, and (3) a discussion organized around examples of historical and contemporary situations in which decisions need to be made because of scarcity.

In the "Button Battle" game students apply some of the rules they have learned about decision-making such as looking for alternatives to solve the problem of scarcity presented in the game. Because there are not enough buttons to go around, the result is the creation of a new set of rules and, in effect, a new game. The questions included for the debriefing of the experience are designed to help the students analyze the experience.
The developmental activity follows virtually the same pattern as the students apply rules for making decisions to a more contrived problem solving exercise. In this activity, however, there is an additional learned capability involved which is that of modeling through role playing. Rather than being given a set of alternatives from which to choose, the students create their own, hopefully modeling positive adult behavior. As in the previous exercise, debriefing questions are provided to focus on the intent of the activity.

Finally, in the concluding activity, students are expected to organize information provided for them and also organize what they have thus far learned about political decisions made because of scarcity to solve historical and contemporary example problems. The concluding exercise is essentially discussion oriented which, depending upon how long the first two activities take, may seem anticlimactic.

Critical Appraisers' Reactions. As might be expected, the reviewers were concerned with the potential class disruption that playing a game might cause. They also noted that the students who were not playing would be observing and this could cause the observers to lose interest. However, some teachers did comment that it would be an-effective way to get a discussion going.

The reaction to the "baseball field" role playing activity was generally favorable. Some reactors felt it could be used to introduce the lesson. Several appraisers indicated that the performance of this activity would be made more meaningful through the experience gained in the "Button Battle" game.

The discussion of historical and contemporary examples of scarcity
as a concluding activity also received favorable comment. One reactor, however, pointed out that the example of Columbus sailing for America because of scarcity violated the principle of multiple causation. This is essentially a valid criticism although it doesn't necessarily negate the use of the example for purposes of demonstrating how scarcity can affect a decision.

One other criticism which may be more serious is that with all the examples of scarcity in our environment (oil, food, living space, sugar, etc.), none were brought into the lesson activities. It may be useful to note if the pilot teachers had their students bring this out or if it were ignored completely.

Pilot Teachers' Reactions. The overall response to the activities in this lesson appeared to be one of guarded enthusiasm. The comments followed the usual pattern of generally positive feelings from the enthusiastic teachers and generally negative reactions from the unenthusiastic teacher. However, the two teachers who earlier had commented that their students were not responding well began to register positive reactions to the lessons.

As might be expected, the "Button Battle" game received favorable reaction with a mean response of 3.83 concerning its success in engaging student interest and 3.5 concerning its success in introducing the lesson. The developmental and concluding activities received positive but relatively less dramatic responses with an across-the-board 3.16 mean response to all the questions under each activity.

Essentially the feeling appeared to be that while they were useful activities, the "Button Battle" was a tough act to follow. Several
teachers commented that their students did the activities rather quickly and then became bored as the exercise went on. There was also the problem of using uninvolved students as observers rather than participants and three teachers noted that non-players had difficulty in figuring out exactly what they were to do. The general impression left after reading the teachers' evaluations was that although they had no difficulties in teaching the last two activities, they probably needed something more like the "Button Battle" to keep the students interested.

Students' Reactions. The "Button Battle" game, of course, met with favorable response from the students. They enjoyed playing it in class though at times they failed to see what it had to do with scarcity. Apparently, a key factor may have been how well the teacher set up the game and explained the rules to the students. Another important factor could have been the questioning technique used by the teacher in focusing the students' attention on what was happening in the game. The project team had the opportunity to view this lesson being taught on videotape and, while visiting the pilot schools, the investigator was able to observe the game in action. In one case, the teacher used suggested questions and his own to direct students' attention to the experience. The other teacher tried to have the class generalize from the experience based on descriptive questions with the net result of very little closure on the part of the students.

Another comment which recurred in each interview was the students' perception that those who were not directly involved in the game, either as players or as social scientists recording their observations in a notebook, did not pay attention very well. Several students indicated
that they would enjoy a game more if everyone could be involved in a
more direct fashion, primarily as players.

One group of students felt that the "baseball diamond" activity was
relevant to their everyday lives and that role playing, on the whole,
was an enjoyable activity. Since these groups were not asked about the
concluding activity, they made no specific comments about it.

Summary. As one of the pilot teachers put it, "This is a good
lesson, not outstanding, but a good lesson." Aside from the normal con­
trol problems associated with running a game in the classroom, this les­
son is fairly simple, easy to understand, and quite well-focused. The
opening activity which engaged the students in a shared experience which
they can later discuss from a number of perspectives is well-conceived.
Having students reflect on what they have experienced is a qualitatively
strong method to increase learning. However, since the level of quality
of the experience is different for each student, it may be that some will
learn a great deal more than others. The debriefing questions which
analyze the activity are excellent, if the teachers use them or similar
ones of their own.

Unfortunately, the developmental and concluding activities, although
quite good in their own right, do not seem to contain the interest poten­
tial of the "Button Battle" game. There are three possible solutions to
this problem:

(1) Suggest that the teachers spend one day on the "Button Battle"
and do the last two activities at a later date.

(2) Use a similar experience (suggested by one of the teacher reac­
tors) such as a simple game of musical chairs which involves
more students than the "Button Battle" game. It could precede the "Button Battle" game and thus establish a mental set for the students.

(3) Center the lesson around the "Button Battle" game and use the decisions made and the process used in making them as a starting point for similar activities based upon shortages of food, water, space, etc. From the pilot teachers' reactions, it is possible that the students had "psyched out" the last two activities and gained little meaningful learning from them.

Lesson 8: Description. This lesson is similar to Lesson 7 in that it shows another reason why political decisions are made. In this case, the reason is because of conflicts that arise in our social system. The opening activity primarily centers around a discussion about conflicts that the students see everyday. By using examples such as conflicts over places in line, disputes over rules, and whose seat is whose, the discussion seeks to define the concept of conflict. The students are also asked to think of instances when conflicts are "good" or "bad".

The developmental activity in this lesson employs an alternative decision simulation again to have students consider alternative courses of action when they are "Being Picked On." By using previous experiences in considering alternatives and values, the students discriminate among a number of alternatives and choose the one that takes the most variables into account. The goal of the activity is that they are able to solve the problem effectively by successfully making these multiple discriminations.

In the final activity, the students are informed that the principal
(or mayor) has sought out their help in making a decision caused by conflict. The teacher in this case identifies some topical problem in the school or community that the students can identify with and help solve. This activity, like the previous one, requires that the students trace out probable consequences of their actions in order to determine which alternative has the best possibilities. This task may be more difficult since the alternatives are not spelled out for the students.

Critical Appraisers' Reactions. The reviewers in general reacted favorably to the inclusion of a lesson on conflict in this unit. The predominant feeling was that children confront conflict regularly and that the students could easily identify situations in which a decision had to be made because of conflict. There was also an underlying feeling that the teachers appreciated a lesson like this because they could use it for dealing with classroom problems. The inference was that it was a lesson which they would refer to often.

The "Being Picked On" activity received a positive reaction. Again, the reviewers felt it was a real situation that their students could easily identify with. As in Lessons 4 and 5 some reviewers expressed concern over using points to differentiate among the more attractive and less attractive alternatives. They commented that it could promote competition and, as a result, cause conflict.

Since this is a recurring concern, it may be useful to present the designer's rationale for including points in the alternative decision simulations. This reaction will be presented later in this chapter.

The concluding activity caused no particular anxiety on the part of the reactors and many thought the students would find it interesting to
help solve someone else's problem. Several reactors commented that this activity in particular and the lesson in general could be used to explore conflicts in history and in literature. They felt that a number of spin-off activities could be designed from this lesson.

Pilot Teachers' Reactions. The response to this lesson was generally positive but not overwhelmingly so. The pilot teachers noted two trouble spots: (1) that the activities depended quite heavily on discussion, and (2) the students were becoming too familiar with the alternative decision simulation format. This was the third lesson of the first eight that used this method and the students were getting tired of first deciding individually and then in a group.

Concerning the first point, this is probably a valid criticism. When the students are not engaged in whole class discussions, they are discussing in small groups. The implication appears to be that the teachers are looking for an activity similar to "Button Battle" to increase student activity.

The second point may not be quite as serious since these lessons are designed to be taught over a long period of time (3-6 weeks). By spacing lessons this way, the simulation methodology might not seem so repetitive.

The pilot teachers, like the reactors, commented that the examples of conflict were familiar to the students. And, like the reactors, they saw many potential uses in the classroom. Unlike the reactors, however, none of the pilot teachers noted negative responses by the children over the issue of points. One teacher commented that her students didn't agree with the way the points were allocated, but she didn't indicate that competition was a factor.
Students' Reactions. The student reactions actually appear to be suggestions. While the general feeling toward the lesson was positive, some students had specific ideas concerning the "Being Picked On" activity. One group commented that although the situation was realistic, in their case the conflict was usually not between older and younger students but between bigger and smaller students in the same grade or between boys and girls. The same group also commented on the points issued by saying that although they liked getting points, they felt there should be points given to the individual for his decision as well as the group.

On the whole, the students' reactions supported the teachers' perceptions that this was familiar ground for them. None of the students commented specifically that their class was bored with the alternative-decision simulation format although it was pointed out to one group that this was the third time they had done one.

Summary. Based on the reactions cited above, there is little doubt that the issue of conflict has a great deal of potential for classroom activities. The "Being Picked On" example appears to capture one of the more visible conflicts that children are likely to encounter.

The sequence of activities which moves the students from the recognition of conflict in their environment to the solution of problems caused by conflict seems to be a logical progression. As in previous exercises, the students are required to integrate what they have learned in previous lessons.

This is the first lesson which makes a concerted effort at having the students consider consequences. However, this is slipped into the lesson unobtrusively as though the purpose were simply to introduce the
term and its meaning to the students. The final activity, although somewhat contrived, provides suitable closure in having the students consider the consequences which might be involved in conflict situations.

The real strength of this lesson lies in its use as a starting off point for more classroom-specific activities. Although the quality of the experiences in the lesson is not as high as in some of the earlier ones, the potential for spawning high quality experiences is probably unequaled in any other lesson.

Lesson 9: Description.* This lesson presents the second method for learning about the process of decision-making (the first being the alternative decision simulation). This second method maps the progress of a decision through the use of a decision tree. The decision tree is an attempt to concretize the abstract phenomenon of decision-making. In a more expanded form, it has been used to train business leaders in mapping out their more demanding decisions.

All of the activities in this lesson center around the decision tree format. The teacher prefaces the lesson by reviewing the concept of political decisions as choices about group rules, goals, and resources. The purpose of this is to help the students organize information necessary to successfully complete the decision tree. Throughout the activities, the students will be labelling alternatives, consequences, and goals. Through this process the concrete concept of a decision tree is helping the students define the concept of political decision-making and vice versa.

In the opening activity, the class works together on a fantasy story to map out a decision faced by Lottalance the Knight. The developmental

*This lesson is included in Appendix C as a sample lesson.
activity follows a similar format with a more realistic situation—a fellow student about to cause trouble thus resulting in the entire class being kept after school. Finally, in the concluding activity, each person is given a blank decision tree and a list of occasions for decisions which they might encounter. As they trace out their decision, they consider alternatives, weigh positive and negative consequences, and write in their decision.

The key to the success of this lesson is how well the students are able to associate what they are doing on the decision tree with the process of making political decisions. In other words, will the progression on the decision tree confuse them into thinking that consequences always follow alternatives or will it clarify the relationship among alternatives, consequences, and goals.

Critical Appraisers' Reactions. The decision tree idea generally drew favorable comment from the reactors. The consensus seemed to be that it put alternatives and consequences in an understandable perspective for the teachers and presumably for the students. The sequence of the lesson from the opening decision tree used as an exemplar to the student generated concluding decision tree was felt to be quite sound.

The concern over the use of fantasy stories, as opposed to realistic situations, to open and develop the lesson was voiced by one group of reactors. However, the other group felt that the fantasy story decision trees, if not dragged out, would engage student interest immediately. Both groups responded positively toward concluding the lesson by having the students fill in a blank decision tree.

Concern over the names used in the stories was expressed by some
reactors. One thought that the name Lottalance the Knight might cause the students to "get silly." It was also felt that the use of "Weird Harry" in the second decision tree might insult someone in the class named Harry. It was one reactor's feeling that using "Weird" would serve as a negative model for the students.

In general, however, the total concept of the lesson was thought to be well-conceived. The decision tree, which could be used for a variety of situations, generated good response primarily because it provided a concrete approach to decision-making. As a teaching device, it had potential for use with all levels of intellectual maturity.

Pilot Teachers' Reactions. Based on the pilot teachers' reactions, this was one of the best lessons in the unit. The overall response was quite positive ranging from a mean response of 3.76 for engagement of student interest to 3.5 for drawing attention to the purpose of the lesson. The opening and developing activities were perceived as being enjoyable for the students with a mean response of 3.76 and 3.53 respectively.

Several teachers commented that the stories gained the students' attention effectively as did filling out the decision trees. The opening story about Lottalance was generally not taken as seriously as the Weird Harry story because the idea of having to stay after school hit close to home for most of the students.

The concluding activity of having the students fill in their own decision trees worked well although two teachers modified the activity. One worked through student generated occasions for decisions with the whole class while the other let some students identify occasions for decisions
not included in the lesson's list. Both of these modifications serve more to reinforce the flexibility of the lessons rather than point out a weakness.

Two teachers commented that their students had a problem distinguishing good consequences from bad, but most of the teachers said their students had no problems. Again, in this case it would probably be more of the teacher's responsibility than the material's to go more slowly and provide more examples.

The names of the characters in the stories, Lottalance and Weird Harry, were generally received well by the students with some teachers indicating that the students thought they were funny. One teacher did note, however, that upon hearing the name "Weird Harry," her students 'went off.' (Note: In the final revisions of this lesson, Weird Harry was changed to Weird Wembley.)

**Students' Reactions.** In general, the students' reactions to this lesson paralleled the pilot teachers'. Most of the group interviewed thought the decision tree helped them differentiate between alternatives and consequences. Although some thought the final activity was hard to do, they still liked the lesson.

The areas that caused the students the greatest difficulties appeared to center around distinguishing positive from negative consequences. As one student pointed out, he had no trouble thinking of bad consequences, but thinking of good consequences required more effort. When some groups were asked to explain the difference between alternatives and consequences, however, they had no problem in defining them.

Some of the actionable comments by the students include (a) making
the boxes on the decision tree larger so that more consequences could be written in, (b) providing more examples, and (c) defining more clearly what an occasion for decision is.

**Summary.** There is not much to say about this lesson except to concur with the pilot teachers' reactions. It is probably the most well constructed, easily understandable lesson in the unit. The sequencing is logical and progresses well from fantasy into realistic situations. The jump to the student generated decision tree in the concluding activity may be too rapid for some groups. However, given the decision tree model, there is no reason why a teacher couldn't easily conceive of more examples if she perceived that her class needed them. The modifications made by two of the pilot teachers cited above seems to illustrate quite well how this could be done.

There are two concerns, however. Since the decision tree is considered to be a powerfully illustrative device, perhaps it should be introduced earlier in the unit. The decision tree, along with the alternative decision simulation, is used to show the decision process. However, the alternative decision simulation is used three times in the first eight lessons while the decision tree is used once in the first nine. Even if the intention is not to overuse the decision tree as a learning device, its non-use pushes the alternative decision simulation to its iterative limit.

The other concern is much less serious and involves the noted change from Weird Harry to Weird Wembley. It is doubtful that this shift will result in a significant change. Judging from the appraisers' reactions, it is not the name Harry that is likely to "set the students off," but
its juxtaposition with the notion he is weird. As in the other suggestions for name changes in the lesson, it must be determined if the use of this kind of humor in the classroom is dysfunctional either to the lessons or to the classrooms in which they are taught.

**Lesson 10: Description.** As a summary/expository lesson, Lesson 10 is fairly straightforward and direct. There is no new information introduced in this lesson, and the activities center around the review of facts and concepts encountered throughout the unit. In each activity the students are expected to organize information by placing these facts and concepts in the context of the new exercises.

The opening activity is totally discussion oriented as the teacher reviews the concepts of alternatives, consequences, rules, goals, resources, scarcity, and conflict. Through the use of planned repetition, in this case a brief review, the students are prepared for the developing and concluding activities.

In the developing activities, the students are engaged in recognizing political decisions, discriminating among the types of political decisions, and in determining the positive and negative consequences of two decision alternatives. The first two exercises involve simple yes-no and matching discriminations, while the third involves the successful completion of a decision tree. Since these are exercises which are familiar to the students, they require minimal introduction by the teacher.

The concluding activity is a "Decision Game" which is similar in format to "In the Know" or the now defunct "College Bowl" television quiz shows. As in the previous exercises the students must organize information they have learned in order to answer the questions. Some possible
questions are suggested, but the teachers are encouraged to create their own based on their specific subject matter needs. The purpose of the activities, then, is to help the students discriminate and define the concepts in the unit.

Critical Appraisers' Reactions. In reviewing the critical appraisers' comments, it became apparent that they weren't going to be very helpful. This could be caused by the fact that there is no new information introduced and because the activities are fairly familiar. Two concerns did surface, however.

The first concern was that the opening and developing activities involved a great deal of discussion which could cause the lesson to drag. The second concern was that because of the wealth of information in the previous nine lessons, the opening review activity could take an extended period of time. They felt the suggested two day lesson duration might be inadequate.

Because the activities were familiar to the students, the reactors felt that they would be successful in completing them. One reactor did comment that the students might take issue with the suggested answers in the matching activity because of the natural ambiguity of the situation presented.

Pilot Teachers' Reactions. The pilot teachers' reactions to this lesson varied depending upon their students' predisposition toward discussion. The opening teacher-directed review did not fare as well as the developing and concluding activities. Judging from some of the teachers' comments, this could have been caused by the fact that the teachers were simply directed to review the concepts (which were listed).
They implied that a structured set of questions which brought together these concepts would have been greatly appreciated.

The developing and concluding activities received a relatively better response, although some teachers commented that the "Decision Game" was hard for their students. As was noted by the one reactor, pilot teachers did say that their students disagreed with some of the suggested answers. One teacher did indicate, however, that when the logic behind the choice was explained to the students they understood.

Most of the teachers felt the lesson provided an adequate summary for the unit. The time factor problem expressed by the appraisers was not commented upon by the pilot teachers although the range of times ran from 35 minutes to 90 minutes. Generally, the feeling seemed to be that for a summary/review type lesson, the activities were moderately successful in achieving their purpose.

Students' Reactions. Of the three groups interviewed on this lesson, all reacted favorably to the developing and concluding activities. Some students thought the questions on the YES-NO and matching exercises were too easy, but on the whole they felt the questions covered what they had learned. One group did comment on the ambiguous question cited above, and suggested that more questions might have included as examples.

The decision tree used in this lesson was also well received. Some students indicated that providing the occasion for decisions and the alternatives for them helped in thinking of consequences. Several students commented that the situation of the girl having to decide between going with her friends or babysitting was a realistic occasion for decision.

The "Decision Game" also received a favorable response from the
students. They liked the game format generally although one student thought that organizing it like a spelling bee would have been fairer. She felt that this would eliminate the problem of just the students who could answer quickly giving all the responses.

**Summary.** Although the general reaction to this lesson was positive, the lesson itself may not be necessary. In some ways it appears to be evaluation for the sake of evaluation as opposed to evaluation as feedback. There are three essential problems with the lesson:

1. For purposes of review, the opening activity does need a set of exemplary questions from which teachers can structure their own. To expect teachers, especially inexperienced teachers, to conduct a review which sufficiently ties together the lessons' major concepts may be a bit presumptuous.

2. Because the activities in the previous lessons call for the students to perform observable tasks, they are constantly being assessed. By and large, Lesson 10 activities, although enjoyable, are overly repetitive. Because of internal problems, noted by teachers and students, they may confuse more than clarify.

3. Assuming that a wrap-up lesson is needed for Unit 1, the activities should indicate what the student can do at the end of the Unit that he couldn't do before. Paper and pencil and discussion activities can indicate what a student knows about the Unit, but not necessarily show how he will perform under certain conditions. In effect, this is Broudy's distinction between actual (operational) and putative (preparational) learnings. If
the purpose of the lesson is to gauge how aware students are of political decisions in their environment, one of two instances will occur. Either (a) this will be repetitive since earlier lessons have already done this, or (b) a direct or simulated experience will need to be structured so that the student can demonstrate his awareness.

C. Summation and Discussion

Before moving into a discussion of how well the unit appears to have accomplished its goals, what the unit attempts to do and not do, and how applicable the analytic model is to the needs of the Ohio Project, the remaining components of the units need to be discussed. These components were referred to but not analyzed in the body of the previous section because (a) they did not directly affect all the students and teachers equally, and (b) the purpose of the analysis was to review reactions to the core activities.

The additional components of the lessons include the following:

(1) The title and duration of the lesson
(2) The purpose of the lesson
(3) The lesson objective(s)
(4) Materials needed to conduct the lesson
(5) Background information for the teacher
(6) Vocabulary
(7) Value awareness questions
(8) Instructional options
(9) Reading correlations
These supporting components contain a great many characteristics that serve to strengthen the lessons and a few that weaken it. The following summary briefly explores some of these.

**Title and Duration**

On the whole, the titles of each lesson were accurate and descriptive gauges of what the lesson contained. The titles mostly implied the kinds of activities which were expected to follow.

The assessment of lesson duration was at times misleading. In reading the lessons through, some teachers took the statement literally and complained that they would be rushed to complete the lesson. If additional instructional options, value awareness activities, and reading correlations were included, the lesson would stretch well beyond the length suggested. While it is helpful to indicate approximate length of the core activities to the teacher, if taken literally the result could be a superficial treatment of the lesson. Therefore, the indication of lesson duration is a questionable enterprise.

**Statement of Purpose**

On the surface, this appears to be a useful inclusion. However, since the purpose statements are the same for all the lessons, it would probably save time and space by simply stating the unit goals at the beginning of the unit. It would be among the first things that the teacher would encounter while thumbing through the materials, and it would give her some sense of what she was expected to accomplish with the unit.

**Statement of Objective(s)**

As was noted in some of the lesson analyses, statements of this sort
suffer from numerous weaknesses. First of all, generally speaking, each lesson has only one objective. This can hardly serve as any indication of the potential learning outcomes of the lessons. Second, some of the objectives indicate what the students should have learned by the end of the lesson, but others are simply statements of activities in the lessons. In short, instead of saying what the child will gain, it says what the child will do. This may sound like a performance objective, but it is not. As was indicated by Gagne and Briggs, a performance objective involves a statement of what is to be learned, under what conditions, and through what kind of actions.

Finally, since not much is to be gained by stating objectives in the present fashion, it may better serve the purposes of the lesson to either (1) forget about it entirely, or (2) substitute the word goals for objectives. It avoids the value biases some teachers have against objectives, and it can be more useful in describing the experiences which are forthcoming. Thus if the goal of the lesson is for the student to experience scarcity and make a political decision, a goal statement is more accurate and avoids needless criticism from "purists."

Materials

Including a statement of the materials needed is a useful way to inform the teacher that she will need special resources in running the lesson. Often, while reading through and mentally structuring the lesson, there is a tendency to overlook materials that might be needed. If inclusive, this list saves the teacher both time and effort.
Background Information

This particular section is a valuable addition to the lesson. It provides examples and an organized view of the lesson's concepts so that the teacher is prepared to employ the examples if needed, or to initiate information when necessary. Judging from the comments of the critical appraisers and the pilot teachers, the background information component was seen as a worthwhile addition.

Vocabulary

This inclusion is helpful for teachers who would like to integrate these lessons with other subject matter areas. The words suggested can be used in spelling or for vocabulary increasing activities. As was indicated by some of the teachers, however, many of the lists fail to include all the new words so some expansion is needed.

Instructional Options

Of all the additional components, this is perhaps the most useful. It provides much-needed flexibility since the lessons must reach fourth, fifth, and sixth graders at various socio-economic and intellectual levels. Because the options do not always spell out what the teacher is supposed to do, the teacher can be as creative as he wishes in conducting the optional activity.

In addition, if the teacher wishes to expand on some of the concepts in the lessons which he felt were not adequately covered in the core activities, the options could be employed with very little additional teacher preparation. Upon reading through the lesson, if a teacher didn't feel the suggested activities would be appropriate for or effective with her
class, she could develop some of the options. The options received very favorable reactions from the appraisers and the pilot teachers who either read through them or taught some of them.

**Value Awareness Questions**

Since decision-making implies a great many value questions which are often not attended to in the core activities, this section has a great deal of potential. At times, some of the questions raised are thought provoking and require a high degree of student self-awareness. Occasionally the questions appear to require a level of thinking or moral development which is beyond some of the students. Several of the reviewers and pilot teachers also noted this problem. However, if done carefully and introduced appropriately, the value questions should help the students develop their self-awareness.

**Reading Correlations**

This component also seems to be a valuable addition to the lessons. It provides the teacher with an easy reference to books and stories that can be used in conjunction with the core activities. As in the vocabulary component, these correlations serve to reinforce the multi-disciplinary approach to decision-making instead of only placing it within the bailiwick of social studies. If the students know what they are looking for in a story (e.g., examples of decisions caused by scarcity), it may increase their desire to read it. As in the instructional options, the reading correlation component has consistently received favorable comments from the teachers.
The Theory and the Product

In light of the analysis of the lessons in Unit I, several observations can be made concerning how well they reflect the "middle range theory" presented in Chapter III. To recapitulate, the purpose of the middle range theory was to translate a body of theoretical and philosophical statements about how children learn about politics and about how curriculum should be developed into goals, generalizations, and assumptions which would then be translated into an actual product.

The guiding principles and theories were concretized by the product staff into a viable strategy for creating lessons. A statement of instructional strategies and tactics to be employed in presenting these lessons was spelled out by the instructional developer. A summary of those strategies and tactics was discussed in Chapter IV prior to the analysis of the ten lessons. The analysis yielded the following observations:

1. The lessons did reflect the definition of political decision-making as outlined by the project director.

2. The lessons partially accomplished the goals stated in Chapter III. The primary emphasis in this unit was on increasing the students' awareness of self as a decision-maker individually and in groups. The second, third and fourth units presumably will concentrate on increasing the students' knowledge and competence as makers, judgers, and influencers of decisions.

3. The lessons did reflect the generalization statements by including activities on rules, goals, values, scarcity, conflict, and in using the decision tree to help students recognize
alternatives and consequences.

(4) The lessons were designed around the project's primary assumptions. The materials drew from the natural political world of the child, helped students recognize political phenomena in their environment, were mutually educative for students and teachers, and did not attempt to make mini-political scientists of the students.

(5) The lessons did engage the students in the kind of activity-oriented exercises posited by the instructional developer.

(6) In addition, the unit did attend to the needs of the Ohio teachers as determined by the needs assessment. The unit was organized around brief, flexible lessons that employed group participation in decision-making and problem solving activities whenever feasible.

In terms of the product being a reflection of the Ohio Project's conceptual and theoretical framework, it appears as though there is no question about the logical consistency. As far as the kinds of learned capabilities dealt with in the lessons are concerned, a cursory review of the charts in Appendix B will show some areas which are not included. However, this exclusion is understandable. Since the primary goal of the unit was increased awareness, the clear emphasis on the knowledge related areas seems logical. In this case, a distinction must be made between awareness of an environmental phenomena and awareness of self. The former implies more knowledge related activities while the latter implies more attitudinally related activities. In the matrix which illustrated roles and goals of political learning (see Figure 13, Chapter III)
the awareness cells imply heightened self-consciousness while the knowledge cells imply an increased awareness of the process of political decision-making. Because of that distinction, there is a logical consistency in the goals and product outcomes of Unit I. Had Unit I attempted an all-inclusive set of lessons which equally attended to behaviors, attitudes and knowledge, the result would most likely have been Procrustean rather than promethan.

Later units on making, judging and influencing political decisions do include activities in which the behavioral and attitudinal components are more prominent. For example, in Unit II there are lessons in which the students practice skills associated with political decision-making such as making decisions by voting, consensus, and authority.

Building on Lesson 4 in Unit I, students explore their predispositions toward the social values and determine how these enter into their decisions. In Units III and IV, students learn how to use information to judge and influence political decisions. In addition, they encounter other methods of influence which are available to them. Throughout these later units, the teachers and students employ strategies and tactics which have become familiar to them such as the decision tree, small group discussions and group tasks, and full class activities. So, when placed in this perspective, the Unit I goals and outcomes appear to be as complete as possible.

**Effectiveness of the Analytic Strategy**

The strategy for lesson analysis presented in Chapter IV has proved to be a manageable method for collating information gathered through critical appraisal and pilot testing. Clearly, a great deal more data
could have been gathered.

However, given the limited resources and information needs of the Ohio Project, the process employed was effective. As in any formative evaluation, the data gathered is useful only as it relates to making modifications and improvements in the product.

Although all of the lesson components are important when interrelated, the core activities require the most serious assessment by the evaluator. The detailed analysis of each Unit I lesson presented earlier in this chapter illustrates how this assessment might be undertaken.

The information collected during critical appraisal and pilot testing also indicated the strengths and limitations of the instruments used, potential uses of observations and interviews, and ancillary research studies that could be conducted during field-testing and validation testing. Valuable insights were gained concerning how to contact and involve teachers in the developmental process, how to work effectively with critical appraisers and pilot teachers, and how to use time, money, and people more efficiently. All these learnings bear directly on successful implementation of the suggested field-testing and validation testing phases of analytic evaluation.

D. The Instructional Developer Reacts

It would be difficult to consider an analytic evaluation of curriculum materials complete without including the reaction of the instructional developer to some of the persistent questions raised during the analysis of the materials. The purpose of such an inclusion is to provide the reader some insight into the value orientations of the developer
and how that relates to the revision decisions made during formative evaluation.

As was noted during the analysis of the ten lessons in Unit I, there were some differences of opinion between the critical appraisers and the developer on certain substantive and pedagogic issues. However, these divergences of opinion take on importance only as they are noted consistently by pilot teachers, students, and the evaluator as he describes the learning experiences included in the lessons. In order to present these issues to the reader and the developer in some coherent and reactable fashion, they will be presented in the form of questions. What follows is the developer's reaction to those questions.

**QUESTION 1:** During several of the lessons, concern was indicated by critical appraisers and later by pilot teachers over the amount of discussion. What criteria did you use in determining when to use discussion and how to balance discussion with shared group experiences?

**RESPONSE:** As you noted in L. E. Frase's review of the value of panel reactions, the positive side was low cost and time expenditure—how can that be "positive" when the speedy results are worthless! Anyway, panel reaction to too much "discussion" was a warning light. Discussion, in social studies is deadly. It is usually a teacher led dialogue with one or two students, with the rest hoping not to be called on. Once I perceived that some beginning parts of lessons were being perceived by teachers as "discussions" I changed the directions. This resulted in pilot teacher reactors saying they could have spent more time on those parts but in actuality using them as intended—to briefly focus class attention on a point before or after an exercise. As you know, a State Department official
criticized the lessons as not being "inductive because they did not begin with discussion questions." This warped but common misperception of Taba's work made me avoid "discussion" at the beginning of a lesson where it could ruin the learning experience. The "discussion and summarization" questions were put in to satisfy State Department officials, who know that "an inquiry lesson must have a discussion."

QUESTION 2: There was some controversy over the use of names in the lessons. "Weird Harry" and "Lottalance, the Knight" received some criticism as did Peter Potsenhopper and Betsy Brown to a lesser extent. The intent appeared to be the injection of some humor into the lessons. How do you determine when humor is dysfunctional, and how do you feel about the criticism of the names used?

RESPONSE: Remember, the pilot teachers enjoyed the lessons and the students, to your surprise, remembered specifics of the stories well after they had experienced the lessons. The criticism of humor came from the State Department official and a few panel reactors. I disregarded the State Department member's comment and noted that the panel reactors who mentioned names smiled, and thought the lessons were alright. If the names had stopped those people from using the lessons they would have been dysfunctional and I would have changed them. Once past those teachers, the names could function with children as they were intended. Adults, unconsciously using the model of political education as education about formal governmental institutions, have made such education forgettable by making it deadly serious and emphasizing recall. That's a great way to minimize transfer. Believing that political education is involvement in the enduring tasks of citizenship such as decision making--tasks
which when mastered facilitate use of formal institution but are
not relegated to them alone—I used the world of the child, in-
cluding fantasy, as a practice ground to promote transfer. As you
noted, it works.

QUESTION 3: In Lesson 3, it was pointed out that students had
some problem differentiating non-political decisions from
political decisions and in seeing rules as political deci-
sions. In what way, if any, was this problem resolved in
the revisions? Did you feel the students needed to grasp
this distinction in order to be successful in the lesson?

RESPONSE: The problem was addressed in revision by writing better exam-
examples—examples easier to distinguish as rules concerning groups.
That's what pilot testing for formative evaluation is all about.
As a classroom teacher and chairman of an individualized instruc-
tion program in math, science, language arts, and social studies, I
am keenly aware that people learn at different rates. Therefore, if
I were told that all children had developed the concept of a politi-
cal decision as a decision about rules after Lesson 3 I would con-
clude I was being told a lie. The unit can be considered a success
if slower, timid students are not afraid of and even interested in
the world "alternatives" and "consequences" in a classroom situation
and perceive a political decision as decision about a group at the
end of Lesson 10. I use pattern recognition in the lessons—the
same things are used different ways. This allows slow students to
catch on—experience a Gestalt "A Ha!"—while others who have caught
on are outfoxing the teacher by applying the skills and knowledge
they perceive is going to be called for. Dissecting a lesson is not
as useful an exercise in determining potential success for all stu-
dents as is analysis of the pattern of lessons.
QUESTION 4: Although teachers noted that the students generally enjoyed the activities, some comments were made concerning the quality of the experiences in the lessons, especially Lessons 3, 6, and 10. Do you feel that an experience must be direct to be of high quality?

RESPONSE: Experience is the best teacher. Experience is involvement in physical concentration on mental activities. A Harvard graduate student reading a text can be having as direct an experience as a dripping Boy Scout watching his instructor model the correct way to step into a canoe or a nine year old debating whether or not "you have to go to bed at 8:30" is a family role. Dale's categories are handy, and I do believe direct experience is the highest quality of learning. However, it is the activities which create the direct experience for the learner which count in designing instruction, not Dale's categories per se.

As Harold Lasswell told me, "A professional has to smell like a professional." Lesson 10 is a review lesson. Teachers who must evaluate but cannot perceive that anything that doesn't look like a test can be an evaluation can "smell like a professional" by using it. At conferences, after a presentation of these materials, teacher will ask "What about evaluation exercises?" That's understandable, given the pressure they're under to be "accountable." That pressure is applied by technocrats who cannot comprehend that human social institutions are normatively organized, not input-output organized. Anyway, I allow the rest of the audience to point out to the questioner the evaluative functions of the objectives, Lesson 10 and Lesson 6, and they do.

Lesson 6 is direct involvement in multiple discrimination and
as such was well received by pilot teachers and students. Lesson 3 has lots of involvement for the students. It introduces the word political which has negative connotations for teachers. If this were a problem continuing in the unit it would necessitate a change. Since it is only an initial reaction to the introduction of the term, later accepted by teachers, it stays.

QUESTION 5: In Lesson 7, a game is used to introduce the concept of scarcity to the students. Because of your background in designing games and simulations, you obviously feel they are an important tool for learning. How do you feel about concerns presented by the reactors and piloters such as controlling the class during the game, avoiding the normal class letdown after the game activity, and coordinating what happens in the game with a debriefing discussion?

RESPONSE: Lesson 7 poses some interesting instructional design problems. As you know we ran into the social studies "Party Line" when asking social studies professionals about these lessons. They would read Lesson 1 and talk about the need for games and simulations. (That's how you can tell a professional--when you ask for advice they have to show how professional they are--by citing everything that exists, whether it's relevant or not.) Most classroom teachers won't try a new set of materials that looks like it might provide an opportunity for them to lose control of the class. Therefore, this was kept in abeyance until the seventh lesson when the teachers trusted the material enough to try it. It's powerful. However, the problem is not so much in activity as in getting the teachers to follow instructions. In later lessons I used boxes to call teachers' attention to following the steps so that all students would reach the objective. There is a tendency for teachers to ruin an experience by playing 20
questions—the students try to guess the generalization the teacher has in mind, do so, satisfy the teacher, and forget another school lesson. Better writing in the boxes has helped alleviate this. I don't believe in teacher-proof lessons. I believe in meeting teachers' needs. However, meeting the need to act omnipotent is a tough one to work with.

QUESTION 6: In one of the background information sections (Lesson 9) you explain that two devices are used to illustrate the decision process—the alternative decision simulation and the decision tree. In the first eight lessons the alternative decision simulation is used three times while the decision tree is not introduced until Lesson 9. Yet, reactors, teachers, and students all commented that the decision tree was a powerfully illustrative device. Why is the simulation used so often while the decision tree is withheld until so late in Unit I?

RESPONSE: The decision tree is a powerful device. However, consider how powerful a device it is to a fourth grader who does not know or care what an alternative or consequence is, or what a decision has to do with him or her. I know the tree is good for adults, my job is to make it relevant to students, to involve them in it as a direct experience. To do that they use consequences in Lessons 4, 5, and 8. Then they are emotionally and psychologically prepared to see what is obvious to an adult—"The decision tree is a useful thing." Notice they are introduced to the tree with fantasy—they play with it first—they they are free to discover its potential. To hit students with a wonderful decision tree without taking into account where they are mentally is simply poor teaching. Anybody can "teach" that way. Teaching well includes learning by application.

Incidentally, the alternative decision simulation is utilized
three times, but only applied by students once or twice. The first time in any simulation is an orientation time—people are simply learning what they're supposed to do. After that they're free to discover what they can do—that's education.
FOOTNOTES


2 Ibid., p. 35.


6 Ibid., p. 140.

7 Ibid.


9 Dewey, op. cit., p. 140.

10 Ibid., p. 143.

11 Ibid., p. 142.


13 Ibid., p. 31.


15 Ibid., p. 38.

16 Ibid., p. 39.

17 Ibid., p. 40.

18 Ibid., p. 42.
19. Ibid., p. 43.
20. Ibid., p. 45.
21. Ibid., p. 57.
22. Ibid., p. 58.
23. Ibid., p. 60.
24. Ibid., p. 47.
25. Ibid., p. 64.
26. Ibid., p. 63.
27. Roger LaRaus, Ohio Project memo, January 1975, pp. 1-3.
29. Ibid., p. 9.
30. Ibid., p. 76.
31. Ibid.
32. Ibid., p. 83.
33. Ibid.
34. Ibid., p. 94.
35. Ibid., p. 107.
37. Ibid., p. 132.
38. Ibid., p. 234.
Chapter V

THE POLITICAL LEVEL OF EVALUATION,
SUMMARY AND REFLECTIONS

A. Introduction

In Chapter II, three levels of evaluation were discussed. Chapter III illustrated how the historical/conceptual perspective of a curriculum development project may be presented to provide the framework for the analysis of materials. Chapter IV illustrated how the analytic model might be employed (1) to suggest revisions to the developer, and (2) to evaluate the linkage between the conceptual framework and the product. Both of these levels of evaluation were formative in the sense that they bore directly upon product revision prior to field-testing and publication. Because of limited information needs, the evaluation has thus far been fairly narrow in scope. Aside from the normal politics within the project staff, the process has also been essentially apolitical.

However, if the evaluation strategy continues as the investigator suggested in Chapter II, a field-testing phase is needed before the materials reach the schools. When the materials reach the schools, the effect will be political in nature. The field-testing phase can thus provide a valuable linkage between inner-directed evaluation research and outer-directed evaluation research. In the former, the schools affect change in
the product. In the latter, the intent is to discover how the product might affect change in the school. Field-testing can help gauge the extent of that effect.

In reviewing the eight evaluation strategies presented in Chapter II, it appears that the consideration of the political effects of a curriculum innovation have been tangential. The two strategies which come closest to including political effects in their evaluations are Stufflebeam's CIPP strategy and Stake's antecedents-transactions-outcomes strategy. Even then, it would take a broad interpretation of these strategies to consider them as politically inclusive.

For example, one could argue that the CIPP strategy includes an analysis of the context to be affected by the change, but by definition context implies more than the political environment. It might logically include sociological, philosophical, psychological, pedagogical, and economic contexts as well as the political. In attempting to cover all the bases, the CIPP strategy creates a less than manageable plan especially for a small scale curriculum development project.

Stake's model fares better in that it makes possible an interpretation of antecedents, transactions, and outcomes as applicable to political analysis. That is, one could explore preconditions that could affect change, transactions that could help or hinder change, and projected outcomes of change. However, the illustrations shown in Chapter II appear to apply more directly to product or program evaluation. Stake never describes his model as applicable politically.

Implications for Evaluation

What, then, are the implications of the political level for
evaluation? Since the project has not reached the suggested field-testing phase, the implications will be highly speculative. They do rest on the assumption that curriculum change is a political process, however. The following sections will (a) explore the idea of curriculum change as a political process, (b) suggest how the project might view this process, and (c) suggest some researchable questions based on this view which can be implemented during field-testing.

In viewing curriculum change as a political process, the implication is that despite the excellence of any instructional materials ultimately created by a development project, real curriculum changes in schools entail processes such as persuasion, power, influence, conflict, decision-making, and accommodation among educational actors. Teachers, administrators, supervisors, school board members, legislators, and community interest groups all constitute sources of policy decisions, official implementative acts, and informal change. Action by the members of any one of these groups toward the curriculum can affect the prerogatives and actions of the other members or the other groups.

Clearly, one of the functions of the political level of evaluation would be the determination of how the project might marshall the support of these groups in implementing change; i.e., the incorporation of the materials into the present curriculum. Conversely, another function of the evaluation would be the determination of degrees of resistance to the innovation among salient groups and potential sources of this resistance (e.g., threat to status quo, conflict with group goals, threat to power structure, feelings against curriculum content, etc.).

Normally, curriculum evaluation has shied away from political
questions and concentrated on analyzing data from students, teachers, parents and scholars in order to determine the "best" curriculum. As Frederick Wirt and Michael Kirst point out, "the distinctively political concepts of conflict and accommodation have seldom been applied in curricular discourse."\(^5\)

Thus, the judgmental function of summative evaluation may not be to determine the overall best curriculum but to determine which curriculum is most appropriate under certain conditions. In a political scientist's frame of reference, these conditions are most likely affected by group rules, goals, and values. This idea is extended later in this chapter.

At this point, it may be useful to examine Wirt and Kirst's exegesis of value bases as they relate to political decisions in evaluation. They identify four broad bases for evaluating curricular elements. They are tradition, science, community, and individual judgment.\(^6\)

The appeal to tradition is best represented by the Great Books program and the Council for Basic Education. It holds that those subjects which have withstood the test of time are of most worth.\(^7\) The appeal to science, newest among the bases, assumes that capabilities whose usefulness have been revealed through psychological and educational research are those which should be given first priority in the curriculum.\(^8\)

The appeal to community assumes that the school is part of a larger community, and the community can best define matters which should be given first priority in the curriculum.\(^9\) Finally, the appeal to individual judgment presupposes that the student's preferences dictate to a large extent what the student will learn. Therefore, curriculum decisions should be highly personal and subjective as they relate to the individual's
values, needs, and desires.\textsuperscript{10}

Given these value bases, the pattern of decision-making used in curricular decisions might be best described as what Lindblom and Braybrooke call disjointed incrementalism.\textsuperscript{11} These are a collection of "relatively simple, crude, almost wholly conscious and public strategies for decision-making, which, taken together as a mutually reinforcing set . . . constitute a systemic and defensible strategy."\textsuperscript{12}

Included among the features of disjointed incrementalism are: (1) the acceptance of broad outlines of the existing situation with only marginal changes contemplated; (2) consideration of only a restricted variety of policy alternatives, excluding those that entail radical change; (3) consideration of only a restricted set of alternatives for any given policy; (4) adjustment of objectives to policies and vice versa; (5) willingness to reformulate the problem as data become available; and (6) serial analysis and piecemeal alteration rather than a single comprehensive attack.\textsuperscript{13} In essence, this strategy calls for a reliance on pragmatism which generally results in minimal curriculum change.

If Lindblom and Braybrooke's description is correct, and experience has given no reason to doubt that it is, the implications for the evaluation of curriculum materials are extensive. Unfortunately, a project with limited resources, such as the Ohio Project, cannot probe all the implications presented by the political level of evaluation. The suggestions made in the following section are considered to be within the realm of possibility for this kind of development project.
B. A Suggested View

The effects of political decisions beyond the control of the project can be devastating to the curriculum development process. As was pointed out earlier, materials may be conceptually sound, well-constructed pedagogically, and empirically evaluated, but if they are in conflict with currently established rules and goals or with firmly entrenched values, the chances of implementation are slim.

Since critical appraisal and pilot testing have resulted in most of the major revisions that are likely to occur, field testing may perform two functions. It can (a) extend the process of pilot-testing by making it more empirically sound, and (b) give the project more latitude to make generalizations about the appeal and effectiveness of the materials. However, if field-testing incorporates an appraisal of the political climate for change, it can accomplish both goals while gaining valuable information to guide diffusion activities.

How might this be accomplished? Presumably, field-testing attempts to establish a sample which represents a cross-section of school district types (urban, rural, suburban), socio-economic status (high, middle, low), types of teachers (different ages, years experience, teaching styles, etc.), and types of students (different reading levels, sex, ethnic background, ability, etc.). The sample may be drawn state-wide or nationwide depending on the desired audience. While the materials are being tested, orientations of salient districts toward rules, goals and values can be examined. Just with these orientations are and how information may be gathered concerning them is examined in the next three sections.
Rules

In the case of curriculum related decisions, such as ones concerning the adoption of new materials, rules may be defined as policy. In most public school settings, policy may be either clearly spelled out or tacit, but usually, both conditions exist. In the former situation, curriculum policy may be relatively stable as in Texas where a state-commissioner-appointed State Textbook Committee recommends textbooks to be used state-wide. The commissioner must then approve the books it recommends.

In other situations, the school district's Central Office makes textbook decisions usually based upon the recommendations of an assistant superintendent in charge of curriculum. Sometimes, the Central Office will give the building principals autonomy in curricular decisions, and this responsibility may be shared with faculty members depending upon the leadership style of the principal.

Where the decision-making function is shared among interest groups such as a Parent Advisory Council or a School Cabinet made up of parents, teachers, and students, the official policy may be more difficult to discern. If the decision-making function is shared, it could be the result of "enlightened leadership" or community pressure. Depending upon which is the case, the principal may act on their recommendations or take their suggestions under advisement and make the decision he thinks is best.

In most school districts, the superintendent has the greatest leverage in curriculum decisions. His power may be direct, in which case others are expected to implement his policy decisions as spoken. Where the superintendent's power is more diffused, as in a large bureaucratic
setting, the policy may be more in terms of an official statement which presupposes certain kinds of reactive behaviors without clearly defining them.

Finally, one other important policy-making group should be considered: the school board. Their power for making curriculum decisions may be more potential than real. Ostensibly, they represent the voice of the community. Since they have direct control over the employment of the superintendent, they can exert pressure on him in order to influence his decisions. However, because school boards tend to view superintendents as experts in educational matters, they generally abjure to his judgment.

In attempting to pin down the potential effect of curriculum policy, the question is "Who makes the decisions?" By identifying key actors in policy decisions, the project can develop several perspectives of the materials depending upon whose decision they are attempting to influence.

The difficult first step is deciding who to start with in determining the flow of policy decisions. Based upon the research available, the district superintendent appears to be the key actor with whom to begin. In descending order, other key actors are assistant superintendents of curriculum and/or instruction, principals, area supervisors, school boards, teachers, community groups, and students. The amount of coverage, of course, is dependent upon the amount of information the project needs and how much money they are willing to spend to get it.

Several different tactics may be employed to gather such information. The logical starting point would be with the district superintendents of the field-test sites. Because one of their schools is testing the materials, it would not be unusual to send them a copy of the materials.
Within the packet, a questionnaire would be included for the purpose of first gauging their reactions to the materials and second determining district policy toward the adoption of curriculum materials.

The policy questions would either be interspersed throughout the questionnaire (which should be two to four pages with approximately 25 questions) or located toward the middle. The questions would then be factored and analyzed to determine (a) who makes curriculum policy decisions, and (b) what would the policy toward the political education materials most likely be.

The data would then be graphed, and the project director would decide whether to repeat the process with the policy makers indicated by the superintendents, or to do follow-up questionnaires or interviews with superintendents who did not respond. It is assumed that no further action would be needed with superintendents who clearly make curriculum policy and who view the materials favorably. In districts where the superintendent is not the key policy actor, a process similar to the one described above would be used since the key actor(s) was identified. In the case of the Ohio Project, the State Department of Education can provide this valuable identification function. In other situations, the state or local chapter of the NEA may have research data already available.

Goals

Determining the goals of the field-test school districts should be a somewhat easier task than discovering the flow of curriculum policy decisions. In this case, goals may be more narrowly defined as the objectives or philosophy of the school. Since most public schools include training in citizenship somewhere within their statement of philosophy, materials
on political (citizenship) decision-making should be able to gain access somewhat more easily than materials on sex education, for example. With the upcoming Bicentennial, there may even be a demand for the materials.

Getting the materials into the school is one operation, getting individual teachers to use them is quite another. In many classrooms, materials like those on political decision-making may conflict with the established class goals. The curriculum agenda of the typical elementary school teacher is already extended to its limits. Generally speaking, social studies is not a highly rated priority in the elementary school classroom. Therefore, the problem is to determine political education's ranking among the goal priorities in the typical classrooms and, depending on the outcome, to emphasize the multi-disciplinary approach which can be used with the materials.

The data can be gathered quite simply from the field-test teachers. Some useful data can be generated by first asking the teachers to rank their goal priorities before using the curriculum materials. Subsequent to field-testing, the same priority ranking instrument would be used. The data can then be analyzed to determine if using the curriculum materials had any effect on the reallocation of goal priorities. In situations where the priority ranking of political (or citizenship) decision-making went down or remained the same, follow-up questionnaires and/or interviews would be implemented to determine the teachers' reasons. Based upon that information, decisions would be made about the significance of the data, and what steps would need to be taken to modify the materials if the data was judged to indicate trends of opposition.
Values

The allocation of value preferences permeates both policy and goal decisions. The most manageable method for analyzing value preferences is through the use of Lasswell's eight social values as a conceptual base. These social values were discussed briefly in Chapter 11, but to recapitulate, they are: power, enlightenment, wealth, well-being, skill, affection, respect, and rectitude. While determining all the key actors' value preferences would be virtually impossible, certain significant persons or groups could be identified. The majority of these would emerge from the research done on policy and goal decisions. As policy analysis determines who makes the decisions, and goal analysis determines what the decisions are designed to accomplish, social value analysis determines why the decisions are made.

The following illustrations show how social value preferences can affect a curriculum decision both positively and negatively.

Decision: to adopt or not adopt the new political decision-making curriculum materials

Social Value

Power (Positive) - Teacher A sees that learning how to make decisions more effectively will help her to share decision-making responsibilities with her students.

(Negative) - Teacher B sees that if her students learn how to make, judge and influence decisions they may challenge her authority.

Enlightenment (Positive) - Superintendent A believes that political decision-making is an enduring task of
our society and that students need to acquire information on it while they are in elementary school.

(Negative) - Superintendent B believes that elementary school children have enough on their hands just learning the 3 Rs. Leave decision-making to the adults.

Wealth (Positive) - Parent group A feels that people who have experienced success and financial security are generally effective decision-makers.

(Negative) - Parent group B feels that if their children are going to get ahead in life, they need vocational training and career education as early as possible. Being a good decision-maker won't get a good paying job.

Well-being (Positive) - Principal A believes that the only way society will survive is if people early on learn how to become effective decision-makers and problem solvers.

(Negative) - Principal B believes that if students learn a little about making decisions without the benefit of adult experience and maturity, they could cause problems in the school and at home. This could be
a threat to their well-being.

**Skill (Positive)**
- School Board A feels that decision-making is an important skill for elementary school students to acquire.

**(Negative)**
- School Board B feels that the school can do only so much and that reading, writing, and computation skills should have highest priority.

**Affection (Positive)**
- Superintendent A feels that he should adopt the materials because of his friendship with State Department of Education personnel.

**(Negative)**
- Superintendent B feels that the State Department has ignored him and refuses to have anything to do with materials they have a connection with.

**Respect (Positive)**
- Teacher A believes that if her students learn about decision-making they will see what a skillful decision-maker she is.

**(Negative)**
- Teacher B believes that if her students discover ways of circumventing her decision-making authority, they will lose respect for her judgment.

**Rectitude (Positive)**
- Principal A believes that teaching about effective decision-making is a good way to increase students' self-responsibility.
(Negative) Principal B believes that elementary school children are not responsible enough to handle effectively what they learn about political decision-making.

These examples are designed to illustrate some of the value biases which could affect the eventual adoption of the materials. Social value analysis can help to determine in advance where potential trouble spots might be. Where resistance is particularly strong, the director could decide either to make the materials more appropriate for that type of school district, to mount a public relations effort to inform the community on the purpose of the materials, to adopt a "hard line" approach on changes in the materials, or to simply indicate that these materials are inappropriate for some school districts.

Researchable Questions

After proposing the view of the political level of evaluation discussed above the most useful course of action is to suggest some questions for research. The purpose of the suggestions is not to develop a research design to be followed but to focus on areas of concern which can be manageable handled by the Ohio Project. It is an extension of Professor Richard Snyder's "rolling hoop" concept of curriculum development. Just as the development of new curricula carries implications for teacher education and curriculum research, the evaluation of new curricula implies a "rolling hoop" containing new models for evaluation and questions for evaluation research. Among the questions of concern for the Ohio Project are:

1. What is the current status of curriculum policy in the
(1) What potential effect will the new curriculum materials have on the reallocation of current educational goal priorities in the representative schools and in their classrooms?

(2) What potential impact will the value preferences of key actors in the curriculum decision-making process in the representative schools have upon the adoption of the new materials?

While these questions represent only a beginning step for research, they add an important dimension to the linkage of curriculum development activities and evaluation activities. Models and strategies of evaluation generally depict evaluation as either a component on the linear plane of curriculum development or as an activity which parallels the development of curricula. In a cybernetic model of curriculum development, developmental activities and evaluation activities are constantly intersecting. At times, development guides and shapes evaluation, while later in the project evaluation guides and shapes development. Thus, evaluation research questions such as those posited above serve a dual purpose: (1) to act as feedback gauging the climate for change, and (2) to act as guides indicating how the political process of curriculum development can affect change.

C. Summary

The purpose of this study was to design a manageable evaluation strategy for a small scale curriculum development project, the Ohio Project. A review of salient evaluation models and strategies provided
guidance, but none was directly applicable to the Ohio Project. The models and strategies suffered from two problems which limited their adaptability. One problem stemmed from the fact that they were primarily designed to serve the needs of the large scale curriculum development projects of the mid-1960s and early 1970s. The second problem grew from the limitations caused by placing primary emphasis on product evaluation with little or no attention paid to trends leading up to the conditions that spawned the product, or projections of events likely to occur if and when the product was implemented.

The models and strategies investigated were apparently the result of the effect of linear thinking in curriculum development. The concept of curriculum development as a "rolling hoop" implies more than the thinking underlying the Tyler rationale and its offspring. Because of that, the study developed an evaluation strategy more conducive to a cybernetic model of curriculum development than strategies designed for linear models of curriculum development.

To briefly summarize, the major questions explored in the study were:

1. Will viewing a curriculum development project historically, analytically, and politically result in an evaluation strategy which is viable for a small scale project?

2. Are prevailing paradigms used in curriculum evaluation adaptable to this strategy or must the strategy incorporate selected components of these paradigms?

3. Will an analysis of the materials through a series of appraisal techniques substantiate the developers' intended outcomes and
this justify the developer's "middle-range" theorizing?

(4) What implications do these findings hold for subsequent development and evaluation activities of this project, in particular, and for curriculum development in general?

Concerning the first question, one of the natural tendencies of viewing evaluation in this three-fold manner is to attempt to incorporate more information than is needed. In Chapters III, IV, and V, the strategy was applied or suggested in such a manner as to meet the information needs of the project. Compiling historical and conceptual references for a project of this type is fairly simple if the developers have stated their positions. As a participant-observer, the investigator has easy access to the history of the project and can either take copious notes during conceptualization meetings or request that the developers present their positions for view in an open forum. The purpose for specifying the conceptual framework is to compare the Project's "middle-range" theory with the materials it develops.

Product analysis as applied in Chapter IV accomplishes two purposes. First, it holds the materials up to numerous appraisals from varying perspectives and then looks for critical consistency among the appraisers. Thus, a criticism noted by each group of appraisers often carries more weight than a criticism noted by several members in one group. Second, it checks the logical consistency between what the developers have said they will do and what is actually accomplished.

Finally, political evaluation as suggested in Chapter V assumes the position that curriculum materials do not exist in a vacuum and that they will have a political effect on the schools and classrooms they touch.
This effect involves decisions made because of policy, goals, and values and the conflicts which occur as different predispositions confront each other. One purpose of evaluation is to provide information concerning these predispositions and the predicted outcome of the conflict. As applied in the study, this evaluation strategy proved to be viable for the needs of the Ohio Project in its development of elementary political education materials.

The second question which was concerned with the use of prevailing evaluation models and strategies for the Ohio Project was explored in Chapter 11. It was found that the strategies reviewed had numerous strengths and weaknesses internally and that their applicability was limited. For purposes of the strategy suggested in this study, concepts of evaluation methodology and theory were drawn from Scriven's formative and summative model, Parlett's illuminative evaluation model, and Stufflebeam's CIPP strategy. Stake's notion of antecedents, transactions, and outcomes was also useful in designing the overall framework of the historical, analytical, and political strategy.

The historical level attended to Parlett's concern for understanding and documenting the curriculum development process. This level focuses on presenting the historical background and conceptual framework of the Ohio Project. The analytical level followed Scriven's concept of formative evaluation by appraising the product for the purpose of making substantive changes. The political level drew from Stufflebeam's CIPP strategy by exploring decision-making implications for considering the product within contexts into which it will be introduced.

The third question of how well the "middle-range" theory has been
translated into an actual product is analyzed in Chapter IV. This chapter deals with this question in detail and supports the claim that the materials were successful.

The findings suggest that much new thinking and reformulation about the relationship of evaluation to curriculum development is needed. Strategies designed for the evaluation of curricula appear to be situation specific. That is, evaluation is designed to meet the needs of the individual projects.

In the past decade, the trend was toward large, heavily funded projects. In the mid-1970s, that type of project still exists, although fewer in number. The grand evaluation paradigms are still highly applicable to such projects. However, privately funded projects have emerged as the potential curriculum development projects of the next decade. Thus, new, less ambitious, and more manageable evaluation strategies need to be designed. These strategies are likely to be more intimate and designed to promote sharing among projects for purposes of survival. Information for product improvement must be carefully gathered so as not to waste valuable project resources. They must also, however, attend to the ethical question of creating the best product possible.

Finally, again for purposes of survival, a small-scale project must be particularly sensitive to the value and goal preferences of the consumers they serve and willing to be flexible in terms of educational policy. It is this final issue, what will be taught to whom where, when, and why that holds the greatest implication for contemporary evaluation strategies.
Further Reflections

Reflecting upon the findings in the study, some additional discoveries surfaced. Largely serendipitous, these discoveries hold important implications for further research. Among these discoveries are:

(1) Much redefinition of evaluation terms and concepts is needed.

(2) The design of content analysis schemes needs to center on psychological principles of learning rather than logical principles.

(3) The use of participant-observation methodologies in formative evaluation needs to be further researched.

As was noted in Chapter II, considerable overlap among evaluation terms exists. In addition, conceptual gaps concerning the roles and goals of evaluation and key actors in the evaluation process still plague the field. This may be the result of evaluation strategies designed to reflect a logical view of what should exist and not what actually does exist.

As a result, the normal sources of evaluation information are what is intended and what is observed. Thus, phenomena not intended nor observed do not exist and are not evaluated. This situation exists apparently because of some discomfort over the weak behavioral research designs typically used in evaluation studies.

The implication for further evaluation research is clearly one of exploration into other disciplines. The research should have as its focus the identification of research models and paradigms more pertinent to evaluation. Educational and behavioral research have become more concerned with what is statistically significant than what is humanly
significant. The designs are inherently unnatural. What is needed are models designed to capture the evolution of a process.

As new models and strategies are identified in other disciplines, a new language of evaluation can be generated. When different terms are used to describe the same phenomenon (such as context and antecedents), a new, more descriptive term should be created. When one term (such as product) connotes two distinct concepts (such as instructional materials and outcomes of instruction), new labels need to be devised. Finally, where conceptual gaps exist (such as between roles and goals of evaluation and roles and goals of key actors in the evaluation process), cognate fields may provide applicable concepts to fill those gaps. In this way, research can guide redefinition.

The second discovery relates to the need for more psychologically oriented schemes for content analysis. Up to now, Bloom's Taxonomy has been the pervasive force in the design of content analysis matrices. As conceived by Bloom, Krathwohl, and others, the taxonomies depict a logical view of how learning occurs. The acquisition and application of learned capabilities implies a psychological view of learning, however.

For example, Bloom's level of application in the cognitive domain connotes a single psychological operation. However, when a person is applying knowledge as Bloom defines it, he is employing several learned capabilities (defined and concrete concepts, organizing information, and even modeling). The division of learning into three sub-areas--psychomotor, cognitive, and affective--also presupposes non-interaction among them. Real learning, however, involves continuous interaction among cognition, attitudes and behaviors. Thus, new schemes for content analysis
must attend to the question of what students need to bring to a learning experience and what they will gain from it.

Finally, further research must be undertaken to establish alternative roles for the curriculum evaluator. In this study, the evaluator acted as a participant-observer. As such, he was not directly involved in the creation of underlying instructional or curriculum theory. He therefore was not as ego-involved with the materials as the curriculum developer or the instructional materials designer. This role allowed him more latitude for objectivity than they would have had.

In addition, as a participant in the actual creation of some of the lessons, the evaluator was familiar with the material's structure and substance. Because of this, there was no need for extensive briefings. The limitations and constraints and information needs of the Project were already familiar ground. Thus, data collection generated information which was absolutely necessary for product improvement. By adopting a participant-observer's role for the evaluator, the concern for both objectivity and subjectivity in evaluation noted in Chapter II is alleviated.

The evaluation study of the Ohio Project is clearly heuristic. It is, therefore, exploratory. It was undertaken because extant models and strategies for evaluation were not directly applicable to a small-scale project. The discoveries noted above emerged from this exploration. As was also noted, much additional research is needed. This need may be met through systematic analysis of such disparate fields as law, business, engineering, medicine, and even politics where appraisal of activities is a way of life. Then, perhaps, Robert Stake's call for new paradigms, new methods, and new findings will be answered.
FOOTNOTES

1 Lee Anderson, Richard Remy, and Richard Snyder, "Improving Political Education in Elementary Schools: Challenges and Opportunities," (mimeographed position paper of the Task Force on Elementary Education of the APSA's Committee on Pre-Collegiate Education), p. 43.

2 Ibid.

3 Ibid.


5 Ibid.

6 Ibid.

7 Ibid., p. 204.

8 Ibid., p. 205.

9 Ibid.

10 Ibid.


12 Wirt and Kirst, op. cit., p. 206.

13 Ibid.

14 Ibid., p. 212.

15 Ibid., p. 219.
OHIO ELEMENTARY SCHOOL POLITICAL EDUCATION PROJECT

LESSON EVALUATION FORM

1. Before completing the rest of this form, please read the entire lesson and comment upon your first impressions regarding the lesson.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

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________________________________________________________________________


** * * * * * *

2. Does the lesson fit the title? [ ] YES [ ] NO

   IF NO: Comments and/or suggestions: ____________________________

   __________________________________________________________________

   __________________________________________________________________

   __________________________________________________________________

   __________________________________________________________________

   __________________________________________________________________


3. Is the length of the lesson realistic? [ ] YES [ ] NO

   IF NO: Comments and/or suggestions: ____________________________

   __________________________________________________________________

   __________________________________________________________________

   __________________________________________________________________

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   __________________________________________________________________


4. Is the lesson consistent with its stated purpose? [ ] YES [ ] NO

   IF NO: Comments and/or suggestions: ____________________________

   __________________________________________________________________

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   __________________________________________________________________
Lesson Evaluation Form

5. Is the lesson consistent with the objective(s) stated for the lesson?
   □ YES    □ NO
   IF NO: Comments and/or suggestions:

6. Are the materials listed in the "materials" category adequate for the lesson?
   □ YES    □ NO
   IF NO: Comments and/or suggestions:

7. Is the background information useful and clear? □ YES    □ NO
   IF NO: Comments and/or suggestions:

8. Vocabulary suggestions, if any:

9. The following three questions concern the core of the lesson—the sequence of instructional activities that make up the lesson.

9a. How do you feel about the activities (STEPS) used in opening the lesson? (For example, do you feel they will engage students' interests; are they too difficult; would they require unusual preparation, etc.) Do you have any specific suggestions?
Lesson Evaluation Form

9. continued

9b. How do you feel about the activities (STEPS) used in Developing the Lesson? (For example, do you feel they will engage students' interests; are they too difficult; would they require unusual preparation, etc.) Do you have any specific suggestions?

________________________________________________________________________

________________________________________________________________________

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9c. How do you feel about the activities (STEPS) used in Concluding the Lesson? (For example, do you feel they will engage students' interests; are they too difficult; would they require unusual preparation, etc.) Do you have any specific suggestions?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

10. What are your reactions to the questions about value awareness? Will it engage students curiosity or supplement classroom value examination?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

11. Would you use this lesson in your own classroom? □ YES □ NO

IF NO: Please explain:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Lesson Evaluation Form

12. Do you find the instructional options for the lesson useful?  □ YES □ NO
   Is there enough activity here?  □ YES □ NO
   What else would you suggest?

13. In what ways, if any, could this lesson fit with, utilize and/or be a part of things you are already doing in (a) social studies and (b) other areas such as language arts, reading, science, etc?

14. How does this lesson supplement or enhance the textbook materials you are now using? Be as specific as you can.

15. At what grade level would you recommend the use of this lesson?

16. Is this lesson flexible enough to be used with slower, average and advanced students?
Ohio Elementary School Project:
Experience Based Education for Citizen Competence in a Free Society

Mershon Center
199 West 10th Avenue
Columbus, Ohio 43201

Lesson Journal
(Use back for comments if necessary)

This Lesson Journal is designed as a formative evaluation tool. If you think the lesson will "work" with your students, with modifications you make as you go along, please teach it and tell us what you did to make it educationally sound for you and your class. Be specific so we can rewrite the lesson including your revisions. Feel free to write on the lesson if you like and return it to us—we'll send you a revision. If the lesson would not work well, in your professional opinion, and can't be presented to students in its present form with in-class modifications and additions, tell us why, and what you would suggest to make it workable. We value your opinions and suggestions more than the numbers.

Teacher: ___________________________ Unit: Lesson: ___________________________

School: ___________________________ Date: ___________ Grade: ___________________________

A. Is this evaluation based on reading the lesson or trial teaching the lesson?

1. How long did (would) it take you to complete the lesson?: ________________

2. Did (would) your students experience the objective(s) stated for the lesson?  
   Yes  4 3 2 1  No  Comments, Suggestions: ________________________________

3. Are the materials listed in the "materials" category adequate for the lesson?  
   Yes  4 3 2 1  No  Comments, Suggestions: ________________________________

4. Was the background information understandable? Check one:  
   Had no difficulty understanding  4 3 2 1  Had a lot of difficulty understanding  
   Comments, Suggestions: ___________________________________________
The following questions concern the sequence of instructional activities that make up the lesson.

5a. How did you feel about the activities (STEPS) used in OPENING THE LESSON?

Did (would) these activities engage the interests of the students? Check one:

Engaged interests

Didn't engage interests

Comments, Suggestions:

5b. How did you feel about the activities (STEPS) used in DEVELOPING THE LESSON?

Did (would) these activities succeed in introducing the lesson? Check one:

Yes

No

Comments, Suggestions:

Were these activities enjoyable for the students? Check one:

Yes

No

Comments, Suggestions:
Lesson Journal
Page 3

1. Did (would) these activities help students experience the lesson objective(s)?

   Yes | 4 3 2 1
   No

   Comments, Suggestions: ________________________________

2. How did you feel about the activities (STEPS) used in CONCLUDING THE LESSON?

   Did (would) these activities help draw students' attention to the purpose of the lesson? Check one:

   Yes | 4 3 2 1
   No

   Comments, Suggestions: ________________________________

3. Did (would) the activities help the students feel successful? Check one:

   Yes | 4 3 2 1
   No

   Comments, Suggestions: ________________________________

4. Would you recommend this lesson to other teachers? Yes | 4 3 2 1

   No

   Comments, Suggestions: ________________________________

5. Is this lesson appropriate for the grade level you teach? Yes | 4 3 2 1

   No

   Comments, Suggestions: ________________________________

6. At what grade levels, in addition to yours, would this lesson be appropriate?

   ________________________________

7. What is your overall reaction to the lesson and its reception by your students?

   ________________________________

8. What options or literature correlations would you suggest for this lesson? (Use back of page for comments.)

   ________________________________
LESSON TITLE: You Make Decisions

LESSON OBJECTIVE(S): Students will demonstrate they make decisions by completing a decision questionnaire.

<table>
<thead>
<tr>
<th>Intellectual Skills</th>
<th>Verbal Information</th>
<th>Cognitive Strategies</th>
<th>Motor Skills</th>
<th>Attitudes</th>
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<tbody>
<tr>
<td>Opening Activities</td>
<td>1. Discussion</td>
<td></td>
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<tr>
<td>Developing Activities</td>
<td>1. Students fill in questionnaire.</td>
<td>2. Class creates bar charts</td>
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<tr>
<td>Concluding Activities</td>
<td>1. Students list decisions they make.</td>
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</table>
**LESSON TITLE:** Deciding Among Alternatives  
**LESSON OBJECTIVE(S):** Students will compile evidence that they make decisions from among alternatives by a log of alternatives and decisions they make in a single day.

<table>
<thead>
<tr>
<th>Cognitive Strategies</th>
<th>Motor Skills</th>
<th>Attitudes</th>
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### Cognitive Strategies

#### Opening Activities
1. Students list alternatives in fantasy situations.

#### Developing Activities
1. Finding alternatives in a story.
2. Recording alternatives in a notebook.

#### Concluding Activities
1. Students record their own daily decisions in a notebook.

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# Lesson Title
Political Decisions: Rule-Ruling for You

## Lesson Objective(s)
Students will be able to identify political decisions as decisions about group rules.

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<tbody>
<tr>
<td>Opening Activities</td>
<td>1. Spaceship simulation</td>
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<tr>
<td>Developing Activities</td>
<td>1. Making rules for groups.</td>
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<td>2. Students report on findings.</td>
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<tr>
<td>Concluding Activities</td>
<td>1. Identify political decisions from a list of decisions.</td>
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Legend: X = Included, - = Not Included, → = Not Applicable
LESSON: TITLE: Political Decisions and Social Resources

LESSON OBJECTIVE(S): Students will be able to identify political decisions as decisions giving groups things they want.

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<td>Opening Activities</td>
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<tr>
<td>1. Students identify political decisions in a cartoon.</td>
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| Developing Activities |                 |                   |                 |        |            |        |       |            |                   |                   |            |                      |                    |
| 1. "Can Judy Play" simulation | | | | | | | | | | | | |

| Concluding Activities |                 |                   |                 |        |            |        |       |            |                   |                   |            |                      |                    |
| 1. Students describe values in other political decisions. | | | | | | | | | | | | |
**LESSON TITLE:** Political Decisions and Group Goals

**LESSON OBJECTIVE(S):** Students will make political decisions concerning group goals by comparing their goals for state spending with the decisions made by the Ohio Legislature.

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<td>Opening Activities 1. Students suggest possible goals for the class.</td>
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<td>Developing Activities 1. Students set goals (spending) for Ohio simulation</td>
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<td>Concluding Activities 1. After ranking their choices, compare with actual decisions of legislature.</td>
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**Lesson Title:** Political Decisions Are Everywhere

**Lesson Objective(s):** Students will identify evidence of political decisions about rules, values, or society in their environment.

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<th><strong>Motor Skills</strong></th>
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<td>1. Students read story</td>
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<td>&amp; discuss political</td>
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**LESSON TITLE**: Scarcity and Political Decisions

**NUMBER**: 1 - 7

**LESSON OBJECTIVE(S)**: Students will identify political decisions arising from experiments involving groups facing scarcity.

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<td>Opening Activities</td>
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<tr>
<td>1. Students play &quot;Button Bottle&quot; game and observe players' behaviors.</td>
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<td>1. Students role play teachers deciding because of scarcity.</td>
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<tr>
<td>1. Discussion of historical situations in which scarcity caused political decision.</td>
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204
LESSON TITLE: Conflict and Political Decisions

LESSON OBJECTIVE(S): Students will make decisions arising from conflict within their community groups.

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<td>1. Students recognize how conflicts arise.</td>
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<td>Developing Activities</td>
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<td>1. Do &quot;Being Picked On&quot; simulation</td>
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<td>1. Students suggest solutions for problems faced by the principal, mayor, etc.</td>
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**LESSON TITLE**: Climbing a Decision Tree

**LESSON OBJECTIVE(S)**: Students will climb a decision tree concerning a political decision of their choice.

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<td>1. Review</td>
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<td>2. Students look for alternatives &amp; consequences on &quot;Decision Tree.&quot;</td>
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<td>1. Students fill in blank &quot;Decision Tree&quot; from new story.</td>
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<td>Concluding Activities</td>
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<tr>
<td>1. Students fill in &quot;Decision Tree&quot; for everyday decisions.</td>
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</table>
LESSON TITLE

SUMMARY/EXPOSITION

OBJECTIVE(S): Students will distinguish political decisions from non-political decisions and identify kinds of political decisions they recognize. They will identify political decisions and their effects on society and political decisions caused by conflict and scarcity.

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Lesson 1
Unit 6

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CLIMBING A DECISION TREE

DURATION: Approximately two periods

PURPOSE: To help students develop awareness of political decisions in their environment

OBJECTIVE: Students will climb a decision tree concerning a political decision of their choice.

MATERIALS: Two transparencies; "Sir Lottalance and the Dragon," "Staying After School." Dittos of decision tree for each student or group of students. Overhead projector. If you wish to make an art project out of constructing Decision Trees, construction paper, paste, crayons, etc. may be used.

BACKGROUND INFORMATION FOR TEACHERS:

Individual decision-making involves an abstract mental process. Since the process of political decision-making "takes place" inside the individual's head where the process itself cannot be viewed, how can children learn about it? There are two ways, one of which has already been used in this unit.

The first way is by examining the results of a decision. Students examined the results of their decisions in lessons four, five and eight. The pattern of presentation of these lessons was the same so that students could accurately predict what they would be asked to do. Since they did not have to expend mental energy on guessing what the lesson would require of them, they could learn to devote energy to examining alternatives.
weighing consequences, and examining the results of their decisions.

The second method of learning about the process of decision-making is used in this lesson. It is called a Decision Tree. Social scientists studying the process of decision-making create maps of possible alternatives and possible consequences that look like branching trees. Such trees may depict consequences of consequences ad infinitum. For the purpose of making the process of a decision concrete, for children, a small decision tree can be used.

To climb this Decision Tree children start at the trunk, or "occasion for a decision." An occasion for decision is a problem situation where what to do is not obvious. The occasion may be a fantasy—the arrival of a dragon outside the princess' castle; or real, "spotting someone doing something that could cause one to have to stay after school." In either case, a decision is called for. Students then clamber into the branches of the tree. The branches, or alternatives, may number from two to four or more. Of course when learning to climb beginners usually try a tree with a few small branches that one can grip, rather than grappling with a 100 foot oak.

Above the branching alternatives, hidden in the foliage, are the positive and negative consequences of each alternative. Students, gazing up into the leaves, can ask themselves what's "good" and what's "bad" about each alternative. Above the positive and negative consequences, with a new giddy view of the world from the lofty top of the decision tree, is the goal of the decision. Your climbing students can reach the goal on the top of their tree. In so doing, they can make both the results of a political decision and the process of decision-making concrete and learnable.
NOTE: The Background Information for lesson two covered some of the steps people go through in increasing competency in the decision-making process. Because people relate leaping to a conclusion to the decision-making process it is easy to forget that the process of examining alternatives, consequences and goals is the decision-making process.

VOCABULARY: Decision Tree, Positive, Negative

STRATEGIES:

Opening the Lesson

STEP 1 Review the concept of a political decision as a choice about group rules, resources, or goals, which includes alternatives and possible consequences. Ask how many students notice that they make decisions if they climb a tree or wall. Do they plan their attack by looking over the obstacle for alternative routes? Do they see the consequences of a weak branch or sharp point? Inform them that they are going to use their ability to see alternatives and consequences that grow out of an occasion for a decision - they are going to help Sir Lottalance make a decision about fighting Dingbat the Dragon.

STEP 2 Cover the transparency "Sir Lottalance and the Dragon" with paper so that it will not project when you turn on the lamp in the overhead projector. This transparency is to be uncovered by the paper a step at a time so that students may discover their familiarity with the parts of a decision tree through successful climbing. Advise the students they are to put themselves in the place of the knight, Sir Lottalance.

Sir Lottalance was riding along, minding his own business, when he came upon some townspeople. The people were sad. They were sad because the terrible dragon, Dingbat the Dimwitted, had lumbered out of his cave and carried off the princess from the king's castle. The king had
offered a huge reward for anyone who could destroy the dragon. The first knight to try had been barbequed by Dingbat's breath. The second knight to try had tripped over his own sword and become dragon dessert. Sir Lottalance could hear the princess beating her fists against the dragon and calling him nasty names. He could hear Dingbat's tummy rumbling as the dragon waited for another tasty meal of fried knight. Sir Lottalance was the fastest knight around. What could he do?

STEP 3 Raise the paper on the transparency so that the sign "Occasion for Decision" portraying Dingbat the Dragon and the trunk of the tree is exposed to view. Advise the students that in order to climb the tree they will have to think of Sir Lottalance's alternatives. Ask them for alternatives. When they have described fighting or fleeing, raise the paper to expose the alternative branches on the tree and congratulate them for doing such a good job of climbing a decision tree.

STEP 4 Ask the students to climb higher into the branches of the tree to look at the consequences of Sir Lottalance's decision. Ask:

"What would be a good or positive consequence of getting out of town fast?"

"What would be a bad or negative consequence of getting out of town fast?"

When the students have suggested ideas corresponding to "stay alive" and "be called Lottalance the Sissy" fold the covering paper to expose the consequences of "getting out of here fast." Again, congratulate your students for a good job of climbing, and remind them they still have an alternative branch to explore.
Ask: "What would be a bad or negative consequence of fighting Dingbat the Dragon?"

"What would be some good or positive consequences of fighting Dingbat the Dragon?"

Unveil the total transparency and savor the student's sense of accomplishment. Then, weighing the consequences, place the class goal high on the top of your decision tree.

DEVELOPING THE LESSON

STEP 5

Ask if the students would like to try climbing another decision tree. Assuming class interest is somewhere between enthusiastic wall climbing and Rip VanWinkle apathy, use the "Decision Tree, Staying After School" example. This may be shown via overhead projector or the tree with empty signs may be traced on the chalkboard so you may fill spaces in as you climb. If you use the transparency, cover it with paper and expose the picture after completing each step, as you did with Sir Lottalance. Advise your students they are to put themselves in the place of the student in the story "Staying after School."

They may imagine the student is themselves, as the object of the exercise is to familiarize students with the parts of the decision tree so they can climb to the top in their own decisions.

You are very interested in getting home from school on time. Your club or troop is going on a trip which you have been looking forward to for weeks. Today the health department is giving hearing tests to everyone. The whole class looks like jet pilots with
Lessons 9

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They may imagine the student is themselves, as the object of the exercise is to familiarize students with the parts of the decision tree so they can climb to the top in their own decisions.

You are very interested in getting home from school on time. Your club or troop is going on a trip which you have been looking forward to for weeks. Today the health department is giving hearing tests to everyone. The whole class looks like jet pilots with
their earphones on. The health people have warned that there must be absolute quiet. If the class is disturbed, everyone will have to stay after school to finish the hearing test properly.

You look up. One seat ahead in the next aisle is Weird Wembley. Weird Wembley is about to disturb the class! Weird Wembley is a terrible decision maker. He acts first and is always surprised by the consequences. What can you do - you don't want to miss the trip!

STEP 6

Raise the paper on the transparency so the occasion for decision sign is exposed, or fill it in if using the chalkboard. Ask the students what alternatives could be used to climb the tree. Elicit the three illustrated or more if you prefer. Three are used on the transparency to avoid oversimplifying decision making and to help students think in terms of several alternatives.

STEP 7

Ask the students to climb higher into the branches of the tree to look at the consequences of the students' alternatives. Ask:

"What would be a good or positive consequence of telling the teacher on Weird Wembley?"

"What would be a bad or negative consequence of telling the teacher?"

"What would be the consequences of doing nothing?"

"What would be a negative consequence of stopping Weird Wembley?"

"What would be a positive consequence of stopping Weird Wembley?"

Weigh the consequences, and place the class goal high in the tree.
CONCLUDING THE LESSON

STEP 8  The following exercise may be an individual or small group exercise, at the discretion of the teacher. The objective is to have students use a decision tree to illustrate political decisions they may face, such as:

- Deciding what to do with friends one afternoon
- Deciding who to invite to a birthday party
- Deciding to join (or quit) Scouts or a club
- Deciding where to go on a field trip
- Deciding what to do if your friends don't like each other
- Deciding rules for a game with few players
- Deciding who gets to play with what equipment or toys
- Deciding how to raise money for a group
- Deciding who's team captain
- Deciding who gets to play

Reproductions of the empty decision tree may be passed out. Students may then:

1. Decide what question to decide on and label it at the base of the tree

2. Abbreviate their decision in the "Occasion for Decision" sign. "Deciding what to do with friends on an afternoon" in the "Occasion for Decision" space.

3. Think up alternatives and box them in on the branches of the decision tree.

4. Discuss positive and negative consequences of each alternative, one at a time.

5. Write in their consequences, weigh them, and write in their goal.

6. Congratulate themselves as successful decision makers - offer their services to the administration.

Trees should be compared to enhance students' awareness of political decisions in their environment.
Can your students find any evidence they valued a person's right to pursue happiness as they climbed a decision tree?

INSTRUCTIONAL OPTIONS:

- Flannel board or construction paper decision trees may be produced for display.
- Class members may produce cardboard decision trees which can be cut apart as puzzles. Students can recreate the decision process in putting together each others' puzzles.
- Creative writing may be based on decision trees such as "Sir Lottalance and the Dragon," "Peter Pottsenhopper and the Pirate," "Betsy Bingo and the Three Bears," etc.
- Students may make decision trees on transparencies and lead the class in climbing them by uncovering them with paper—or do the same thing using the chalkboard.

Reading and Literature Correlation:

Many stories in the children's readers concern characters facing a series of political decisions, with each decision's consequences setting the stage for another occasion for decision. These stories could be used to practice reading aloud, recognizing occasions for decision, generating alternatives and predicting consequences.

Students could read aloud parts of a story while other students listen, so faster readers would not "sneak preview" consequences. Each time an occasion for decision is reached, the students or teacher could instruct the reader to stop. At this point, the occasion for decision should be written on the board, and students should suggest the two or three best or most likely alternatives, and the positive and negative consequences for each alternative. Then, students should label the decision as political or non-political and vote for the alternative they believe will be chosen. Reading should then proceed and the alternative which is chosen should be marked; consequences might be marked as T (true), F (false), U (unknown), or S (surprise). In many cases, the surprise consequence will be the occasion for a new decision, and then a new tree should be started as an offshoot of the previous decision.
(Illustrative of decisions arising out of a conflict situation. Miguel, told by his father that he cannot help in a search for missing sheep, goes off to school only to be tempted before he goes inside to look for the sheep. He decides to do so alone. He finally finds the sheep. His grandfather is proud and happy that Miguel has found the sheep. His father is angry because Miguel disobeyed his command. When he discovers that Miguel found the sheep he is not quite as angry, but admonishes Miguel that he cannot skip school and he must do his homework for tomorrow. He gives Miguel a spank. Miguel realizes he has done both good and bad and because of it he must suffer the consequences.)

(Students can note occasions for decisions, discuss alternatives and consequences, then read ahead to see which alternative is chosen.)

(Students can note occasions for decisions, discuss alternatives and consequences, then read ahead to see which alternative is chosen.)
CONSEQUENCES
1. BE FAMOUS
2. BE RICH
3. EAT DRAGON STEAK
4. MARRY PRINCESS
1. BECOME A DRAGON DINNER

POSITIVE
1. STAY ALIVE

NEGATIVE
1. BE CALLED LOTTALANCE THE SISsy

ALTERNATIVES
FIGHT
GET OUT OF HERE FAST

OCCASION FOR DECISION
DINGBAT THE DRAGON

GOAL

DECISION TREE
SIR LOTTALANCE AND THE DRAGON
GOAL

CONSEQUENCES

POSITIVE

NEGATIVE

ALTERNATIVES

OCCASION-FOR-DECISION

DECISION TREE
Decision Tree

Staying After School

Goal

Consequences

Stay After School with Friends

Leave on Time

Leave on Time

Stay After School, Miss the Trip

Be Called Tattletale

Risk Staying After

Alternatives

Do Nothing

Tell the Teacher

Stop the Student

Occasion for Decision

Hearing Test

Positive

Negative

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## Comparisons of Contemporary Evaluation Models on Selected Characteristics

<table>
<thead>
<tr>
<th></th>
<th>STAKE</th>
<th>SCRIVEN</th>
<th>PROVUS</th>
<th>HAMMOND</th>
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<tbody>
<tr>
<td><strong>Purpose</strong></td>
<td>To describe and judge educational programs based on a formal inquiry process.</td>
<td>To establish &amp; justify merit or worth. Evaluation plays many roles.</td>
<td>To determine whether to improve, maintain, or terminate a program.</td>
<td>To find out whether innovation is effective in achieving expressed objectives.</td>
</tr>
<tr>
<td><strong>Key Emphasis</strong></td>
<td>Collection of descriptive &amp; judgmental data from various audiences.</td>
<td>Justification of data gathering instruments, weightings, &amp; selection of goals, Eval. model: combining data on different performance scales into a single rating.</td>
<td>Identifying discrepancies between standards &amp; performance using team approach.</td>
<td>Local program development.</td>
</tr>
<tr>
<td><strong>Role of Evaluator</strong></td>
<td>Specialist concerned with collecting, processing, &amp; interpreting descriptive &amp; judgmental data.</td>
<td>Responsible for judging the merit of an educational practice for producers (formative) &amp; consumers (summative).</td>
<td>A team member who aids program improvement &amp; counsels administration. He should be independent of the program unit.</td>
<td>Consultant who should provide expertise in data collection. He is also a trainer of local evaluators (program personnel).</td>
</tr>
<tr>
<td><strong>Relationship to Objectives</strong></td>
<td>Examination of goal specifications &amp; priorities. Identification of areas of failures &amp; successes. It is up to the evaluator to assist in writing behavioral objectives.</td>
<td>Look at goals &amp; judge their worth. Determine whether they are being met.</td>
<td>Agreement of the evaluation team &amp; program staff on standards. Comparison of performance against standards to see whether a discrepancy exists.</td>
<td>Evaluation focuses on the definition &amp; measurement of behavioral objectives.</td>
</tr>
<tr>
<td><strong>Relationship to Decision-Making</strong></td>
<td>Descriptive &amp; judgmental data results in reports (including recommendations) to various audiences. Judgments may be based on either absolute or relative standards.</td>
<td>Evaluation reports (with judgments explicitly stated for producers or consumers) used in decision-making.</td>
<td>Evaluation staff collects information essential to program improvement &amp; notes discrepancies between performance &amp; standards. Every question in all criteria (C), new information (II), &amp; a decision (D). Eval provides new information.</td>
<td>Evaluation is the source on which to base decisions about instructional, institutional, &amp; behavioral dimensions.</td>
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<tr>
<td>(2) Input.</td>
<td>(2) Program planning.</td>
<td>(2) Visitation.</td>
<td></td>
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<tr>
<td>(3) Process.</td>
<td>(3) Program implementation.</td>
<td>(3) Annual reports.</td>
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| (1) Context eval. for planning decisions. | Evaluation of educational systems vs. evaluation of instructional programs. Five areas of evaluation. | Use of content specialists as judges. | |
| (2) Input eval. for programming decisions. | Information provided to decision-maker should be effective & not confusing or misleading. Appropriate evaluation procedures should be used for different decisions. | (1) Reflects interests of program administrators. | (1) Statements of objectives in behavioral terms. |
| (3) Process eval. for implementing decisions. | (2) Standard criteria often used. | (2) Objectives should contain references not only to course content but also to mental processes applied. | (1) Behavioral objectives clearly stated. |
| (4) Product eval. for recycling decisions. | (3) Objectives must consider: pupil's entry behavior, analysis of our culture, school philosophy, learning theories, new developments in teaching, etc. | (3) Objectives should contain references. | |

| (1) Internal validity. | (4) Reliability. | (1) Reflects interests of program administrators. | |
| (2) External validity. | (5) Objectivity. | (2) Standard criteria often used. | |
| (3) Relevance. | (6) Importance. | | |
| (7) Scope. | (8) Credibility. | | |
| (9) Timeliness. | (10) Timeliness. | | |

| (1) Experimental design not applicable. | Evaluation domain determined by the decision-maker; the object of evaluation varies according to context from distal, definable objects to complex systems. | (1) Involvement of professional community. | (1) Need to interpret & use results of assessment. |
| (2) Use of systems approach for evaluation studies. | (2) Quick feedback. | (2) Develop designs to assess student progress. | |
| (3) Directed by administrator. | | | |
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<tr>
<td>Defining, obtaining, &amp; using information for decision-making.</td>
<td>The process of identifying the decision areas of concern, selecting appropriate information, &amp; collecting &amp; analyzing information.</td>
<td>Focusing attention on processes of education using professional judgment. Development of standards for educational programs.</td>
<td>Comparing student performance with behaviorally stated objectives.</td>
</tr>
<tr>
<td>To provide relevant information to decision-makers.</td>
<td>To report summary data useful to decision-makers in selecting or, for alternatives.</td>
<td>To identify deficiencies in the education of teachers &amp; students relevant to content &amp; procedures; self-improvement.</td>
<td>To determine the extent to which purposes of a learning activity are actually being realized.</td>
</tr>
<tr>
<td>Specialist who provides evaluation information to decision-makers.</td>
<td>Specialist who provides evaluation information to decision-makers.</td>
<td>Professional colleagues who make recommendations to a professional judge.</td>
<td>Curriculum specialist who evaluates as part of curriculum development &amp; assessment.</td>
</tr>
<tr>
<td>Terminal stage in context eval. is setting objectives; input eval. produces ways to reach objectives; product eval. determines whether objectives are reached.</td>
<td>Range &amp; specificity of program objectives determined in systems assessment; program planning produces ways to reach objectives; program improvement provides data on the extent to which objectives are being achieved; program certification determines whether objectives are reached.</td>
<td>Self study judgments are based on sets of predetermined criteria.</td>
<td>Evaluation implies attainment of behavioral objectives stated at the beginning of the course.</td>
</tr>
<tr>
<td>Evaluation provides information for use in decision-making.</td>
<td>Evaluation provides information for use in decision-making.</td>
<td>When deficiencies are found, program revisions are requested, thus correcting substandard conditions; corrective process built in.</td>
<td>Actual pupil performance data will provide information for the decision-maker to use in strengths &amp; weaknesses of a course or curriculum.</td>
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<tr>
<td><strong>CONTRIBUTIONS</strong></td>
<td>(1) Provides a systematic method for arranging descriptive &amp; judgmental data, thus emphasizing inter- &amp; intrarelations between them.</td>
<td>(1) Discriminates between formative (ongoing) &amp; summative (end) evaluation.</td>
<td>(1) Provides continuous communication between program &amp; evaluation staff through feedback loops.</td>
<td>(1) Makes use of local personnel who can carry on evaluation process once initiated.</td>
</tr>
<tr>
<td></td>
<td>(2) Considers both absolute &amp; relative judgments.</td>
<td>(2) Focus on direct assessment of worth, focus on value.</td>
<td>(2) Allows for program improvement as well as assessment after all early stages at end.</td>
<td>(2) Considers interaction of several dimensions &amp; variables.</td>
</tr>
<tr>
<td></td>
<td>(3) Requires explicit standards.</td>
<td>(3) Applicable in diverse contexts.</td>
<td>(3) Acknowledges alternative procedures in adjusting objectives &amp; in changing treatment.</td>
<td>(3) Provides feedback on program development &amp; revisions: stresses self-evaluation.</td>
</tr>
<tr>
<td><strong>LIMITATIONS</strong></td>
<td>(1) Inadequate methodology for obtaining information on key constructs.</td>
<td>(1) Equating performance on different criteria results in sometimes overlapping concepts.</td>
<td>(1) Demands a lengthy time commitment; may be expensive to carry through.</td>
<td>(1) Difficulty of quantifying data involving several dimensions &amp; variables.</td>
</tr>
<tr>
<td></td>
<td>(2) Some cells of design matrix overlap; some distinctions not clear.</td>
<td></td>
<td>(2) Inadequate methodology for establishing standards.</td>
<td>(2) May be complex &amp; time-consuming to set up.</td>
</tr>
<tr>
<td></td>
<td>(3) Possibility of leading to internal strife within program; value conflicts possible.</td>
<td>(3) No methodology for assessing validity of judgments.</td>
<td>(3) Requires large, expert, well-organized staff.</td>
<td>(3) Possible fixation of evaluation on the &quot;cube.&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3) Several overlapping concepts.</td>
<td>(4) Designed for complete evaluation; partial evaluation not considered.</td>
<td>(4) Neglects judgmental dimension.</td>
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<td></td>
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<td>(5) Motivation problem in local personnel.</td>
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<tr>
<td>(1) Provides a service function by supplying data to administrators &amp; decision-makers charged with conduct of the program. (2) Is sensitive to feedback. (3) Allows for evaluation to take place at any stage of the program. (4) Holistic.</td>
<td>(1) Provides a service function to administrators &amp; decision-makers. (2) Allows for evaluation to take place at any stage of the program. (3) Holistic.</td>
<td>(1) Is easy to implement; team can observe &amp; make judgment. (2) Has little lag time between observations made, data collected, &amp; feedback. (3) Breadth of variables noted is large. (4) Leads to self-study habit &amp; self-improvement.</td>
<td>(1) Is easy to decide whether behavioral objectives are being achieved. (2) Is easy for practitioners to design evaluative studies. (3) Checks degree of congruency between performance &amp; objectives; focus on clear definition of objectives.</td>
</tr>
<tr>
<td>(1) Little emphasis on value concerns. (2) Decision-making process is unclear; methodology undefined. (3) May be costly &amp; complex if used entirely. (4) Not all activities are clearly evaluative.</td>
<td>(1) Role of values in evaluation unclear. (2) Description of decision-making process incomplete. (3) May be costly &amp; complex. (4) Not all activities are clearly evaluative.</td>
<td>(1) Objectivity &amp; empirical basis are questionable. (2) Attention to process of education not balanced by attention to consequences. (3) Replicability is questionable.</td>
<td>(1) Tendency to oversimplify program &amp; focus on terminal rather than ongoing &amp; pre-program information. (2) Tendency to focus directly &amp; narrowly on objectives, with little attention to worth of the objectives.</td>
</tr>
</tbody>
</table>
BIBLIOGRAPHY

A. PRIMARY SOURCES

1. Books


2. Articles


3. Unpublished Materials


B. SELECTED REFERENCES

1. Books


2. Articles and Papers


