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A PROCESS MODEL FOR CURRICULUM THEORIZING.

THE UNIVERSITY OF NORTH CAROLINA AT
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A PROCESS MODEL FOR CURRICULUM THEORIZING

by

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APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of the Graduate School at the University of North Carolina at Greensboro.

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The investigator has created and explained a process
oriented conceptual model for curriculum theorizing as one
alternative to technical, behavioral models currently in use
exemplified by the work of theorists, such as Ralph Tyler.
The investigator's model draws from the fields of anthro-
pology, communication theory, curriculum theory and general
semantics as they exhibit a process orientation. The model
has been created through the development of axiological,
ontological and epistemological groundings which are process
oriented. The model is bounded by the school setting and
includes the following variables: process orientation,
learners, teachers, human knowledge and human interactions
within the school. Basic assumptions include first, to be
interested in curriculum theory is to be primarily concerned
about the lived-in experience of persons in school settings;
second, to be interested in curriculum theory is to be
concerned above all else about learners as unique and valued
individuals; and third, all curriculum statements are value
laden. The model has been evaluated in part through the use
of questionnaires given to the investigator's undergraduate
students including one utilizing McQuail's questions for
analyzing a communication model. The questions are: Is the
process one directional or interactional? Is the process
open or closed? Are meanings fixed or transacted? Is the

process seen from the perspective of the sender or receiver? Is the process purposive or non-purposive? Is the process system linked or system free? The model can be further tested through participant observation techniques as developed by Severyn Bruyn.

DEDICATION

To Karl and Melanie

ACKNOWLEDGEMENTS

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CHAPTER I

INTRODUCTION

This dissertation will focus on creating and explicating a model for curriculum theorizing which is process oriented, not to be presented as the one model for curriculum theorizing, but rather as an alternative, idea generating model. Terms in the dissertation title, A Process Model For Curriculum Theorizing, are defined in the course of the first chapter. Each term in the title has been specifically and deliberately chosen by the writer. Methodology for this study is also found within Chapter One. Chapter Two has a review of the literature pertinent to concepts in the model, and the model itself is presented in Chapter Three. Evaluation and implications of the model are presented in Chapter Four.

Justification For The Study

The need for a study of this kind has been demonstrated by an emerging interest in modeling by those in curriculum theory. Information theory was an early source of modeling in curriculum theory as was systems theory (Ryans, 1956; Macdonald, 1966). The "Humanistic-Existential Personal Model" of James Macdonald, Bernice Wolfson and Esther Zaret

was a recent, highly original contribution to the literature of the field (Macdonald, Wolfson & Zaret, 1974). Bruce Joyce and Marsha Weil have devoted a book to modeling in education wherein they describe some basic models in use now, call for the creation of new models, and discuss the significance of modeling in education. "In the real world of education there are real decisions to be made among models which really differ from one another. By the models we choose, reality is created for our students " (Joyce & Weil, 1972, 19). Persons in many fields have written about the value of modeling for conceptualizing.*

Macdonald has cited John Dewey's statement about the significance of educational philosophy as the core of all philosophy being, "the study of how to have a world " (Macdonald, 1975b, 12) and Macdonald has elaborated, "Curriculum theory in this light might be said to be the essence of educational theory because it is the study of how to have a learning environment " (Macdonald, 1975b, 12). Curriculum theorizing which draws on a variety of fields should prepare educators to create a richer, more liberating learning environment. This model takes insights from the fields of education, anthropology, communications theory and general semantics as they define and utilize a process orientation in their investigations.

*See for example Bross, 1953, 161-182; Baudhuin, 1974, 415-424; Whorf, 1956, 57-64; Meredith, 1970, 297-304.

The basic concerns inherent in this writer's work derive from several assumptions which are the grounding for the model. The first assumption is that to be interested in curriculum theory is to be concerned about the lived-in world of persons in school settings, even if one is reluctant to make pronouncements about what should be done in a given school next Tuesday at 9:45 A.M. The second assumption is that to be interested in curriculum theory is to be concerned, above all, about persons as unique and valued individuals. Primary emphasis must be on persons, on students and teachers, rather than on arbitrarily predetermined outcomes or curricular materials. The third assumption is that all curriculum statements are value-laden because the curriculum theorist is a world shaper. Curriculum theorizing is a serious business to be playfully, artfully approached by persons who create holistically. Rather than taking place in a vacuum, curriculum theorizing, design and implementation are strongly influenced by cultural factors. Therefore, the common practice of calling such work value free, neutral, and objective is an unfortunate one because it tends to lock educators into the status quo, avoiding critical examination of that status quo. Macdonald's re-occuring question, "In whose interest?"

is a necessary corrective for it helps in locating the source of values operating in the school setting.*

The tendency in curriculum theory and design has been to consciously or unconsciously adopt a deterministic way of considering and manipulating students and teachers. Much has been borrowed from behavioral psychology and efficiency studies in industry with learning considered in terms of products rather than processes. For example, B. F. Skinner saw little need to observe the rats in his boxes but focused instead on the rats' final behavior-- the pressing of the lever. Much the same kind of thinking prevails in our public schools where the implicit mode of operation is to cover material. Learning, therefore, is often thought of as a product, discrete and fixed, after certain specified objectives have been attained. Taken for granted is the notion that goals and objectives can be determined before learning activities are experienced. However, now some theorists in education and in other fields are suggesting that purposes and objectives can never be clear cut and known in a worthwhile sense before the learning activities are experienced.** Emphasis on a process

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*This question is an important, largely neglected one. Some theorists take for granted limitations on curriculum which should not be found in a democratic society. "Some knowledge and skills, though teachable and very much a part of the culture, are not available for curriculum, since they are kept secret by families, craft groups, corporations, or governments." (Johnson, 1967, 132)

**See for example Huebner, 1975a, b and March, 1977.

orientation in this dissertation will be an alternative way
of examining school settings and expectations about learning.

Definition of Terms

As stated earlier, the terms in the title of this dis-
sertation have been deliberately chosen as the writer has
worked through her model construction. The terms will be
defined in this order: curriculum theorizing as process
and curriculum theorizing as model building. Borrowing
from Israel Scheffler's definitional framework, the defini-
tions in this dissertation are intended to be stipulative
and programmatic. "The interest of stipulative definitions
is communicatory . . . offered in the hope of facilitating
discourse. . . . The interest of programmatic definitions
is moral, that is, they are intended to embody programs
of action " (Scheffler, 1960, 22).

Curriculum Theorizing as Process

A process orientation regarding curriculum theory en-
visions occurences and relationships as dynamic, ever
evolving, infinitely complex and multi-dimensional. The
number of variables is virtually infinite and all are inter-
related, mutually affected. Therefore the richness of every-
thing which is happening is impossible to fully comprehend
or capture. A process orientation is disharmonious with a
concept of clear cut beginnings and endings and with static,
set goals and objectives. "Things" do not exist; processes

evolve. The English language has not been helpful in this regard, for it tends to influence the users' thinking toward solid rather than process orientations. This language bias will be examined more fully in Chapter Three as a backdrop for the model.

The meaning of the term process in this dissertation derives from a grounding in process philosophy. It differs therefore substantially from J. Cecil Parker and Louis Rubin's concept of "process as content " (Parker & Rubin, 1966). They have defined process as:

> All the random, or ordered, operations which can be associated with knowledge and with human activities. There are a variety of processes through which knowledge is created. There are also processes for utilizing knowledge and for communicating it. Processes are involved in arriving at decisions, in evaluating consequences, and in accomodating new insights. (Parker & Rubin, 1966, 2)

Their models are designed in terms of "methods of thinking" and in terms of specific "intellectual procedures" (Rubin & Parker, 1966, 22) the student uses to learn a particular discipline. Some of the processes given in their three models are "formulating questions, analyzing the material, creating operational devices, summarizing, classifying and performing " (Rubin & Parker, 1966, 55-63). Rubin and Parker's emphasis on "the utilization of the evidence gathered from a penetrating study of people doing things, as they go about the business of life, in reordering the curriculum " (Rubin & Parker, 1966, 48) is noteworthy.

In this century scientific investigators have moved
from a Newtonian things and events orientation to an
Einsteinian world-in-process orientation. However, those
of us in education seem determined to cling to our 17th
century conceptions of reality. Much that passes for
learning in the schools is a mechanical and lifeless memori-
zation of "facts" which have no real meaning for the student.
The student and the curriculum are seen as two concrete,
very distinct entities. It is fruitful to look at the
thought of philosophers such as Whitehead on process orien-
tations, making analogies to education. Whitehead has said:

> The how an actual entity becomes constitutes what
> the actual entity is so that the two descriptions
> of an actual entity are not independent. Its
> "being" is constituted by its "becoming." This
> is the principle of process. Process is the be-
> coming of experiences. (Smith, 1970, 175)

This writer adapts the above statement for curriculum
theorizing in general and for this dissertation specifically
to read as follows:

> The curriculum whereby a student becomes educated
> constitutes what that student is so there is no
> clear cut distinction between the student and
> what he or she is experiencing in the school
> setting. The student's "being" is constituted
> by his or her "becoming." This is a principle
> of curriculum theorizing as process. Curricu-
> lum is the becoming of school experiences.

Virgil Herrick supports a common view of education by
stating that every learning situation must include a
learner, a purpose, a content and process (Herrick, 1950,
38). In this dissertation the investigator shall examine

whether those concepts are as separate and legitimate as he and others present them. This inquirer believes it would be more rewarding to speculate about the school experience in terms of evolving curriculum rather than what tends to become static content passively absorbed. Furthermore, the writer asserts it is not integrative to talk in terms of learners in isolation from a holistic view of them as entire persons. Dewey has spoken to this by enjoining us: "Abandon the notion of subject matter as something fixed and ready made in itself, outside the child's experience; cease thinking of the child's experience as also something hard and fast; see it as something fluent, embryonic, vital; and we realize that the child and the curriculum are simply two limits which define a single process " (Archambault, 1964, 345). McLuhan's "The medium is the message," could be extended to say, "The process is the content." McQuail's questions for looking at communication process questions serve as guidelines for our examination of a process model for curriculum theorizing:

1. Is the process one directional or interactional?
2. Is the process open or closed?
3. Are meanings fixed or "transacted"?
4. Is the process seen from the perspective of the sender or receiver?
5. Is the process purposive or non-purposive?
6. Is the process system linked or system free? (McQuail, 1975, 28-30)

These questions will be considered later in evaluating the model in this dissertation.

Curriculum Theorizing as Model Building

This section will briefly discuss modeling in general and modeling in this dissertation. A model is a symbolic device for abstracting and categorizing important aspects of the process under investigation. A model has organizational, heuristic and predictive functions. Social justification is required for the model's existence and it must be able to stand up to evaluation. Model development can be verbal, graphic and iconic. There is no such thing as the one model true for all time and for all contingencies. Modeling helps persons to organize their perceptions. Marc Belth has discussed the inevitability of human modeling:

> We use models before we even know we have them.
> Within some model the events we see are symbolized.
> . . . Without some model the world of things
> would, undoubtedly, exist and would be sensed in
> some way, but it would have no meaning. . . . For
> it is some model that gives to the world qualities
> it does not otherwise have, certainly that could
> never be discerned. Nor is this a dissolution
> into total subjectivity, because the models
> themselves are public in form, and are themselves
> examinable. . . . The only time that models of
> some kind are not in use are those occasions
> when no thinking occurs. (Belth, 1977, 59-60)

Belth makes distinctions among analogies, models and metaphors useful for the model builder:

> By means of a model we examine, in its totality,
> an event that is otherwise not examinable. By
> means of analogy we cross sorts of things with
> one another within the model, so that unfamiliar
> elements are treated in terms of the more
> familiar or the more readily accessible. And
> by means of a metaphor we transfer the specific
> traits of one event to another so that the
> analogical relationship can be made clear and
> apparent. (Belth, 1977, 7-8)

He makes a further distinction between hard and soft models
which is also valuable. He says that models in which actual
objects are being symbolized are hard or scientific models
and that those in which symbols depict conceptual matters
are soft models (Belth, 1977, 66). He observes that models
can be placed on a continuum regarding hardness and softness.
He notes, as have others,* that the scientist begins with
analogies and models all the time in experimentation and
that newer more inclusive models must continually challenge
others through their power to provide explanations (Belth,
1977, 195-196). It is erroneous to think a scientific model
is necessarily more valuable or true than a conceptual one.
Influence on the lives of people remains a major consideration
in judging the significance of a given model (Belth, 1977,
68). One should keep that thought in mind while turning
toward consideration of modeling in curriculum theorizing.

The model in this dissertation will not be an ameliora-
tive one. The kind of curriculum theorizing which says we
must do something, anything and fast, because the schools
are in such a sorry state, will be avoided for this leads
to piecemeal attempts at repair jobs instead of overall
careful reconceptualization. Herbert Kliebard discusses the
"production model" which has been dominant in curriculum
theory and design and suggests, "The task of the future is

*See for example Kuhn, 1962.

to develop alternative modes of thinking to the dominant production model of the last fifty years " (Kliebard, 1975, 48-49). Mauritz Johnson has spoken to this also. He has stated that theorizers have been more concerned with improvement than with insight and with platforms which propose policies rather than with theories which provide explanations (Johnson, 1967, 127-8). The model in this dissertation will be philosophic and interpretive. Moreover, it will be a model which persons can use to theorize broadly and to question current assumptions about school settings and the individuals in them. Further, the model will be influenced by the conception of Ian Ramsey and of John Mann on the necessity for positing a disclosure model as opposed to a picture model. The latter is evaluated in terms of its "static accuracy," the former by "its capacity to continue generating new propositions that reveal the phenomenon. . . . Where the picturing model closes the world, the disclosure model discloses, opens the world " (Mann, 1975b, 143-144). The source of the disclosure model is grounded in the model creator's personal knowledge of ethical reality and its findings "are not the result of operations upon data, but are rather the result of extensions, transformations, and deployments of intuitively held personal knowledge " (Mann, 1975b, 144). Moreover, a model which fails to disclose meanings and provide explanations has little value;

while disclosure modeling can be very individual, it is not

private.

James March enjoins the model creator to consider the

justice of her model, acknowledging that justice is never

fully attained but must be pursued. "In that pursuit we ac-

cept responsibility for social myths by which we live. . . .

Models are not neutral . . . . Independent of its truth

value, a model has a justice value " (March, 1977, 2).

Barbour notes that models aid in the evoking of attitudes,

the guidance of behavior, the interpretation of experience

and the organization of perception (Barbour, 1974, 16).

This writer acknowledges the importance of each of those

functions in her model creation and in her anticipation of

its applications. Barbour also makes a distinction between

myths and models, saying the models come from "reflection on

the living myths which communities transmit " (Barbour,

1974, 27). Of crucial importance to this writer in that

statement is the emphasis on the word "living." Models are

always with us but their liveliness must be scrutinized so

that the most vital models can be guides to human actions.

Barbour enjoins the model creator to take her model seriously

but not literally (Barbour, 1974, 38). This too must be done.

The investigator has worked in this study to create a just

model, a conceptual model from which meanings about the lives

of learners and teachers in the school experience can be ex-

plored. The model is verbal rather than graphic or iconic.

The model creator asserts that in the creation of the model and in her attempt to give life to the model in her own teaching she does accept responsibility for the social myths by which she lives and interacts with students.

Methodology

Successful model creation demands that the designer specify a value orientation from which the work has evolved, determine the boundaries of the model and the variables to be included in the model showing their relationships. The model must be subject to evaluation and must have usefulness to persons other than the creator. Macdonald's thoughts on the purposes of curriculum theorizing serve as a guide for methodology, "to develop and criticize conceptual schema in the hope that new ways of talking about curriculum, which may in the future be far more fruitful than present orientations, will be forthcoming " (Macdonald, 1975b, 6),

In this dissertation a method of investigation into curriculum theorizing will be used which considers curriculum theorizing as deliberate activity, as activity based on human interests and concerns, as inherently subjective and as intellectually playful. The writer asserts that curriculum theorizing must be seen as deliberate effort to create integrative knowledge. The writer assumes that persons who cannot discuss the models through which they operate in education have probably failed to carefully think through

what they are attempting to do and why. Since the writer
believes that those in education, above all others must be
concerned with human development and enhancement, she posits
that curriculum theorizing must have as its basic grounding
emphasis on the lived experience of the student, seen
holistically. Ralph Tyler's interest in the needs of the
learner as a source of objectives is faulty for such inter-
est basically identifies the needs so that they can be
manipulated through instruction pre-determined by the
teacher (Kliebard, 1975, 70-83).

In this dissertation the model creator seeks to explore
for herself and others a deductive model in which the es-
sential variables emerge from her existential, process
philosophic grounding. The essential variables are process
orientation, learners, teachers, human knowledge and human
interactions within the school. The model is bounded by
the school setting. However it is not confined to any grade
or age levels of schooling. Political factors operating in
the world beyond the school are acknowledged but are not an
integral part of the model since the designer has been con-
cerned primarily with the lived-in school experience of the
student. Alvin Gouldner has spoken to the question of
where problems for study come from:

> Much of any man's effort to know the social world
> around him is prompted by an effort, more or less
> disguised or deliberate to know things that are
> personally important to him . . . . Like it or

not, and know it or not, in confronting the
social world the theorist is also confronting
himself. (Gouldner, 1970, 41)

Belth explains:

The events of the world do not come to us self-
labeled. We give them labels, names, identities.
We note and define problems. . . . Nature, as
nature, in this conception has no problems.
(Belth, 1977, 14)

Humans do have problems, however, and seek to explore them.
This writer, concerned with the lived-in experience of per-
sons in school takes the school setting as the place to
give her concepts a "local habitation," in Belth's terms
(Belth, 1977, 40). Her methodology emerges from the assump-
tion that all human knowledge is derived from human con-
cerns and from human perceptions and that reality therefore
is constructed by humans attempting to explain the world to
themselves and to make a better world for themselves.
Peter Berger and Thomas Luckman's concept of "reification"
is useful to the person designing a model which questions the
usual lived-in world of the student and teacher:

Reification is the apprehension of human phenomena
as if they were things, that is, non-human or pos-
sibly suprahuman terms. Another way of saying this
is that reification is the apprehension of the
products of human activity as if they were some-
thing else than human products--such as facts of
nature, results of cosmic laws, or manifestations
of divine will. Reification implies that man is
capable of forgetting his own authorship of the
human world, and further, that the dialectic be-
tween man, the producer, and his products is lost
to consciousness. The reified world, is by
definition, a dehumanized world. . . . As soon as
an objective social world is established, the

possibility of reification is never far away. The objectivity of the social world means that it confronts man as something outside of himself. The decisive question is whether he still retains the awareness that, however objectivated, the social world was made by men--and, therefore, can be remade by them. In other words, reification can be described as an extreme step in the process of objectification, whereby the objectivated world loses its comprehensibility as a human enterprise and becomes fixated as a non-human, non-humanizable inert facticity. Typically, the real relationship between man and his world is reversed in consciousness. Man, the producer of a world, is apprehended as its product, and human activity as an epiphenomenon of non-human processes. Human beings are no longer understood as world-producing but as being, in their turn, products of "the nature of things." It must be emphasized that reification is a modality of consciousness, more precisely, a modality of man's objectification of the human world. Even while apprehending the world in reified terms, man continues to produce it. That is, man is capable paradoxically of producing a reality that denies him. (Berger & Luckman, 1966, 83-84)

This will not be an experimental dissertation verified empirically. It will not be an "objective" study. One can turn to realizations of the 20th century scientist for input concerning objective and subjective ways of knowing. Louis De Broglie has said:

When we set out to observe facts we soon find ourselves dealing with a Reality which is always infinitely complex and full of an infinity of shades, and on the other with our understanding, which forms concepts which are always more or less rigid and abstract. . . . Reality is too fluid and too rich to be contained in its entireity within the strict and abstract framework of our scientific ideas. (Matson, 1964, 154)

Weizsacker has pondered what it is that the researcher actually studies:

> We wanted to press on behind appearances to the
> things themselves in order to know them and to
> possess them; now it appears that precisely beyond
> our natural perceptual world the very concept of
> thing can be defined only in relation to the man
> to whom it appears or who himself makes it. . . .
> Contemporary physics compels the physicist to
> look upon himself as subject. . . . From the very
> start we are involved in the argument between
> nature and man in which science plays only a part,
> so that the common division of the world into
> subject and object, inner and outer world, body
> and soul, is no longer adequate and leads us
> into difficulties. (Matson, 1964, 144)

The ethnomethodologist explains, "Social theorists assume there
is a meaningful external world independent of social inter-
action. . . . Ethnomethodology investigates the interactional
work that sustains this assumption " (Mehan and Wood, 1975,
5). This researcher is also concerned with interactions as
she examines the "givens" that have dominated curriculum
theorizing partly as a consequence of domain assumptions
and of language. She is designing an alternative model
drawn from her philosophic grounding. Her modeling approach
is conscious, deliberate, artful and playful. Mann is help-
ful in his discussion of curriculum creation as art form:

> Technological talk cannot comprehend a curriculum
> as art. For technological talk is precisely talk
> about conditions, conditioning and the conditioned.
> It is talk locked into a means end, cause-effect
> structure which cannot be bent to describe cur-
> riculum as unconditioned immediacy. . . . To re-
> gard an object of art, or a curriculum-as-art as
> unconditioned is not to forget that it is con-
> ditioned, but merely to look at it and talk about
> it in its artfulness. And surely a curriculum,
> which cannot be art, can be artful to some degree,
> and can be considered not only in terms of how it
> conditions and is conditioned by man, but also in

terms of how it answers man's listening and
seeking. (Mann, 1975b, 136)

Alphonse Chapanis is helpful in his discussion of modeling

as intellectual play, "a grown-up sophisticated version of

a child's game, but a game nonetheless "* (Chapanis, 1961,

118). Edward Krug notes that professors do not value playful-

ness:

> To foster intellect as play will not require the
> neglect of intelligence for practical ends. . .
> the world of teacher education is loaded against
> it. Preoccupied with the turning out of teachers
> competent in the technology of their craft,
> educationists find little opportunity and show
> little inclination to apply the idea of their own
> work and to regard "education" as a study to be
> pursued, in part at least for its values as
> intellectual play. (Krug, 1966, 403-404)

Methodological assumptions which could have application

for the curriculum theorizer are taken from David Smith in

a process approach to communication theory:

> First, the quality of a finding does not rest in
> important measure on the objectivity of the pro-
> cedures used. Indeed objectivity becomes an empty
> concept. Stated positively information would be
> accepted on the basis of its richness of explana-
> tion. Second, the nature and limitations of the
> observer's perspective must always be stipulated
> along with his observations. . . . Third, a num-
> ber of differing explanations can be accepted
> simultaneously insofar as they derive from dif-
> fering perspectives. It is not necessary to
> attempt studies which will provide a final choice
> between competing theories. Fourth, inasmuch as
> the phenomena change, differing explanations from
> the same perspective may be held simultaneously
> when situations or contexts differ. Fifth, more
> complete explanations will be developed through
> attempting to employ more holistic perspectives

*See also Macdonald, Wolfson & Zaret, 1974, Appendix B; and
Brubaker, 1976, 65-66.

rather than by accumulating the results of indi-
vidual analytic studies. (Smith, 1972, 179)

Mann provides a caution as work on the dissertation begins:

A good conception should not be sacrificed or re-
duced in importance for lack of immediately avail-
able operational definition of variables. But the
language used should be as precise as possible and
as close to operationality as possible without such
sacrifice. Speculation should not be an excuse
for sloppiness, but the need ultimately to measure
should not be an excuse for avoiding explanation
of some of the more complex components of educa-
tional experience. (Mann, 1975a, 161)

CHAPTER II

REVIEW OF THE LITERATURE

This chapter will summarize a review of the literature pertinent to the dissertation with special attention given to the literature helpful in creation of the model. The first part of the chapter entitled "Perspectives," will indicate the kind of background reading and questions the investigator has pursued in order to become competent in the literature of curriculum theory. The rest of the chapter will be organized around sources used in establishing the philosophic bases of the model. The following headings used in Chapter III will serve as the other organizing headings of this chapter: Domain Assumptions, Language, Axiological Orientation, Ontological Orientation, Epistemological Orientation and Interaction in the Model.

Perspectives

Curriculum theorizing is a relatively new field in the area of curriculum. William Pinar has made a distinction among three kinds of curriculum theorists. The largest group, 60 to 80 percent, are traditionalists and their work is:

> characterized by the pragmatic, by the concrete
> ever-changing tasks of curriculum development,
> design, implementation, and evaluation. The
> bulk of this writing has one essential purpose;

it is intended as guidance for those who work
in the schools. (Pinar, 1975, xi)

A second and smaller group, 15 to 20 percent, are conceptual

empiricists who investigate "'phenomena' empirically with

an eye to the goal of prediction and control of behavior "

(Pinar, 1975, xii). The third and smallest group, 3 to 5

percent, are reconceptualists. The reconceptualists'

emphases:

> have not been observable and measurable behavior--
> as they tend to be for the conceptual empiricists--
> or the tasks of the practitioner--as they tend to
> be for the traditionalist. Rather, the recon-
> ceptualists tend to concern themselves with the
> internal and existential experience of the public
> world. . . . In brief, the reconceptualist
> attempts to understand the nature of the educational
> experience. (Pinar, 1975, xii-xiii)

The investigator has read widely in the classics of

curriculum literature, with a classic defined as "a work that

had a specific impact on the thinking of its time, or

functioned as a turning point document in curriculum theory

development, or endured as a widely used referent piece "

(Fraley, 1976, 1). The investigator's reading therefore has

taken her back to the writings of William T. Harris (1897

and 1898); Frederick Taylor (1911); and Franklin Bobbitt

(1912, 1918). Their work represents the beginnings of cur-

riculum study in this country with a strong focus on bor-

rowing terminology and ways of thinking from the world of

industry and applying these to education. The reading has

logically continued through progressive educators such as

Dewey (1915, 1933, 1938, 1944, 1965, Archambault, 1964); Counts (1932); and many others. All of the classics in curriculum theory cited by Fraley (1976) were among the works read. They are included in the bibliography at the end of this dissertation. The investigator has read books currently in use as curriculum texts such as Goodlad, von Stoephasius, and Klein (1966); and Saylor and Alexander (1974). She has read widely in the works of the reconceptualists whose literature is growing. This reading has included but not been limited to Pinar (1974, 1975) as an excellent starting point introducing one to the writings of Huebner, Mann, Macdonald, Kliebard, Apple and Shaw, among others. Wolfson (1966, 1968, 1977) and Molnar and Zahorik (1977) have also been among the most useful authors read.

The investigator conducted an ERIC search, consulted dissertation abstracts and read widely in journals such as Educational Leadership, The Journal of Teacher Education and Educational Theory.

William A. Jenkins has observed in reaction to a Huebner paper that "a task of no small size must be assumed by the curriculum leader. . . . The task does more than provide a challenge; it can overwhelm, engulf, enervate, and stupify " (Jenkins, 1966, 22). Jenkins questions whether the curriculum theorizer can have substantial knowledge in the fields of politics, economics, sociology, art, the humani-

ties, communications, group dynamics, history and anthropology. It is evident to this investigator that the reconceptualist curriculum theorists have expertise in varying fields, excluding no areas of human knowledge from their domain, welcoming into their small number persons from varied professional backgrounds. A glance at the personal biographical sketches in Curriculum Theorizing: The Reconceptualists quickly shows that the contributors to the volume came to their interest in curriculum theory from original professional interests as varied as theology, as music, as mathematics, as engineering, as philosophy, etc. (Pinar, 1975) So perhaps while one curriculum theorist cannot be a scholar of the humanities, the fine and applied arts, the physical and social sciences, etc., in the aggregate curriculum theorists can synergistically combine rich interests and diverse experiences to truly reconceptualize curriculum theorizing.

This investigator's explorations into reconceptualization through model creation have led her to read widely in the fields of American curriculum classics, communication theory, general semantics, and anthropology. The reader is asked to consult the bibliography at the end of the dissertation as an essential but necessarily partial guide to what the investigator has carefully read as background preparation for her model creation task. The investigator's reading pattern developed through interest in these questions which eventually came to be focused on model creation as the task

of the dissertation: Are most of us aware that persons with-
in the same society and among societies perceive their worlds
very differently? In whose interest is it for some to try
to convince others (blacks or women, for example) that the
reality of those in power in the status quo is everyone's
reality? How have language influences and unexamined as-
sumptions about reality tended to lock the larger society
and the schools into a status quo? If curriculum can be
thought of in terms of "influence over persons" (Mann, 1975b,
145) and curriculum theorizing can be thought of in terms of
"how to have a world," (Macdonald, 1975b, 12) how does the
lived-in experience of learners and teachers reflect the
larger American reality beyond the schools? In whose inter-
est is it to say that current modus operandi in the schools
and in curriculum are merely "givens" of American life? In
whose interest is it to assume that American curriculum is
neutral or value free? Should those who write materials for
students to use and those who spend their days in the class-
room with students specify the value orientations under which
they are operating? What of the administrators and the need
to examine their attitudes towards teachers and students?
If one wants to speculate about the kinds of questions asked
above, how does one do it? What is modeling? How can
modeling aid in thinking about the lived-in experience of
students and teachers? What kinds of models are there? How
does one create a model? How does one evaluate a model?

Domain Assumptions

The investigator's concentration on the lived-in experience of persons in school led her to speculate about why usual ways of operating in the schools and usual concepts about the nature of persons in the schools seem to be "givens," essentially taken for granted as "the way things are." Earlier her interest in feminism had led her to reading radical feminists and black revolutionary rhetoric. This first deeply implanted in her mind the notion that people create their social worlds and the worlds are created to some persons' advantage and to others' disadvantage. She read biographies of Malcolm X and his own works noting that persons typically wrote of him, "He was dealing, as he recognized himself, in symbolic action; he was attempting the liberation of black men by altering the terms in which they thought and the scale by which they measured themselves " (Goldman, 1973). And of black-white relations black persons were writing statements like this:

> It is necessary for us to develop a new frame of
> reference which transcends the limits of white
> concepts. . . . By and large, reality has been
> conceptualized in terms of the narrow point of
> view of the small minority of white men who live
> in Europe and North America. . . . We must say to
> the white world that there are things in the
> world that are not dreamt of in your history and
> your sociology and your philosophy. (Bennett,
> 1973, frontpiece)

This kind of reading led the investigator to ask these sorts of questions. How are the public and private worlds in

which humans live constructed? Who decides how persons in certain roles or of certain races, or of certain sex or certain age ranges should behave? Who decides on "the rules of the game" by which a given society operates and to whose advantage are the rules formulated? How much of what happens in schools between persons happens because persons have not thought of other possibilities? What have been the "givens" of schooling in America during this century? How can these "givens" be examined for possible reformulation? The investigator found Gouldner's The Coming Crisis of Western Sociology (1970) especially valuable as she began her reading and adopted his term, domain assumptions. Also useful were Berger and Luckman's The Social Construction of Reality (1966) and the work of the ethnomethologists Garfinkel (1967) and Mehan and Wood. (1975) The reconceptualists cited earlier in this review were helpful typified by sources such as Apple's "Commonsense Categories and Curriculum Thought (1975a). Curriculum classics previously cited were also valuable as were readings from anthropology such as Levi-Strauss's The Savage Mind (1966) and Burling's Man's Many Voices (1970) to list only two books. General semantics sources such as the writings of Korzybski (1948) and Hayakawa (1962, 1972) served as essential background reading as did Symbolic Interaction Theory in Communication Theory for

example Blumer's "Symbolic Interaction: An Approach to
Human Communication " (1972).

Language

  Speculation about taken for granted realities of the
school experience led the investigator to questions about
the frequently unseen influence of language in human af-
fairs, particularly in educational settings. She recalled
Franz Fanon musing about school children in the Antilles
reading in their books about "our ancestors, the Gauls "
(Fanon, 1967, 146) as well as feminist Mary Daley's dis-
cussion of "the power of naming " :

> We have not been free to use our power to name
> ourselves, the world or God. The old naming
> was not the product of dialogue--a fact inad-
> vertently admitted in the Genesis story of
> Adam's naming the animals and the woman.
> Women are now realizing that the universal imposing
> of names by men has been false because partial.
> That is, inadequate words have been taken as
> adequate. . . . To exist humanly is to name
> the self, the world, and God. . . . The libera-
> tion of language is rooted in the liberation of
> ourselves. (Daly, 1973, 9)

The investigator began to think of questions such as these:
What is unique about human language? How does our language
influence the way we think and the way we act toward each
other? How can persons remind themselves that the word and
the referent are different? Are words neutral? Do words
mean or do people mean? Do words on paper speak of reality
in a different manner from the way spoken words do? Do
people speaking different languages perceive reality

differently and label that reality differently? What of language used in the schooling experience? Does it need critical examination? To pursue these questions, the investigator did extensive reading in the fields of general semantics and anthropology. She drew from the work of Korzybski (1948), Bois (1957, 1975), Lee (1941), Hayakawa (1962, 1972), Whorf (1956) and Postman and Weingartner (1969) among many others and she surveyed all of the issues of <u>Etc</u>., the general semantics journal, published within the last ten years. From the field of anthropology she found Hall (1959, 1976); Goody and Watt (1972); Lee (1959); Levi-Strauss (1966); Burling (1970); and Tyler (1969) especially thought provoking. The reconceptionalists were drawn on extensively, particularly Huebner in articles such as "Curricular Language and Classroom Meanings" (1975a) and Apple in selections including "Commonsense Categories and Curriculum Thought" (1975a).

Axiological Orientation

To consider the question of the value base of her model, the investigator had to consider first whether all curriculum theorizing necessarily originates from an explicit or implicit axiological grounding and if so, what the axiological grounding of her model would be. She worked through these kinds of questions: Can the curriculum theorist's work be value free? Which is more authentic, to

seek future good for students, future-based rationale for what is being experienced now in the school setting or to value above all the present experience for itself? If one especially values the present, one must also speculate about how far the present extends and in what directions. Is there a past or a future independent of the present? Are events in time more connected or more discrete? Should educators prepare students to live their lives in anticipation of permanence or in anticipation of change? Do persons themselves change more over the course of their lifetimes or maintain more stability over the course of their lifetimes? What is the essential, crucial purpose of education? Questions such as these led the investigator to the reconceptualists cited above, especially to Macdonald (1975a, 1977) and also to Phenix's powerful "Transcendence and the Curriculum" (1975) and Huebner's "Curriculum as Concern for Man's Temporality" (1975b). Pepper's World Hypotheses (1970) was helpful in focusing the reading as were works such as Dunkel's Whitehead on Education (1965); Kaufmann's Existentialism from Dostoevsky to Sartre (1975); Mead's "The Present as the Locus of Reality" (1965); Whitehead's The Aims of Education (1967); Whorfs' Language, Thought, and Reality (1956) and a provocative classic, Thomas Hopkins' Interaction: The Democratic Process (1941).

Ontological Orientation

To sharply focus on persons in her model, the investigator had to define carefully for herself her conception of being. She pondered these questions: Is it more fruitful to speculate about persons in terms of being or in terms of becoming? Are persons more like verbs or more like nouns? Is it fruitful to try to determine in advance of an educational experience what a given student will "get out" of the experience? Should the terms "teacher" and "learner" be scrutinized regarding their connoted meanings, their possible oversimplifications? Are teachers frequently learners? Are learners frequently teachers? Does most learning take place in a school setting? Are persons best considered as separate from what they do or are they best defined by what they are doing? Questions of this type led the investigator through writings of Dewey, Whitehead, and many reconceptualists as cited earlier in this literature review. Philosophers of Process (Browning, 1965), including excerpts from the writings of Henri Bergson, Charles Sanders Peirce, William James, Samuel Alexander, C. Lloyd Morgan, John Dewey, George Herbert Mead and Alfred North Whitehead, was valuable. Also useful were Pragmatism in Education (Bayles, 1966) and Readings in Twentieth Century Philosophy (Alston & Nakhnikian, 1963). Especially valuable sources from anthropology included the works of Lee (1959) and Hall (1959, 1976) and from general semantics the writings of Korzybski (1948) and Marsh (1969).

Epistemological Orientation

The investigator was interested in the following kinds of questions as she began to speculate about the nature of human knowledge in the model creation task: What essential interests are reflected in search for human knowledge? Is human knowledge more like a commodity or a process? Is human knowledge more changing or unchanging in its nature? Is the acquisition of human knowledge a deliberate endeavor most of the time or not? Can human knowledge be best considered as segmented, separated into specific disciplines or not? Is it most helpful to consider the learner's intellect in human knowledge acquisition as of paramount importance or must his intellectual, physical and emotional capacities be all considered together, all the time? Are there some essential things which everyone must know? Does the meaning of the knowledge reside in the knowledge itself or in the knower? Can a person know more than he can tell? Does knowing the name mean that the person really knows significantly about that which has been named? Does a given language pre-dispose a person toward certain ways of thinking about human knowledge? To provide the conceptual framework for the part of her model concerned with knowledge, the investigator read widely in general works as well as in education sources. Among the general works read were The Conditions of Knowledge (Scheffler, 1965); What is Knowledge? (Pears, 1971); and Genetic Epistemology (Piaget,

1970); and <u>The Process of Thinking</u> (Belth, 1977). Books concerned with the idiosyncrasy of human knowledge were read including words from the fields of the physical and social sciences such as <u>The Structure of Scientific Revolutions</u> (Kuhn, 1962); <u>The Broken Image</u> (Matson, 1964); <u>The Social Construction of Reality</u> (Berger & Luckman, 1966); <u>Psychology as a Human Science: A Phenomenological Approach</u> (Giorgi, 1970); <u>Cognitive Anthropology</u> (Tyler, 1969); and <u>The Reality of Ethnomethodology</u> (Mehan & Wood, 1975). Works consulted in educational philosophy included those commonly read by graduate students, for example: <u>Patterns of Educational Philosophy</u> (Brameld, 1971) and <u>Philosophic Problems and Education</u> (Pai & Myers, 1967). Among the especially valuable works in process philosophy were <u>Philosophers of Process</u> (Browning, 1965) and <u>Whitehead on Education</u> (Dunkel, 1965). Freire's works (1971, 1973) were provocative exemplars of current curriculum theorizing in an actual educational setting. Among the helpful sources from the field of anthropology most directly related to education were "Attitude Organization in Elementary School Classrooms" (Henry, 1974) and <u>Freedom and Culture</u> (Lee, 1959); from the field of communication theory, "Perception and Communication: A Transactional View," (Toch & MacLean,

1967) and The Human Dialogue: Perspectives on Communication

(Matson & Montagu, 1967) and from general semantics "General

Semantics: A Neglected Method in Philosophy of Education"

(Winetrout & Pratte, 1973) and Teaching as a Subversive

Activity (Postman & Weingartner, 1969).

Interaction in the Model

To consider the dynamics of her model, the investigator

addressed herself to these kinds of questions regarding the

relationships between teachers and students in the working

of the model: How are settings, environments and persons

related? Should the model focus on the schooling experience

primarily or should it focus on the political and social

world beyond the school? Is it true that the more things

change in schools, the more they remain the same? Do

teachers tend to treat students the way they themselves are

treated by administrators? Are persons and institutions

necessarily in conflict regarding their aims? Are clear

cut distinctions between work and play necessary in students'

and teachers' lives? Can students provide a major part of

the input regarding their learning experiences at school?

Have interactions in the school setting been based on

borrowing from models in industry such as scientific manage-

ment or human relations models? To answer these questions

for the section of her model dealing with interactions in

the model, the investigator read Sarason's works concerned

with educational settings and roles within those settings such as The Culture of the School and the Problem of Change, The Creation of Settings and the Future Societies and Human Services and Resource Networks (1973, 1972, 1977). She also read Brubaker and Nelson's work on bureaucratic and professional models for governance and curriculum functions in school settings, including Introduction to Educational Decision Making (1972) and Creative Survival in Educational Bureaucracies (1974) as well as much of Brubaker's other recent work such as Creative Leadership in Elementary Schools (1976) and Secondary Social Studies for the 70's: Planning for Instruction (1973). The investigator found Sergiovanni's work tracing the impact of various organization theories on educational administration helpful. She has read "The Odyssey of Organizational Theory in Education: Implications for Humanizing Education" (1976) as well as the book Sergiovanni wrote with Starratt, Emerging Patterns of Supervision: Human Perspectives (1971). Wilson, Shapiro, et. al.'s Sociology of Supervision (1969) was valuable for a history of the emergence of supervision as a specialized function in America. Recent work of reconceptualists such as Apple and King's, "What Do Schools Teach," (1977) was also utilized as was Stratemeyer's classic Developing a Curriculum for Modern Living (1947).

CHAPTER III

THE CONCEPTUAL MODEL

Introduction

As discussed in Chapter One, a model is a symbolic device for abstracting and categorizing essential aspects of the process of interest. In this chapter the model will be described and explained. The model is concerned with the liberating of persons through education rather than rendering them more easily controlled through education. Taken for granted ways of seeing the world must undergo critical examination by any person hoping to create a novel theoretical model. Such a person does well to bear in mind the old truism that it was not the fish who discovered water. Therefore, this chapter begins with a section concerned with the power of taken for granted ways of seeing the world, herein called domain assumptions. Understandings about how the world really "is" used by groups of persons to order their world and to make sense out of it are intimately connected with the words used to create concepts and categories. Domain assumptions are reliant on and formulated in terms of language. Therefore, human language influences and variations are briefly discussed next in this chapter.

This writer believes that all human endeavors, including model creation, grow out of the doer's implicit or explicit philosophical orientation. Therefore the specific axiological, ontological and epistemological bases of the model are given. Indeed, the model is created through its philosophical orientation, made explicit. The last section of this chapter is concerned with interaction in the model, since persons learn and create their personal curriculum through their relationships with other persons.

Domain Assumptions and Language

The categories which groups of humans create to make sense out of their world are intimately connected with their language. Whorf has questioned:

> How does such a network of language, culture and
> behavior come about historically? Which was first:
> the language patterns or the cultural norms? In
> the main they have grown up together, constantly
> influencing each other. But in this partnership
> the nature of language is the factor that limits
> free plasticity and rigidifies channels of
> development in the more autocratic way. This is
> so because a language is a system, not just an
> assemblage of norms. Large systematic outlines
> can change to something really new only very
> slowly while many other cultural innovations are
> made with comparative quickness. Language thus
> represents the mass mind; it is affected by in-
> ventions and innovations, but affected little and
> slowly, whereas to inventors and innovators it
> legislates with the decree immediate. (Whorf,
> 1956, 156)

Wendell Johnson has explained:

> There is a basic scheme of classification built
> into our common speech and language. This built-
> in classification system directs us so that we

observe the things we can readily classify with
the names we know, while we tend strongly to
overlook or disregard everything else. We see with
our categories. (Postman and Weingartner, 1969,
127)

Domain Assumptions

This section of the model chapter will explore briefly
the concept of domain assumptions with some general illustra-
tions followed by some specific illustrations in education.
The next section will indicate the respect for the power and
relativity of human languages which can be gained by those
who take language differences seriously and who examine them
critically. The purpose of these sections is not to gener-
ate cynicism about the question of whether humans can know
about the world in a real sense. Varying domain assumptions
and language differences are seen as inherent in human
groups but needing constant scrutiny by the curriculum
theorist to evaluate their effectiveness in helping people
to live in their world and to change their world. Domain
assumptions and language differences are drawn on to indi-
cate that the curriculum theorizer adopting a process orien-
tation must be able to examine critically his or her own
domain assumptions. Also he or she must have an apprecia-
tion for the ways the English language and inappropriate
borrowing from certain professional languages have habitu-
ated certain thinking and acting patterns in the schools.

This model borrows the term "domain assumptions" from Alvin Gouldner, a sociologist, to indicate that a society's way of categorizing, organizing and explaining its reality tends to be both conventional and arbitrary, while seeming to be neither, to the participants (Gouldner, 1970). Many other terms could have been used. Persons who have investigated the idiosyncrasy of a group's reality have used many terms, such as "constitutive rules," "rules by which men live," "deep lying social constants," and "habits of thought,"* to conceptualize their ideas. Carroll Quigley speaks of a group's "system of categories and of valuations" or "cognitive system," calling these "the most important thing we can know about any society and the most difficult to learn " (Quigley, 1975, 22-3). Levi-Strauss speculates, "Men's conception of the relationship between nature and culture is a function of modification of their own social relations " (Levi-Strauss, 1962, 117). In current popular literature Robert Pirsig explores Poincare's "conventions " (Pirsig, 1974, 257). The domain assumptions which persons immersed in a given culture internalize consciously and unconsciously are significant for as Gouldner explains they:

> entail beliefs about what is real in the world and thus have implications about what it is possible

*See for example Apple, 1975, 128; Barton, 1950, 12 and Smith, 1950, 7.

> to do, to <u>change</u> in the world; the values they en-
> tail indicate what courses of action are desirable
> and thus shape conduct. (Gouldner, 1970, 47-8)

He elaborates that domain assumptions are always implicitly
present in theory construction and that it is much easier
for persons to accept theories which do not contradict their
habitual ways of seeing the world.

The general semanticist warns that the map is not the
territory. This statement can be extended to the idea that
just as maps vary among perceivers, so also does the nature
of the territories themselves. This investigator will
briefly indicate a few directions pursued especially by
anthropologists which could be elaborated and expanded by
others interested in the idiosyncrasy of human perception
and human domain assumptions. Two very basic concepts will
be discussed. The concepts are color and time. Color per-
ception and interpretation vary not only from one individual
to the next but also from one culture to the next. Claude
Levi-Strauss has discussed a particular classification of
colors not based on brightness and intensity but rather on
relative light and relative darkness with a further distinc-
tion regarding those colors appearing in succulent plants
and those appearing in dry plants. Thus a color appearing
shiny brown, quite akin to red to the anthropologist is
perceived by the native in one society as close to green
(Levi-Strauss, 1962, 55). Robbins Burling has reported that
the number of basic colors identified by a given group and

used by them varies, sometimes with distinctions only made between black and white (Burling, 1970, 48). Paul Henle discusses the Navaho making distinctions among what we call white, red and yellow but not distinguishing among what we would call gray, brown, blue and green. Henle notes of the Navaho, "They do not suffer from a peculiar form of color-blindness any more than we do since we lack words for the two sorts of black which they distinguish " (Henle, 1965, 8). Basic assumptions about time (and therefore about space, motion and position) differ depending on the thought pattern and language being used. Several investigators have been interested in the Hopi notion of "time" which is more operational, more world-in-process, than ours. Whorf has explained that the Hopi conceptualize "time" as "exhibition of dynamic effort in a certain process" (Whorf, 1956, 57) rather than as past, present or future. Expressions such as "while morning-phase is occuring" are used rather than "in the morning " (Whorf, 1956, 143). The expressions are not used as nouns. The Hopi see reality in terms of Events or as Whorf suggests, in terms of "Event-ing " (Whorf, 1956, 147). He elaborates, "Everything is thus already 'prepared' for the way it now manifests by earlier phases, and what it will be later, partly has been, and partly is in the act of being so 'prepared.' An em-phasis and importance rests on this preparing or being pre-pared aspect of the world that may to the Hopi correspond

to that 'quality of reality' that 'matter' or 'stuff' has
for us " (Whorf, 1956, 148). Whorf explains that Hopi
process thought patterns would be valuable to the scientist
in the twentieth century. "Hopi, with its preferences for
verbs, as contrasted to our own liking for nouns, per-
petually turns our propositions about things into proposi-
tions about events " (Whorf, 1956, 63). The Hopi do not
think in terms such as ten days, for ten days cannot be ex-
perienced. Only this day can be lived. Therefore they use
expressions such as "after the tenth day" instead (Whorf,
1956, 140). Whorf discusses what he calls Standard Average
European (SAE) "objectification of time " (Whorf, 1956, 140),
the tendency to think that time can be quantified, cut up into
segments. Edward Hall has discussed the Eskimo incredulity
that work should start and stop because of a shrill whistle
as contrasted with work in a rhythm based on the tides
(Hall, 1976, 17). Richard Marsh has examined Oriental con-
cepts of time as being less linear and more circular than
SAE time. He talks about the Oriental "next-time around
attitude" (Marsh, 1969, 113) which assumes a fullness in
time with opportunities evolving over centuries of endless
time rather than the notion that it's now or never.

By considering a few varying human conceptions of such
basic concepts as color and time, the curriculum theorist
can begin to ponder many domain assumptions automatically
carried over from the larger society to the school.

Domain assumptions operating in education should be closely examined by the curriculum theorist since these persons more than practitioners have the responsibility to ask the most basic questions out of which new theory can evolve. Behavioral approaches to curriculum are in fashion with such current forms as competency based education and accountability. Herbert Kliebard draws the curriculum theorist's attention to behaviorism enshrined as virtual canon law in education today (Kliebard, 1975, 64). The questions Ralph Tyler identified as basic in 1949 continue to dominate curriculum theory today. The questions are:

1. What educational purposes should the school seek to attain?

2. What educational experiences can be provided that are likely to attain these purposes?

3. How can these educational experiences be effectively organized?

4. How can we determine whether these purposes are being attained? (Tyler, 1949, 1)

Tyler has noted that objectives must be determined at the start for they "become the criteria by which materials are selected, content outlined, instructional procedures are developed, and tests and examinations are prepared " (Tyler, 1949, 3). In the introduction to a series of papers from a major curriculum theory conference, held in 1950, Virgil Herrick and Ralph Tyler have stated the place of objectives in education: "The crucial importance of educational objectives in curriculum development is almost an axiom "

(Tyler & Herrick, 1950, 2). To those attending the confer-
ence, they must have seemed to have been "givens," not to
be questioned. But in the same publication, which is en-
titled Toward Improved Curriculum Theory, George Barton
says, "The rules by which men live should become objects of
study and reconstruction " (Barton, 1950, 12). Alex Molnar
and John Zahorik observe in a 1977 Association for Super-
vision and Curriculum Development publication, Curriculum
Theory:

> The power and impact of the Tyler model cannot
> be overstated. Virtually every person who has ever
> been in a teacher education program has been intro-
> duced to this model. It has become synonymous
> with curriculum work at all levels. Teachers, cur-
> riculum committees, and curriculum theorists have
> perceived the asking and answering of Tyler's
> four questions as their main task.
>
> The pervasive Tyler model, then, embodies
> the "common sense" of our culture. The four de-
> cisions reflect the prevailing assumptions about
> people and how they should be in relation to one
> another. To stand outside of Tyler is to stand
> outside of the dominant assumptions of American
> culture. The rationale, however, does not allow
> for substantive changes in the status quo.
> (Molnar & Zahorik, 1977, 3)

Noam Chomsky has called behavioral approaches to the
acquisition of knowledge "a curious deviation from normal
scientific practice " (Chomsky, 1975, 75). He questions the
idea that general theories of learning exist. (Chomsky,
1975, 159) Many other psychologists such as Bruner do also
(Bruner, 1960, 1966).

Wolfson suggests study of factors making a difference in human interaction as a curriculum focus (Wolfson, 1966, 27). Apple discusses the operation of "latent assumptions" and habits of thought determining "taken-for-granted" reality saying they "set the boundaries of curricularists' imaginations and provide a fundamental framework for a large portion of the problematic activities of schooling " (Apple, 1975c, b, 115, 121). He writes of students now questioning "constitutive rules" and their "alienation from imposition of obligatory meaning structures " (Apple, 1975b, 128). He calls for examination of "accepted commonsense conceptions of competence," calling for examination of "the basic regularities of the institutional structure of schooling itself. The regularities themselves are the 'teaching devices' that communicate lasting norms and dispositions to students, that instruct children in 'how the world really is' " (Apple, 1975a, 141). He reminds educators that schools do not exist in a vacuum. Dwayne Huebner, who has discussed various value orientations behind the school experience, points out, "Narrow concerns for effectiveness, behavioral objectives, and principles of learning have hidden much broader problems of economic and technical policies pertaining to education " (Huebner, 1974, 47). Seymour Sarason's use of an outerspace man to consider behavioral and programmatic regularities of the typical school from a

fresh viewpoint could be useful (Sarason, 1971). One needs

to see the basic assumptions of the curriculum theorist

from unusual, foreign perspectives also.

Also it would be a useful exercise to have persons

tease out and play with domain assumptions in particular

disciplines now being taught in the schools. For example,

domain assumptions in American history instruction include

such generalizations as the inevitability of the expansion

of certain peoples across the planet, and the necessity

of the western hemisphere being "discovered" by Europeans

(Moran, 1969, 104). Native Americans and minorities seem

to be of incidental interest and artificial chronologies

take the student from president to president or from war

to war. Apple observes that "consensus" and "happy co-

operation" are presented as having been norms of American

life through history (Apple, 1975c, 105).

Language

What are the characteristics of humans that define

them as a distinct species? Noam Chomsky has seen the

acquisition of human language as an extraordinary ac-

complishment, as that which makes persons human. Discus-

sing the differences between human language and the

linguistic capabilities of species such as apes, Chomsky

uses an exaggerated analogy. He notes that humans are able

to jump, albeit less well than other creatures. Since

jumping and flying are both types of locomotion, since both involve movement up and down and since humans can develop their capacity to improve jumping, Chomsky asks, Does this mean that flying and jumping are not so very different? Does it mean, "People can really fly, just like birds only less well?" (Chomsky, 1975, 41). Can apes talk like persons only less well? Chomsky says no.* He notes the ease with which virtually all human children acquire language without specific training and thinks of the human mind as, "specifically developed to accomplish this task " (Chomsky, 1975, 13). Alfred Korzybski has identified the concept of time binding to exemplify the fact that through human language, human experiences are preserved from one generation to the next and each new generation is not starting from scratch. Korzybski explores the notion that through language human powers of abstracting are virtually infinite. Much of Korzybski's concern in founding general semantics came from his perception of the dangers of careless human abstraction through unexamined language usage (Korzybski, 1948, 187).

Another consideration about human language will be briefly explored here. Can significance be attached to the way that literacy itself influences persons' perceptions? Paulo Freire, who has worked with illiteracy in South America, writes about the illiterate person as oppressed by written words "kept imprisoned in the magic tool box of

*Others disagree. See for example, Linden, Apes, Men, and Language. New York: Dutton, 1975.

those present day sorcerers, the stewards of the culture of
silence " (Freire, 1973, viii). Jack Goody and I. Watt
in an article entitled, "The Consequences of Literacy,"
explore the effects of literacy on persons and on their
traditions. They quote Nietzche as saying western civiliza-
tion is populated by "wandering encyclopedias," unable to
function in the present but weighed down by "a historical
sense that injures and finally destroys the living thing,
be it a man, or a people or a system of culture " (Goody
& Watt, 1973, 340). Goody and Watt say that illiterate
societies have a "structural amnesia" (Goody & Watt, 1973,
340) which literate societies lack. The former are able
to continually transform their traditions and their history
to make them relevant to the current needs of the group.
Also, reliance on oral communication makes for a more in-
timate relationship between symbols and referents since
words do not accumulate layers of meaning over time. Goody
and Watt discuss the evolution of the Greek alphabet and
of Greek thought. "It is surely significant that it was
only in the days of the first wide-spread alphabetic cul-
ture that the idea of 'logic'--of an immutable and imper-
sonal mode of discourse--appears to have arisen; and it
was also only then that the sense of the human past as an
objective reality was formally developed " (Goody & Watt,
1973, 331-2). A brief discussion will now explore what it
means to say that language usage encourages certain kinds

of categorizations and distinctions. The general semanticist
explains that meanings are in people, not in words. This
can be carried a step further. In addition to the statement
applying to individual persons, it can also apply to groups
of persons. Meanings are defined in part by group usage
and group environment. The linguist and the anthropolo-
gist have discovered that languages differ in such things
as the kinds of vocabulary distinctions persons are led to
make. For example, Stephen Tyler describes how the Koyas of
South India do not distinguish between dew, fog, ice or
snow but have at least seven different terms for the plant
Americans call bamboo and very specific terms for cousins
on differing sides of the family (Tyler, 1969, 3). Es-
kimos have a multitude of terms for snow (Marsh, 1969,
112). In America only the skier makes such fine distinctions.
The English speaker has three singular and three plural
personal pronouns with which to categorize persons. The
Palaung people in Burma have eleven possibilities in con-
trast to the English six possibilities. They make pro-
vision for such forms as you and I, he or she and I, and
they and you (Burling, 1970, 14-15). Dorothy Lee has
studied the language forms of the Wintu people for whom the
unique individual self is not of primary importance. The
third person pronoun form is primary with the first person
singular form a variant of it (Lee, 1959, 38). Languages
differ in the kinds of grammatical observations which must

be made just as they differ in vocabulary distinctions. In Navaho, for example, statements must be made much more specific than they need be in English. The English sentence, "I drop it," is incredibly vague to the Navaho who must specify in his language whether what was dropped was liquid, living, round or long. Furthermore, agency must be more clearly delineated as well as time considerations including such distinctions as whether the act is stopping or starting, habitual, etc. (Henle, 1965, 9-10).

The tendency of English speakers to dichotomize, to see reality in terms of opposites has been widely noted by persons in many diverse fields from education to general semantics, to anthropology.* Richard Marsh explains that this is not a universal among languages. "The Oriental languages, however, are so constructed that it's more difficult to separate in your mind one quality from its opposite. In the Oriental view, opposites are not opposed. They arise mutually; they are complementary " (Marsh, 1969, 110). Marsh calls such languages "multi-valued" and English "two valued " (Marsh, 1969, 110).

*This is a continuing theme in Dewey's writings on education and a major concern of the general semanticist who urges us to avoid artificial splits caused by word usage. Cognitive anthropologists such as Tyler (1969) and Diamond (1974) have spoken to this also.

A discussion of the idiosyncracies of given languages inherent in the languages themselves may lead the question, what difference does it make to real persons? An example concerning sex bias in English usage will be briefly given here to indicate the kinds of analyses which could be done. Robert Baker has noted that in our society one's sex is of such importance that pronouns make designations according to sex rather than other possible categories such as religious beliefs, social standing, age, parentage or race (Baker, 1975, 45-64). Whorf has questioned the seeming naturalness of the English language's "covert system" of gender classification (Whorf, 1956, 90). He notes that there are many more personal masculine or feminine names than there are sexual classifications of objects. These personal names must be memorized regarding the sex of the person to whom they can refer. Also the classifications are not self-evident. "Natural properties" themselves can't tell us that ghosts are referred to as it, nature as she and small boats as she. Whorf concludes, "The mistakes in English gender made by learners of the language, including those whose own languages are without gender, would alone show that we have here covert grammatical categories and not reflections in speech of natural and noncultural differences " (Whorf, 1956, 90-92). Ann Bodine has analyzed English and American grammar books through history as well as those in current use. She has

determined that according to English pronoun usage, males
are considered to be more important than females. Bodine
cites Poole writing in 1646:

> The Relative agrees with the Antecedent in gender,
> number, and person. . . . The Relative shall agree
> in gender with the Antecedent of the more worthy
> gender: as the King and the Queen whom I honor.
> The Masculine gender is more worthy than the
> Feminine. (Bodine, 1975, 134)

She also cites a grammar book written in 1967 and still in
use today in which Roberts talks about "following the con-
vention that, grammatically, men are more important than
women " (Bodine, 1975, 140). Research studies have shown
that the supposedly generic "he" is frequently ambiguously
interpreted or interpreted to include only males.* Bodine,
a linguist, concludes, "Personal reference, including
personal pronouns, is one of the most socially significant
aspects of language " (Bodine, 1975, 144).

One of the functions of language is that of helping
humans to place things in categories, to make distinctions.
The general semanticist warns that the word is not the
thing and that whatever we say a thing is, it is not.
A. B. Johnson notes that humans "disregard the individual-
ity of nature and substitute a generality which belongs to
language " (Johnson, 1949, 188). A human tendency to

*See Powers and Mamola (1977) for a summary of studies and
  for additional references.

categorize and then ignore the uniqueness of each item so categorized leads the general semanticist to call for persons to "think the index." While all of the children are students, student$_1$ is not student$_2$, is not student$_3$. So enamored can a given group of people be of their terms and (to them) their neat categories, that they forget the arbitrary nature of those terms. Differing systems of assigning names to persons can be glanced at to point to ways of stipulating names which are different from English stipulations. Levi-Strauss has found some interesting variations in naming. In groups such as the Iroquois, two persons cannot bear the same first name. The Yurok in California sometimes wait six or more years until a person dies, freeing a name for a new person. The Dakota have certain specific names assigned to children according to sex and according to birth order. In some groups going through certain phases of life leads to the acquisition of a new name. Sometimes a child's name is changed according to a prescribed formula if a sibling dies (Levi-Strauss, 1962, 188-90).

The language used by those in education needs careful examination. Michael Apple and others have observed that the words used by humans in any endeavor are never neutral and that careful consideration must be given to the impact and control wrought by the kinds of words that are now employed (Apple, 1975a, 123). What and whose political

ends do they serve? Do we label students to help them or to

avoid responsibility for their school failure? Huebner

provides a valuable way of looking at curricular languages.

He has classified them as being determined by these value

systems: technical, political, scientific, esthetic, and

ethical (Huebner, 1975a, 223-8). Huebner observes that the

technical approach with its means and ends behavioral

rationality does have its place but he cautions, "To reduce

all curricular thought to this one is to weaken the

educator's power and to pull him out of the mysteriously

complex phenomena of human life " (Huebner, 1975a, 224).

Apple questions the borrowing of curricular language from

behavioral   psychology. He writes:

> The terminology drawn from this psychology and
> its allied fields is quite inadequate since it
> neglects or at best tends to draw attention from
> the basically political and moral character of
> social existence and human development. The lan-
> guage of reinforcement, learning, negative feedback,
> and so forth is a rather weak tool for dealing
> with the continual encroachment of chaos upon
> order, with the creation and recreation of personal
> meaning and interpersonal institutions, with the
> political nature of schooling and other insti-
> tutions, and with notions such as responsibility
> and justice in conduct with others. (Apple,
> 1975a, 139)

He concludes that usage of the language of psychology has

taken ethical and political considerations out of the cur-

riculum theorist's work. Apple deplores the situation

wherein students are "transformed into manipulable and

anonymous abstractions called 'learners' " (Apple, 1975a, 139).

He cites Friedrichs who has raised the same kinds of questions in the field of sociology. The curriculum theorizer can also look at the question of limited perspectives on humans in the field of psychology as discussed by Giorgi (Giorgi, 1970). DeLoria has spoken to this question regarding religion and the person (DeLoria, 1973, 189-208). Huebner calls for contributions to curricular language from the fields of art, philosophy and theology (Huebner, 1966, 18). Philip Phenix's general dispositions would be valuable starting points for the curriculum theorist. The dispositions are hope, creativity, awareness, doubt and faith, wonder, awe, and reverence, united with a concern for wholeness (Phenix, 1975, 328-33).

Axiological Orientation

Macdonald and others have shown that all curriculum theories are value statements, explicitly or implicitly stated (Macdonald, 1977). Ralph Tyler has suggested that the curriculum theorist should have a philosophy but Tyler makes no presumptions about what that philosophy should be beyond statements such as this, "Quite commonly educational philosophies in a democratic society are likely to emphasize strongly democratic values " (Tyler, 1949, 34). He asks whether schools should endeavor to adjust students to society or prepare them to change society without taking a stand on the question himself. It seems to this writer

that Tyler's rationale leaves room for Dewey's more ef-
ficient burglar to come back and haunt persons in education
if they fail to state their values clearly   (Dewey, 1938,
28). The axiological grounding of this dissertation model
is a contextual, process, existential one. Stephen
Pepper's root metaphor for a contextual world hypothesis
as "the active present event . . . the event alive in its
present" (Pepper, 1970, 232) is valuable for this model.
Pepper explains, "We may call it an 'act,' if we like,
and if we take care of our use of the terms. But it is not
an act conceived as alone or cut off from what we mean; it
is an act in and with its setting, an act in its context "
(Pepper, 1970, 232). The contextual world hypothesis has
similarities to the Hopi conception of reality and to the
twentieth century scientists' and general semanticists'
process orientation. Pepper has said:

> To give instances of this root metaphor in our
> language with the minimum risk of misunderstanding,
> we should use only verbs. It is doing, and en-
> during and enjoying: making a boat, running a
> race, laughing at a joke, persuading an assembly.
> . . . These acts or events are all intrinsically
> complex, composed of interconnected activities
> with continuously changing patterns. . . . They
> are literally the incidents of life. . . . The
> contextualist finds that everything in the world
> consists of such incidents. . . . Contextualism
> holds tight to the changing present events.
> (Pepper, 1970, 232-33)

This model is grounded in holistic conceptions of per-
sons and of events. The whole, be it a person or an

event is more, much more than the sum of particular parts.
Attempts to isolate elements invariably lead to distortion.
Can the person be essentalized into "the learner"? Can the
cognitive, affective and psychomotor capacities of persons
be isolated and considered individually? This model says
no.

　　With stress placed on events, this model further
stresses the quality of the present event which reaches for-
ward and backward through time. To impose a linear or
point-in-time framework onto a given event has been useful
and convenient for Western thought but not helpful when
considering the intuited event. Duration is a better
way to conceive of the intuited event. "As far as the
event quality extends, so far does the event extend, so
far does the actual present extend " (Pepper, 1970, 244).
This is very different from thinking of education for
students as contained in so many hours, units of instruc-
tion or pages in a book. The quality of the present,
lived-in experience of the student in school is of primary
importance in this dissertation. All other considerations
must be measured against that pivotal one. All experiences
are inter-related, connected. As Dewey has observed, some
educational experiences can be mis-educative (Dewey, 1938,
13). Experiences which distort, deceive or bore the
student are not educative experiences. If the student is
not desirous of learning more, then the experience has not

been educative for him and the event has been a non-event for him. Further, there is no such thing as an educational event in isolation. Ultimately each private event emerges into public, broader events. What happens to the student at home, at school, ultimately touches and influences other lives, other events, endlessly. Whitehead has spoken to this in a powerful way. "Everything is thus actually a part of all that to which it is related and to speak of the identity and location of something is merely to specify a focal point in this network of relations which stretches through the universe " (Dunkel, 1965, 34).

In the axiological grounding of this model, change is what is to be expected in human affairs rather than permanence. Change is continuous, unending. Everything in the universe is constantly changing. Permanence is unprovable. New aspects of emerging events are continually manifest. The old saying, "There is nothing new under the sun," is completely false. Actually the sun itself is constantly a new event. Huebner expressed this well in writing that instead of educators helping students to adjust to change as an unwelcome break in expected permanencies, non-change should be seen as the anomaly (Huebner, 1975b, 241). The maturing student himself or herself is a person in process, changing and growing. The student creates himself or herself, as do all persons. Facilitative teachers help but

cannot force the self-creation of students in a particular pattern. Teachers are responsible for enhancing the self-creation of students but must not impose their ready-made patterns on students.

Achievement of the most satisfactory patterning of the mutual relations that constitute the ever emerging student is the goal of education regarding a given student. The final test emerges in the student's desire to make real creative, novel possibilities in the world and her life's efforts doing so. Does the person strive for ever better, more satisfactory, more comprehensive, more ethical patterns of relationship and responsibility? Whitehead has said, "The aim of education is the marriage of thought and action " (Dunkel, 1965, 94).

Ontological Orientation

In this model being is revealed through becoming. Indeed all things however seemingly solid are actually in process, becoming. Dewey has written, "Anything defined as structure is a character of events, not something intrinsic and per se " (Dewey, 1965a, 247). He then discusses the seeming permanence of a house by way of illustration. Since our language is noun oriented, is thing rather than process oriented, it was unusual that Dewey would talk about a physical structure in this manner. However, to the Nootka Indians of Vancouver, whose everyday thought patterns

and language usage are more process oriented, such an ex-
pression is natural. The Nootka talk of a house as being
more like a verb than a noun, as occurring, as becoming
rather than being (Marsh, 1969, 111-112). Charles
Hartshorne has provided a helpful statement on becoming and
being. "That may be said to be which is available for
memory or perception, for integration into ever new acts of
synthesis, and in this sense is a potential for all future
becoming. To be is to be available for all future actuali-
ties " (Hartshorne, 1965, xix). Dewey has written about
the human individual and becoming:

> The ground of democratic ideas and practices is
> faith in the potentialities of individuals, faith
> in the capacity for positive developments if
> proper conditions are provided. The weakness of
> the philosophy originally advanced to justify the
> democratic movement was that it took individuality
> to be something given ready-made, that is, in
> abstraction from time,instead of as a power to
> develop. (Dewey, 1965b,223)

He has explained what is meant by potentiality:

> Potentiality is a category of existence, for develop-
> ment cannot occur unless an individual has powers
> or capacities that are not actualized at a given
> time. But it also means that these powers are not
> unfolded from within, but are called out through
> interaction with other things. (Dewey, 1965b,219)

Dewey has observed that potentialities cannot be known in
advance; they can only be comprehended after interactions
have taken place. In considering the possibilities of each
individual person Dewey has written:

> Individuality conceived as a temporal development
> involves uncertainty, indeterminacy, or contin-
> gency. Individuality is the source of whatever
> is unpredictable in the world. . . . Genuine
> individuality exists; individuality is pregnant
> with new developments. . . (Dewey, 1965b,221-2)

In this model students and teachers are defined as persons-in-process with potentialities to be mutually developed, mutually enhanced. Since the teacher has been engaged in his self-development for a longer time and in a more systematic manner, and since the teacher has freely chosen to make his life's work the facilitating of students' self-development, the major responsibility for the initiation and enhancement of the interaction rests with him. The teacher in this model is hereby designated as a "certified learner" because of the greater range of educational experiences he has sought and had. However, all persons are seen as learners. Edward Hall writes of the distortion caused by those who see "education" and "learning" as synonomous and as confined to schools:

> The popular notion is that the schools contain the
> learning and their job is somehow to get the
> learning into the child. In the United States,
> the process of distortion in education has pro-
> gressed to a point comparable to sex in Freud's
> nineteenth-century Vienna. A natural, powerful,
> pleasureful drive that binds people to each
> other is not only feared but hated, which may ex-
> plain some of the attitudes toward the intellect-
> ual in our country. (Hall, 1976, 31)

In this model, to be human is to be learning as long as one lives. The school experience encourages the student to

consider learning as an unending process. Considering the student as "learner," this writer sees the inadequacy of the term "learner" as well as of the term "student." Both terms are simplifications of complex persons-in-process. Huebner writes:

> Curricular language seems rather ludicrous when the complexity and the mystery of a fellow human being is encompassed in that technical term of control--the "learner." Think of it--there standing before the educator is a being partially hidden in the cloud of infinitudes; the theologian has preached of his depravity and hinted of his participation in the divine; the philosopher has struggled to encompass him in his systems, only to have him repeatedly escape; the novelist and dramatist have captured his fleeting moments of pain and purity in never-to-be forgotten esthetic forms; and the man engaged in curriculum has the temerity to reduce this being to a single term - "learner." (Huebner, 1975a, 219)

Huebner suggests that provision be made by persons in curriculum theory for the complexity and mystery of the human person. This model will follow a convention of the general semanticist who warns that words which are high level abstractions should be so indicated by the use of quotes. For the rest of this dissertation the word "student" and the word "learner" will appear in quotes to indicate the over-simplification of such designations.

In this model the effective, authentic teacher is the person who does what she is becoming. To express it another way, she is not fragmented into contradictory roles. Her teaching and the rest of her life are of-a-piece. Her

life's work and her sharing of it with others through teach-
ing are mutually complementary, mutually congruent. Francine
Shaw writes of the principle of congruence,

> If our lives are well-woven, well-balanced tapes-
> tries, we can leave no incongruent juxtaposition
> unattended; congruence means that the threads of
> the Self weave a conceptual bond with and con-
> tinuity between our theories and experiences, work
> and creative practices, our relation to students
> and the atmosphere we provide for them. (Shaw,
> 1975, 446)

Writing further about the teacher Shaw concludes,

> We must be in the process of growth we help our
> students to experience, be what we help others
> to become; we must be what we do, live what we
> do. . . . Attaining this balance must be our
> immediate concern if we are to be what we help
> others to experience in a meaningful way, or,
> more profoundly, be in the process of becoming
> what we help others to become. (Shaw, 1975,
> 446, 450)

Through holistic concepts of "certified learners" and of
"learners," persons in curriculum theorizing can help all
persons in education to move toward terms more generative,
and more filled with consideration for the potential of
persons. Michael Polanyi writes of "a society of ex-
plorers " (Polanyi, 1966, 83), That seems to be a fruitful
way of thinking and conceptualizing as does Freire's idea
of educator-educatee relationships (Freire, 1973, viii).

Epistemological Orientation

This model is grounded in particular, general assump-
tions concerning the nature of all human knowledge and in
more specific assumptions concerning the student and

knowledge. The particular, general assumptions will be con-
sidered first, followed by the more specific assumptions.
The most basic assumption is that all human knowledge is
grounded in human interest. Macdonald has elaborated,
"This interest may be fundamental self-preservation, but
even self-preservation cannot be defined independently of
the cultural conditions of work, language, and power "
(Macdonald, 1975a, 287). Another assumption is that humans
are learners, knowledge seekers as part of their essential
humanness. Dewey has said, "Growth is the characteristic
of life--education is all one with growing; it has no end
beyond itself " (Dewey, 1944, 53), Israel Scheffler's ob-
servation that learning is a process and therefore fre-
quently not necessarily deliberate or intentional, accords
with Dewey's words (Scheffler, 1965, 10) as does Thomas
Kuhn's comment that the knower can never be aware of the
full ramifications, implications of what she knows. Kuhn
asks, Who discovered Oxygen, Priestly or Lavoisier? Is
knowing that the same as knowing what? (Kuhn, 1962, 55-56).
The "what" could be interpreted as the importance of knowing
"so what," which can never be fully comprehended or fully
completed.

Human knowledge does not consist of fixed, static
achievements. By its very nature, human knowledge is active
and changing. Although it is convenient for educators to
think in terms of bodies of knowledge, such as the disciplines,

this thinking can lead to persons conceptualizing knowledge as a body of facts to be mastered or packaged in some way. Human knowledge is not knowledge of things in the world which exist entirely independent of human knowing. For humans it is not the objects in the world themselves that are important, but rather their human use, the action, the event of their utilization. Jean Piaget discusses this regarding a child's concepts of logical thought and pebbles used to explore, to play out these concepts. It is not the pebbles which are significant to the child or to the person studying the child. Rather, the child's use of the pebbles is significant (Piaget, 1970, 16-17).

Dewey has written about the mistake of assuming objects can be studied without regard to the "learner's" actual use of them.

> Witness the different attitude of a boy in making,
> say, a kite, with respect to the grain and other
> properties of wood, the matter of size, angles,
> and proportion of parts, to the attitude of a
> pupil who has an object-lesson on a piece of
> wood, where the sole function of wood and its
> properties is to serve as subject matter for
> the lesson. (Dewey, 1944, 199)

Stephen Tyler makes the same point in his cognitive anthropology work. He declares that the object of the anthropologist's study consists of "not material phenomena themselves but the way they are organized in the minds of men. . . . Cultures are not material phenomena but are cognitive organizations of material phenomena " (Tyler, 1969, 3).

Human knowledge does not involve absolute certainty.
Rather, in Scheffler's terms, human investigations into the
nature of knowledge have as their aim, "not to judge the
truth infallibly but to estimate the truth responsibly "
(Scheffler, 1965, 54). Piaget has characterized the ap-
proximations of human knowledge as "a system of transfor-
mations that become progressively adequate " (Piaget, 1970,
15). Ethnomethodologists such as Harold Garfinkel, Hugh
Mehan and Houston Wood hold the position that all human
knowledge is ideosyncratic and relative. They state that
all human knowledge about phenomena is :

> dependent upon ceaseless (1) reflexive use of
> (2) bodies of social knowledge in (3) interac-
> tion. As this reflexive interactional work
> assembles the reality, without it, the reality
> could not be sustained. Hence, each reality
> (4) is fragile. Insofar as people may ex-
> perience more than one reality, realities are
> said to be (5) permeable. (Mehan & Wood, 1975, 6)

Human knowledge is holistic. Above all, it is char-
acterized by coherence and connectedness. No fact is true
in some sort of spendid isolation. Inter-relationships,
in which more and more coherence is attained by the knower,
describe the human search for knowledge. Brand Blanshard
has said, "The degree of truth of a particular proposition
is to be judged in the first instance by its coherence with
experience as a whole " (Blanshard, 1967, 193). Freire
makes a useful distinction between "creative assimilation,"
as opposed to "information storing " (Freire, 1973, 46).

Human knowledge is somewhat determined by the physio-
logical make-up of humans which sets some limits and has
some implications for their ability to know and their ways
of knowing. Polanyi reminds humans, "Our body is the ul-
timate instrument of all our external knowledge, whether
intellectual or practical " (Polanyi, 1966, 15). Bearing
this in mind, Huebner's discussion of possibility is
valuable. "Possibility does not reside within the neuro-
logical structure of the individual. It exists at the
boundary between the individual and the life styles that
have been forged by all our predecessors and left in the
tools, images, habits, institutions, memories and visions
embodied in the public world " (Huebner, 1975d, 37).
Piaget and Chomsky suggest that persons interested in human
ways of knowing study closely the mental development of the
young child as a kind of mirror of the mental development of
humans through their history (Piaget, 1970, Chomsky, 1975).

Specific assumptions about the "student" and knowledge
will now be explored.

In this model the "student's" desire to know is seen as
an active phenomenon. The acquisition of knowledge leads
to the desire for further knowledge. One could ask, Does
the "student" have more questions _after_ studying the topic
in class than she had at the beginning? Does she have more
interest _after_ studying the topic in class than she had at
the beginning? The "student's" knowledge must be significant

to the "student" or it is not likely to be assimilated, internalized as knowledge. Human interest here becomes the "student's" own authentic interest as self-defined. Postman and Weingartner relate a telling anecdote. The teacher asks a child in science class, 'How many legs does a grasshopper have?' The student replies, 'Oh, man, I sure wish I had your problems!' (Postman & Weingartner, 1969, 93). Postman and Weingartner ask, "Would you penalize the boy for having different purposes from his teacher and, therefore, for his valuing and perceiving a different reality?" (Postman & Weingartner, 1969, 93). The general semanticist's caution, "Meanings are in people, not in words," is significant here. The teacher cannot assume that any given subject has automatic, built-in interest for the "student." Dewey has said, "It is not the subject per se that is educative or that is conducive to growth. There is no subject that is in and of itself, or without regard to the stage of growth attained by learner, such that inherent educational value can be attributed to it " (Dewey, 1933, 46).

David Pears explains that factual knowledge may usefully be considered as "a state of mind . . . not a continuously busy state; it is more like being in good working order than actually working " (Pears, 1971, 9). In this model the "student's" working-order-knowledge includes both knowing

how and being able but neither one in any absolute sense.

For example a "student" knows how to balance a checkbook

and is able to do so. However, the "student" may be able

to perform a gymnastics feat such as a back walk-over

without knowing how he did it. Or he may know how to cal-

culate the distance between the earth and a million different

stars without being practically able to do so. Also, pro-

vision must be made for that which the student knows but

cannot tell, cannot articulate. Polanyi has spoken to this

at length as tacit knowledge (Polanyi, 1966).

A distinction must be made concerning the "student's" true

knowing and her appearance of knowing. That which is

guessed is not known. That which is occasionally true, but

not consistently true is not known. Bertrand Russell's il-

lustration of the broken clock which is correct twice every

twenty-four hours, demonstrates this idea. That which is

memorized to please the teacher or fulfill a course require-

ment is not known. Worse, that which is memorized may be

destructive of what the "student" has known. Dean Barnlund

gives an illustration about a child raised in a Canadian

cattle farming area who moved to India:

> Thora came home the other day doggedly repeating
> to herself, "A cow is a big animal with four
> legs and two horns. It is the most useful of
> all animals. The feet of the cow are called
> hoofs." I asked what she was doing, repeating
> this over and over again, and she replied that
> this was nature study and she had to memorize
> the cow. The teacher will not tolerate

> improvised replies, but the students must jump
> up smartly beside their desks and repeat exactly
> what was copied from the blackboard the day be-
> fore. It sounds fantastic, but the end of the
> system is to stifle initiative, destroy crea-
> tivity and engender a violent dislike for
> learning. (Barnlund, 1968, 29)

A recent article in the <u>Charlotte Observer</u> discussed North Carolina "students'" inability to explain the meaning of the pledge of allegiance, indeed to even know all of the words in the pledge (Lione, 1977, 1). All too often mere verbal dispositions are inadequate, quickly forgotten and not significant to the "learner." Knowing the word is not the same as knowing about the thing or event itself. The inadequacy of knowing the name has been discussed by many writers in education. Bloom and Krathwohl give an example of Dewey's experience with a class. He began:

> "What would you find if you dug a hole in the
> earth?" Getting no response, he repeated the
> question; again he obtained nothing but silence.
> The teacher chided Dr. Dewey, "You're asking
> the wrong question." Turning to the class
> she asked, "What is the state of the center of
> the earth?" The class replied in unison,
> "Igneous fusion." (Bloom & Krathwohl, 1966, 23)

The student ultimately creates her own truth, her own knowledge, her own world in a process Brubacher has dis-cussed as verification, quite literally "truth-making " (Brubacher, 1967, 250-1). Freire is most forceful. "'I want to learn to read and write so I can change the world', said an illiterate from Sao Paulo, for whom <u>to know</u> quite correctly meant <u>to intervene</u> in his reality " (Freire, 1973, 50).

Looking at the student and knowledge, and Scheffler's question about how much of what an individual knows did she set out to learn (Scheffler, 1965, 10) the concept of the hidden curriculum is pertinent. Dewey has written:

> Perhaps the greatest of all pedagogical fallacies
> is the notion that a person learns only the
> particular thing he is studying at the time.
> Collateral learning in the way of formation of
> enduring attitudes, of likes and dislikes, may
> be and often is much more important than the
> spelling lesson or lesson in geography or history
> that is learned. For these attitudes are
> fundamentally what count in the future. (Dewey,
> 1938, 48)

Curriculum as Process

In this model the curriculum is continually evolving, being created by the "student" and the "certified learners" together as they draw on a wide range of resources and persons. The term "content" is not used. "Content" is rejected as a term because of its static, solid connotations. A brief illustration of the way the word "content" tends to direct curriculum thinking is useful at this point. Mauritz Johnson has written in a paper on curriculum theory, "The only necessary, albeit insufficient, criterion for curriculum selection is that the content be teachable . . . . Cultural content is learnable if meaning can be perceived in it. Cultural content has meaning for an individual to the extent that he recognizes appropriate rules by which his actions toward it may be governed " (Johnson, 1967, 137).

Such a conception of content is not acceptable for this model in which persons themselves are meaning creators. "Students" in this process model do not spend their time trying to grasp the meanings of others in order to learn what rules to passively follow. The goal instead is for reflection, critical examination of all cultural content. Freire's concept of "students" who "practice co-intentional education" (Freire, 1970, 56) with their instructors in a Subject to Subject relationship is valuable here. While Freire used some ready-made content occasionally with persons learning to read in South America, his essential emphasis has been on the "learners" creating their own curriculum, deciding on the words they themselves want to learn. Seymour Sarason has discussed the failure of many innovative projects in the sixties as being caused in large part by the tremendous emphasis that had to be placed on materials, on books, on predetermined content. With time and inservice preparation constraints, very little emphasis came to be placed on what teachers and students would create as curriculum together. The materials became the curriculum (Sarason, 1971). The curriculum theorizer must examine the American over-reliance flat visual materials. Hall has written:

> We are in the grip of McLuhan's Gutenberg Revolution and extension transference. Truth is printed on a page; reality is pictures. All of which conditions people to a flat, shallow approach

> to all sensory inputs. We live in an artificial,
> and for the most part two-dimensional, frag-
> mented, manipulative world of advertising and
> propaganda. (Hall, 1976, 155)

Postman has pondered

> the powerful biases forced upon us by the Age
> of the Printed Word. . . . Print is not dead,
> it's just old--and old technologies do not gen-
> erate new patterns of behavior. For us print
> is the technology of convention. We have ac-
> comodated our sense to it. We have routinized
> and even ritualized our responses to it. We
> have devoted our institutions, which are now
> venerable, to its service. By maintaining the
> printed word as the keystone of education, we
> are therefore opting for political and social
> stasis. (Postman, 1972, 56-57)

Kuhn and others have criticized textbooks and their typical

approaches to topics as containing ready-made, permanent

truths. Kuhn observes, regarding the influence of text-

books on what is perceived as truth in science by students,

"More than any other single aspect of science, that peda-

gogical form has determined our image of the nature of

science and of the role of discovery and invention in its

advance " (Kuhn, 1962, 148). Eric Broudy has recently done

a study on the conservatism of textbook publishers and text-

book content (Broudy, 1975). Huebner notes that reliance

on the textbook as the organizing focus of the curriculum

goes back nearly one-hundred years to William T. Harris.

Huebner says that Harris established "the basic paradigm of

the curriculum field which prevails today with minor themes

and variations. Perhaps even more important is his impact

on the organization of the schools and his concern for text-
books as the center of the curriculum, rather than the teach-
er   as the center " (Huebner, 1977, 92-93).

The curriculum theorizer, having difficulty seeing the
curriculum and the "student" in process together, evolving
together, would do well to recall that the English language
conditions its speakers to think in terms of substantives.
Marsh notes, "We like to have nouns connected with verbs--
things or essences connected with movements or processes--
ignoring the fact that the thing and the process are in-
separable." Marsh gives an example: "We say, 'The dancer
danced.' But this ignores the fact that the dancing is
the dancer and the dancer is the dancing. If there's no
dancing, there's no dancer " (Marsh, 1969, 107). In a
similar way of reflecting, the curriculum theorizer would do
well occasionally to question the sharp split between the
"learner" and "curriculum" as isolated and distinct entities.
Can there be a "learner" without a "curriculum"? Can there
be a "curriculum" without a "learner"?

In this model curriculum is not a "given," transmitted
from "teacher" to "learner." Instead curriculum is con-
ceptualized in terms similar to Florence Stratemeyer's
"Persistent Life Situations." The "learner" is actively pur-
suing knowledge important to him. The "certified learner"
is also learning. In Stratemeyer's scheme the curriculum

develops through "students'" explicit and implicit concerns,
through questions which arise in the course of on-going
activities, through joint planning, through data analysis
and through group and community concerns   (Stratemeyer,
1947, 301-311). Choice of curricula to be investigated is
determined by questioning the meaning the curriculum ex-
perience will have for "students." What insights, questions
do they bring individually and collectively to the proposed
curriculum experience? Will logical explanations and more
knowledge help the "students" in this matter? Is interest
in the proposed curriculum experience transitory or lasting?
Will the proposed curriculum experience help "students" and
"certified learners" in their ability to deal with their
evolving realities? Will the proposed curriculum experience
be best pursued collectively or individually, incidentally
or directly? Can ways of working be utilized which are sug-
gested by the problem itself and not by any pre-ordained
content or materials? Can one curriculum experience lead
naturally into another? Will skills be developed in use
through situations in which the "students" themselves see
a real need for them? Will the principles underlying the
skills become increasingly apparent? Will "students" "get
into" the curriculum experience in a vital, self-enhancing
way? (Stratemeyer, 1947, 311-350).

In such an approach to curriculum, emphasis on the
"student's" experience now, in the present moment, becomes

important. Whitehead's call for "an understanding of an
insistent present" is appropriate here:

> The only use of a knowledge of the past is to
> equip us for the present. No more deadly harm
> can be done to young mind than by depreciation
> of the present. The present contains all that
> there is. It is holy ground, for it is the past,
> and it is the future. . . . Do not be deceived by
> the pedantry of dates. The ages of
> Shakespeare and of Moliere are no less past
> than are the ages of Sophocles and of Virgil.
> (Whitehead, 1967, 3)

Dorothy Lee's discussion of experiences and activi-
ties among some peoples she has studied as an anthropolo-
gist can be helpful to the curriculum theorizer who is con-
cerned about the quality of the "students'" experience.
Lee talks about the Tikopia and notes, "Here I found work
whose motivation lay in the situation itself, a situation
which included the worker and his society, the activity and
its end, and whose satisfaction lay in social value " (Lee,
1959, 29). She discusses also the Hopi way of life. "There
is satisfaction in the situation itself. . . . Value is
total and is to be found in a total situation " (Lee, 1959,
73). Lee observes:

> Our impulse is to break up the situation because
> we are culturally trained to comprehend a totality
> only after we break it up into familiar phrasings.
> But in this way we miss the value inherent in it,
> since it disappears with analysis, and cannot
> be recreated synthetically afterwards. Having
> created a series of elements, we then find no
> difficulty in motivating them according to a
> series of needs. (Lee, 1959, 74)

Beverly Galyean in a book on confluent, Gestalt education provides a list of questions and concerns which are helpful when the "certified learner" is trying to see if the "learner" is able to put himself or herself into the on-going curricular experience in a meaningful way. The interaction proceeds from beginning such as these:

What's going on now?
How are you feeling now?
What are you doing?
How do you do that?
Are you saying that? Or is someone else speaking?
What do you want to do?
What are the consequences of that choice?
Are you willing to take the risks?
How do you help yourself?
Only you know.
You can resolve it.
I will not do it for you, because
You are your own expert.
You are responsible. (Galyean, 1975, 218)

Interaction in the Model

In this model fluid interactions in a multiplicity of settings, social contexts, and educational environments are stressed. The learning experience as lived in by the "learners" and the "certified learner" is paramount with space and time limitations less rigid than typical curriculum thinking which tends to operate in terms of specific, identical daily blocks of time and the physical school building. However, the learning experience as lived in by the "learners" and the "certified learner" is acknowledged as a political environment. Apple enjoins curriculum theorists to bear in mind that schools are overtly insulated from

political forces but are covertly teaching a "middle-class"

and often schizophrenic value system " (Apple, 1975c, 96).

Dewey's question of how students can be prepared for life

in a democracy if they do not experience a democratic school

environment remains unanswered. Persons such as Brubaker

and Nelson have suggested that schools are bureaucratic

and professional institutions (Brubaker & Nelson, 1972).

The reconstructionist curriculum theorists have been ad-

dressing the question of the assumed democracy of American

institutions for some time.* Persons in authentic "learner"

to "certified learner" relationships can take a critical

look at their daily lived-in experience together and re-

create, re-design the lived-in experience as needed. They

are then better able to critically examine the political

world <u>beyond</u> the school. An all too common problem is that

teachers themselves must operate in settings in which they

themselves are "object" to the administrators as "Subject."

Sarason's example of the new math being taught to teachers

in the old ways leading teachers to then teach the new math

in the old way is appropriate here (Sarason, 1971, 42-48).

Helpful also is Sergiovanni's tracing of Frederick W. Taylor's

influence on education through his principles of scientific

management. Also, Sergeovanni writes about the human

*See for example many selections in Pinar (1975) and also
in Macdonald and Zaret (1975).

relations model of persons in organizations as seeing or-
ganizations and persons in inevitable conflict. He comments
on the combining of neo-scientific management principles
and human relations principles in educational settings.
"The movement has provided renewed legitimacy and reinforce-
ment to work standardization, centralization, task spec-
ialization and formalization not only in educational pro-
gram format but in classrooms and organizational patterns "
(Sergiovanni, 1976, 19). One of the important principles
has led to less teacher self-supervision. The task is to
"divide the work of managers and workers so that managers
assume responsibility for planning and preparing work and
for supervising " (Sergiovanni, 1976, 7). Franklin Bobbitt
was one of the first to apply scientific management ideas to
education. "Directors and supervisors must keep the workers
supplied with detailed instructions as to the work to be
done, the standards to be reached, the methods to be em-
ployed, and the materials and appliances to be used. . . .
Whatever the nature or purpose of the organization, if it is
an effective one, these are always the directive and super-
visory tasks " (Sergiovanni, 1976, 7). Wilson, Shapiro,
et. al. (1969) have traced the gradual lessening of the
teacher's control over her own teaching as concepts of super-
vision evolved. Larger schools, local orientations and out-
looks, a "make do" attitude from the Depression led to

supervision as a remedial and provincial function. Super-
visors have come to stereotype teachers in faulty and
negative ways. Wilson, Shapiro, et. al. have deplored the
kind of relationship between teachers and supervisors which
reminds one of McGregor's theory X views of persons in
classical management theory. Sergiovanni points out that
although theory X negative views of human nature may not
now always apply to the administrator-teacher relationship,
"This conception remains ubiquitous as applied to students "
(Sergiovanni, 1976, 10).

An important, essential goal in this model is that of
"certified learners" having more control over their profes-
sional lives with "learners" doing the same. Sergiovanni's
human resources model assumptions with regard to desired
interactions are significant here. "Superordinates work to
continually expand the areas over which subordinates exer-
cise self-direction and self-control as they develop and
demonstrate greater insight and ability and expectations "
(Sergiovanni, 1976, 15). This model assumes that "certified
learners" and "learners" will exercise responsible self-
direction and self-supervision in the accomplishment of tasks
meaningful to them.

What are some major considerations in the facilitation
of authentic "learner" to "certified learner" relationships?
Sarason's emphasis on the creation of new settings is

valuable. He reminds the curriculum theorist that domain
assumptions, or as he calls them "categories of thought,"
must be faced, identified and challenged if one is really
going to create something new (Sarason, 1972, xii). He
suggests that change in a society can be measured by the
number of new settings created but continually cautions
that those attempting to create new settings must critically
examine behavioral and programmatic regularities which
have been operating in the old settings and which might be
automatically applied in new settings, crippling them
(Sarason, 1972, 3). The settings are important, for Sarason
cautions that characteristics of individuals are always,
to some extent a reflection of the setting in which those
characteristics are manifested (Sarason, 1972, 11-12).
Going back to an emphasis on developing the curriculum with
learners, the curriculum theorist can see that in looking
for significant topics for learners to pursue with their
teachers, Stratemeyer stresses that one of the first things
which must be done is for the persons who will be using a
particular environment to examine it and design it to fit
their purposes (Stratemeyer, 1947, 346).

Interactions themselves in this model are created be-
tween and among persons. They are not all initiated, dom-
inated by the "certified learner" although they are directed
by the "certified learner." Dewey gives an illustration of

the difference between merely exciting or indulging a

"learner's" interest and effectively directing that interest.

> . . . All children like to express themselves
> through the medium of form and color. If you
> simply indulge this interest by letting the child
> go on indefinitely, there is no growth that is
> more than accidental. But let the child first
> express his impulse, and then through criticism,
> question, and suggestion bring him to conscious-
> ness of what he has done, and what he needs to
> do, and the result is quite different. . . .
> You see the conventional tree of childhood--
> a vertical line with horizontal branches on each
> side. If the child had been allowed to go on
> repeating this sort of thing day by day, he would
> be indulging his instinct rather than exercising
> it. But the child was now asked to look closely
> at trees, to compare those seen with the one
> drawn, to examine more closely and consciously
> into the conditions of his work. Then he drew
> trees from observation.
> Finally he drew again from combined obser-
> vation, memory, and imagination. He made again
> a free illustration, expressing his own imagina-
> tive thought, but controlled by detailed study of
> actual trees. (Dewey, 1915, 41-2)

Interactions in this model promote the free choosing of

an activity, the evolving of an educational experience for

its own sake. Clear cut distinctions between work and play

are not desired. Dewey has written:

> Activity carried on under conditions of external
> pressure or coercion is not carried on for any
> significance attached to the doing. The course
> of action is not intrinsically satisfying; it is
> a mere means for avoiding some penalty, or for
> gaining some reward at its conclusion. . . .
> But the end should be intrinsic to the action;
> it should be its end--a part of its own course.
> (Dewey, 1944, 204)

In a provocative paper entitled "Sociopolitical Analysis
and Curriculum Theory," Michael Apple and Nancy King discuss
the work - play dichotomy and kindergarten children. By
October, children who a month earlier had not equated the
word "work" with the notion of what it is children do in
kindergarten, had come to do so   (Apple & King, 1977, 122).
They had also come to see early during the school year that
work activities were determined by the teacher and were more
important than play activities.

The plucky first grade heroine of Ramona, a recent
novel for children about a "liberated" family, finds no
liberation in school:

> She sat quietly as Mrs. Griggs pushed a lock of
> hair behind her ear and said, as she had said
> every day since first grade had started, "We are
> not in kindergarten any longer. We are in the
> first grade, and people in the first grade must
> learn to be good workers." (Cleary, 1975, 78)

After many unpleasant days at school, with incessant warnings
not to waste paste and not to help others, the heroine
falters:

> Ramona dreaded school because she felt Mrs. Griggs
> did not like her, and she did not enjoy spending
> the whole day in a room with someone who did not
> like her, especially when that person was in
> charge. (Cleary, 1975, 122)

How many endless days are spent by persons in school with
other persons who do not seem to like them, performing tasks
which have no meaning to any of the participants?

Summary

This conceptual model has been created through exploration of a philosophy grounded in process orientations drawn from the fields of curriculum theory, general semantics, communication theory, and anthropology. The necessity for curriculum theorists to question the taken-for-granted, unexamined assumptions underlying the school experience has been shown. Language influences on the curriculum theorist's work have been briefly identified also. The model creator has developed her model through examination of the three essential foci of all philosophic questions. These foci are axiological (concerned with the nature of human value systems); ontological (concerned with the human nature of being); and epistemological (concerned with the nature of human knowledge). The model has been constructed on these assumptions: all curriculum statements are value statements; all "teachers" and "students" are continually in process; and human knowledge is best understood in terms of the knowner (for example, the "student") rather than in terms of something-to-be-known (for example, the content). To illustrate relationships among persons as present in the model, interactions have been discussed with quotation marks used to indicate that the terms "certified learner," (teacher), and "learner" or "student" are high level abstractions and over-simplifications of complex persons-in-process. Mindful that <u>no one model</u> is

suited to all learning situations or to all instructors or to all students, the investigator presents her own experience with the model in Chapter Four.

CHAPTER IV

EVALUATION AND IMPLICATIONS OF THE MODEL

This chapter will re-emphasize this model creator's

orientations and discuss an attempt to utilize the model in

college teaching. Also the chapter will briefly discuss cur-

riculum theory as a field of study and possible research

directions in curriculum theory as implied by this model.

The sub-headings in the chapter therefore are Recapitulation:

The Investigator's Perspective in Model Creation, The Model

as Now Experienced, and Curriculum Theory as a Field of

Study and Research Potentials.

Recapitulation: The Investigator's
Perspective in Model Creation

Tyler and Herrick in their classic work on curriculum

theory have proposed that the curriculum theorist must di-

rect attention toward all the components involved in the

development of an educational program in order to identify

problems and resolve them. They caution that care must be

taken so "the curriculum worker is not working as one of

the blind men examining the elephant " (Tyler & Herrick,

1950, 1). But Wendell Johnson reminds the curriculum theorist:

> Due reflection must surely leave one with the con-
> viction, however, that there is a gravely mis-
> leading detail in this story. . . and a correspond-
> ing flaw in the theory of human disagreement

which the story represents. The misleading
detail is that the investigators are described
as blind.
        As a consequence, millions of children
have been insidiously affected by the implica-
tion that if only these six legendary companions
in research had been able to see reasonably well
they would have agreed perfectly.
        No redder herring, surely, has ever been
dragged across the faint, faint trail of truth.
(Kurman, 1978, 266-7)

Paula Kurman has quoted Johnson and enlarged :

Going a step further, one might ask, what's
wrong with having six perspectives? Or seven?
Or a hundred? Since man has learned to fly, why
not an aerial perspective of the nature of the
elephant? The conclusions will be different
not because the others are in error, but because
the level of entry to the problem will have
changed. (Kurman, 1978, 267)

Kurman concludes with comments about implications for re-

search activities similar to those of David Smith discussed

in Chapter I. Kurman stresses the inevitability of bias,

the importance of context regarding the investigator, the

necessity to allow for differing conclusions and the need

for alternative perspectives (Kurman, 1978, 267). The

biases of this investigator have been acknowledged as the

essential philosophic grounding of her model. In this

chapter there will be a focus on the playing out of the

model's philosophic grounding in the context of an evolv-

ing undergraduate college education course. This is done

mindful of the dissertation's emphasis on the need to ap-

preciate varying perspectives and the need to avoid propos-

ing any one model as a model for all.

The investigator has determined the following assumptions discussed in Chapter III to be the philosophic grounding of her model. First, to be interested in curriculum theory is to be concerned about the lived-in experience of persons in school settings, without having to make short term, ameliorative pronouncements about same. Second, to be interested in curriculum theory is to be concerned above all else about persons as unique and valued individuals. Third, all curriculum statements are value laden. In working through the model creation task implied by these assumptions, the investigator has followed a procedure which has been deliberate, subjective, intellectually playful and based on human interests and concerns. She has endeavored to create a just model to serve as a disclosure model for curriculum theorizing. The intent of the investigator regarding the successful implementation of her model accords with Stake's concept of "successive approximations" such that "major attention is given to getting an enterprise in operation, even though the initial runs are crude and faulty, so that corrections can be based on experience " (Stake, 1969, 29). Stake concludes, "In our present state the derivation of the specific from the general is some sort of intuitive magic. . . . We need to understand it, to stimulate it, not necessarily replace it " (Stake, 1969, 30). Macdonald has written concerning the generating of propositions to guide the creator of

theoretical models, "This task is a dual technical-logical
and aesthetic (intuitive) process " (Macdonald, 1978, 9).
The essence of the effort in this dissertation has been
model creation and the model itself has been created through
its philosophic orientation being explicitly thought-out.
This approach is analogous to the phenomenological pro-
cedure described by Howard Becker, et. al. in their study
Boys in White:

> These assumptions committed us to working with
> an open theoretical scheme in which variables
> were to be discovered, rather than with a scheme
> in which variables decided on in advance would
> be located and their consequences isolated and
> measured. (Bruyn, 1966, 273)

The Model as Now Experienced

Dissatisfied with the static nature of her college
teaching efforts and slowly "taken" by her model as it has
evolved, the investigator has begun attempting to move
toward a process orientation in her teaching. Consistent
with the philosophic grounding of her model, she has con-
sciously determined that she is concerned about the lived-
in school experience of the persons in her college classes,
that she is concerned about the students as persons and that
she acknowledges an existential, process philosophy as the
guiding and sustaining impetus for her efforts. She has
consciously rejected the notion that one person in the
class is always the "teacher" and all the other persons in

the class are always the "learners." She prefers to operate in terms of persons learning together, creating the curriculum together.

In her first effort toward curriculum in process, the investigator pre-determined topics to be studied in the course of the term, allowing students to choose from a list of possibilities (individual projects) to complete the work on each topic. Possibilities included options such as design of learning centers, case studies, evaluation of Curriculum Library materials, panel discussions, micro-teaching, interviews, etc. Completion of six possibilities was required for an A, four for a B and three for a C. Multiple choice tests were used to evaluate mastery of topic content. This was done during both semesters in 1976. In the fall of 1977, the investigator drew up a list of possible course topics for the class to choose among. The choosing was done on the first day of class and the instructor then drew up the topics for study based on the "student" choices. Again, a list of possibilities (individual projects) was included with several options for each topic. "Students" were encouraged to share the results of their work on possibilities with other class members. Class attendance was not required but "students" were told that anything discussed in class by the instructor or by other "students," for example in panel discussions, was subject to be included on the take-home tests. The

investigator surveyed the class members anonymously to determine their attitudes toward the class and to consider changes for the next semester.* The class had 23 "students;" 78.2 percent of the "students" said they liked the class. While 43.4 percent of the "students" said the amount of time devoted to the course as compared to other classes was about the same, 39.1 percent of the "students" said they were putting more time into this class as compared to others. Responding to a question about the possibilities, 39.1 percent saw them as busy work, 21.7 percent saw them as assignments like any others and 60.8 percent saw them as something "students" could get into. Some "students" added to the latter, "if we had the time." Also 17.3 percent said the instructor should require attendance; 47.8 percent said A and B grades should be more directly tied into class participation and presentation and 60.8 percent said that as much as a week or two weeks time should be taken in determining class priorities for course topics. Finally, 26 percent suggested that the class be offered at a time later than 8:00 A.M.

In spring semester of 1978 class time was moved to 10:00 A.M. Attendance was required and "students" took two weeks to determine course topics. The instructor did not

*Responses from the "students" on the surveys from the 1977 and 1978 classes are available from the investigator. Some of the percentages are more or less than 100 percent because of multiple responses or no response by an individual on a given question.

provide a list from which "students" were to choose. She
did help them to consolidate their lists and did assign
each topic to a time space in the semester. She provided a
list of nineteen options from which "students" could get
ideas for designing their own possibilities to apply to
topics and "students" were encouraged to work together if
they chose. "Students" working for an A were again asked
to complete six possibilities presenting three of them to
the class. B requirements were for four possibilities
with three shared with the class. C requirements called
for three possibilities. Discussion take-home tests were
again used. An anonymous survey of the twenty one
"students" in the class included these responses: 85.7
percent said they liked the course; 42.8 percent said the
class was getting as much effort as their other classes;
47.6 percent said they devoted more time to the class as
compared to other classes. Also, 9.5 percent of the
"students" perceived the possibilities as busy work; 9.5
percent saw them as assignments like any others and 76.1
percent saw them as something "students" could get into.

The instructor asked these "students" in the spring
1978 class to react anonymously to questions borrowed from
McQuail's analysis of models in communication to evaluate
their education course experience. The questions (as
mentioned in Chapter I) were stated as worded by McQuail
with one exception. Question four was re-written for the

sake of clarity in this manner. Is the process to be seen

from the perspective of the sender (teacher) or the (re-

ceivers) students? Seventeen "students" were present the

day the McQuail questions were given to the class. Here is

a summary of the questions and the responses. "Is the

process one-directional or interactional?" The "students"

responded by 64.7 percent that the process was interactional;

29.4 percent stated that it was both interactional and one-

directional. One person responded that the process was one-

directional. "Students" made comments such as this. "The

processes in this class are interactional. The interaction

is sometimes slow to start or a little stilted. This is

because we were taught to be this way (one-directional) and

it is very hard to outgrow it." Another "student" stated,

"We can interact with each other and comment freely. The

procedures branch out and don't confine themselves." The

next question was, "Is the process open or closed?" This

brought a response of 88.2 percent that the process was

open; 11.7 percent of the "students" replied that the

process was both open and closed. One "student" wrote,

"To a certain extent, the processes are closed. We are

expected to do so many projects for a certain grade, the

book reports must be written according to a little form and

be a certain number of pages long, and attendance is taken

into consideration. It is open in that we have freedom to

work on projects of our own choice and in our own direction."

Another "student" wrote, "The process is open because we all have a chance to express ourselves and we can change the curriculum." The third question asked, "Are meanings fixed or 'transacted?'" Replies showed 70.5 percent of the "students" said that the class meanings were transacted and 23.5 percent said that the meanings were both fixed and transacted. One person said that the meanings were fixed. "Students'" comments included the following remarks: "One person's view isn't always right. We all discuss together and the meaning-- as different people perceive it--is brought out. From this we all come to learn the meaning--our way!" Another "student" wrote, "The course meanings are transacted for the class input can alter meanings. Also the meanings come from us; they can't be fixed." A "student" who had indicated that course meanings were fixed explained, "Our goals are fixed--must do six projects and five tests. But they have to be or else no one would do anything and we wouldn't learn." The fourth question was, "Is the process to be seen from the perspective of the sender (teacher) or the receiver (students)?" None of the "students" used the terms sender and receivers in their reply. All wrote in terms of teacher and students. While 52.9 percent of the "students" indicated that the class process was to be seen from the perspective of the "students," 41.1 percent said the process was to be seen from the perspective of both the instructor and the

students. One person said the process was to be seen from
the perspective of the teacher. "Student" comments included,
"The course is constructed from the perspective of both the
instructor and students since we are all allowed to share
what we think. One "student" explained why the terms "sender"
and "receivers" were not applicable. "In this class I don't
think the instructor can be labeled as the sender nor can
the students be labeled as the receivers. Because the
students and the instructor are both sender and receiver at
one time or another." The fifth question asked of the pro-
cess, "Is it purposive or non-purposive?" Whereas 17.6
percent of the "students" said the process in the course was
non-purposive; 47 percent indicated that purposes evolved
and 29.4 percent said the course process was purposive.
Comments included, "The purposes are set in advance, but
there's not a real feeling of rigidity. We know the topics
and possibilities, what's expected of us and where we are
going. But--the way we learn is never the same. Discus-
sions and class "debates" change constantly." Another
"student" replied, "No, not really. We are supposed to get
out of the course what we put in it. If you don't do your
work or read the material you won't get anything. We are
given all types of resources; we just have to use them right."
The last question was "Is the process system-linked or
system-free?" A 70.5 percent total of the "students" re-
plied that it was system-linked, while 23.5 percent responded

that it was less system-linked than other courses. One person answered that it was not system-linked. Comments included, "Linked--the course is required. You can't get by that fact. I wouldn't take it if I didn't have to. But I'm glad I'm taking it and I do enjoy it now. But it's still linked." One "student" wrote, "The process of this class is system-free. (We are required to take this class, but this course is ours, not the system's.)"

The investigator, in using McQuail's questions to access her model as well as to guide the further refinement of the model as it manifests itself in her teaching experience, strives for processes which are interactional rather than one-directional since this accords with the ontological and axiological groundings of her model. McQuail has described the interactional process orientation. "Each act of communication is a response to a prior one and open to modification. The participants are equal and interchangeable as communicators and receivers " (McQuail, 1975, 28). Furthermore, the investigator strives for an open process with meanings transacted in keeping with her projection of interactions in the model as well as her epistemological grounding, especially regarding its emphasis on persons as meaning creators. McQuail writes of transacted meanings:

> There is a relatively high tolerance for variable
> and subjective perception in these situations and
> the receiver of communication is understood to

> be structuring his own social world through his
> reception of communication. (McQuail, 1975, 29)

Regarding the perspective of the process, the investigator

desires that it be from the teacher as "certified learner"

and from the students as "learners" together. This accords

with her ontological and axiological orientations. McQuail

has observed, regarding perspectives, "To adopt one view

rather than the other is to give a biased account of the

communication process " (McQuail, 1975, 29), Considering

the question of purposive as contrasted to non-purposive

processes, the investigator will continually refine her

model toward a developing, evolving sense of purpose rather

than toward a pre-determined purpose or complete non-

purpose. The purposes evolve out of the assumptions ground-

ing her model as stated earlier, especially her emphasis on

the lived-in experience of "students" and her valuing them

as unique individuals capable of formulating their own goals

for learning. McQuail reminds his readers, "The same com-

munication process may be purposive for some of its receivers

and non-purposive for others " (McQuail, 1975, 30). Robert

Stake has spoken to the question of goals in a way that has

meaning for this dissertation in considering the question

of purpose:

> A truly representative list of educational goals
> will contain competing and even contradictory
> goals. Goals compete with each other. . . .
>   Some goals will be contradictory. We seek
> incompatible outcomes. We try to teach faith
> and skepticism. We try to instill deep

> appreciation, and yet provoke aspiration for some-
> thing better. We hope that any one teaching ef-
> fort will aid persons with different aims. . . .
> Evaluators should be alert to the fact that
> goals are changing. Our world changes. Our needs
> change. Our values change. Some of our goals
> change even as a function of what happens during
> instruction. . . . We will continue to aspire for
> goals beyond our reach. (Stake, 1969, 36-37)

Finally, looking at whether the process is system-linked or
system-free, the investigator asserts that it is system-
linked and that to assume otherwise would be politically
naive. However, with her emphasis on the importance of
education as a liberating experience, she acknowledges her
responsibility to work to influence the system in humane
directions even as she notes McQuail's caution that "the
two formulations are irreconcilable " (McQuail, 1975, 31).

Curriculum Theory as a Field of Study and Research Potentials

Curriculum theory, an emerging field as indicated in
Chapter III, has not been a primary focus of attention for
doctoral students in curriculum. A recent study compared
responses made in 1969 by curriculum practitioners and cur-
riculum professors about important areas to be studied in
doctoral work with data from curriculum practitioners who
had earned their doctorates during 1969 - 1975. The new
curriculum practitioners were asked about which areas of
study had been most emphasized in their programs. Although
70 percent of the curriculum professors listed curriculum
theory as being of great importance and 25 percent listed

it as being of moderate importance with only 5 percent list-
ing curriculum theory as relatively unimportant, doctoral
students in the period from 1969 - 1975 spent little of
their time on the topic. While 67.3 percent of the prac-
titioners in 1969 had listed curriculum theory as being of
great importance with 26.9 percent saying it was of moderate
importance, only 5.8 percent said curriculum theory was
relatively unimportant. However, only 19.3 percent of the
practitioners questioned in 1975 who had received their
degrees since 1969 indicated that curriculum theory had
received heavy emphasis in their program. Also, only 36.8
percent said curriculum theory had received moderate empha-
sis in their program. And 43.9 percent indicated that
curriculum theory had received limited or no emphasis in
their program. Organization and administration of public
schools had received heavy emphasis in the doctoral programs
of 59.6 percent of the 1975 practitioners. Also, 43.9 per-
cent said that supervision of instruction had received
heavy emphasis (Wood & Woods, 1978, 395-399). Apparently
curriculum practitioners are not receiving a strong ground-
ing in curriculum theory. Wood and Woods' work shows
further that little attention has been given in doctoral
programs to design of research studies in curriculum and
instruction with 55.8 percent of the recently graduated
practitioners responding that the topic received limited or
no emphasis in their program. Furthermore, 61.4 percent of

those practitioners stated that critique of research of curriculum and instruction received limited or no emphasis in their doctoral studies. (Wood & Woods, 1978, 396)

What kinds of questions should concern the person doing research in curriculum theory? Mann raises these as possibilities: first; concern with a situation, second; concern with a classroom context, third; concern with identifying optimal conditions for desired situational outcomes to emerge, fourth; concern with over-emphasis given to instructional objectives and technologies and fifth; concern because the phenomena do exist. (Mann, 1968, 211 - 212) Brophy, Biddle, and Good (1975) have made a case for moving more toward the analysis of what is actually happening in an educational situation being researched. They note that research has not tended to observe teachers and "students" in the context of on-going educational experiences. Instead they say emphasis has been on such things as curricular innovations, teachers' backgrounds and experiences and programs of teacher preparation. Also they point out that curriculum evaluation studies tend to do quick pre-and post-testing on "students" with little direct classroom observation and without focus on the individual classroom as a unit of study. For example they note, "Like teacher effectiveness research, the Coleman Report may also be faulted because it deals with input and outcome variables concerned with schools but not with the processes by which

education is accomplished in those schools " (Brophy,

Biddle and Good, 1975, 23). Zahorik has shown that teachers'

main focus in planning for instruction is neither specific

objectives for "students" to achieve nor activities in which

"students" should engage but rather content, "the range and

particulars of the subject matter of the lesson or unit to

be taught " (Zahorik, 1975, 138). Additional follow-up re-

search with large samples is needed. Nancy King's dis-

sertation emphasis on the daily social experience of a given

class of kindergarten children is an exemplar of the kinds

of empirical studies which should be done. Apple and King

explain:

> To understand the social reality of schooling it
> is necessary to study it in actual classroom
> settings. Each concept, role, and object is a
> social creation bound to the situation in which
> it is produced. The meanings of classroom inter-
> action cannot be assumed; they must be dis-
> covered. (Apple & King, 1977, 118)

Such research would be appropriate to evaluate A Process

Model for Curriculum Theorizing with participant observation

procedures utilized. Herbert Blumer observes in the intro-

duction to a book on participant observation as a research

methodology:

> The question of how to study human conduct and
> group life goes far beyond a problem of how to
> apply an established body of tested knowledge
> of scientific procedure. . . . The concept sig-
> nifies 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. (Bruyn, 1966, v - vi)

Bruyn explains that the method of participant observation implies a philosophic grounding on the part of the investigator:

> The researcher can no longer shrug off philosophical problems as 'unrelated' to his work in collecting human data. He must now resolve these contradictions by developing a systematic viewpoint of the phenomenon of man. (Bruyn, 1966, xvi)

Bruyn's axioms and their corollaries are compatible with the investigator's conception of how her model could be examined in an actual school setting over a period of time. The axioms and corollaries are as follows:

> Axiom 1: The participant observer shares in the life activities and sentiments of people in face-to-face relationships. Corollary: The role of the participant observer requires both detachment and personal involvement.
>
> Axiom 2: The participant observer is a normal part of the culture and the life of the people under observation. Corollary: The scientific role of the participant observer is interdependent with his social role in the culture of the observed.
>
> Axiom 3: The role of the participant observer reflects the social process of living in society. (Bruyn, 1966, 13-22)

Bruyn summarizes:

> Unlike the traditional empiricist, the participant observer must view a culture just as the people he is studying view it, including reflecting on the social process in which he is inwardly engaged. This means he sees goals and interests of people in the same way that the people see them, not as functions or experimental causes as would the traditional empiricist; it means that he sees people in the concrete reality in which they present themselves in daily experiences, not as abstractions as would

the traditional empiricist; it means he senses
that these people act freely within the scope of
what they see as possible, not as determined
agents of social forces as the traditional empiri-
cist would see them. (Bruyn, 1966, 22)

BIBLIOGRAPHY

Alston, William and Nakhnikian, George, eds. Readings in
    Twentieth-Century Philosophy. New York: The Free
    Press, 1963.

Apple, Michael. Commonsense Categories and Curriculum
    Thought. In J. Macdonald and E. Zaret (Eds.),
    Schools in Search of Meaning. Washington, D.C.:
    Association for Supervision and Curriculum Develop-
    ment, 1975 (a).

Apple, Michael. Scientific Interests and the Nature of
    Educational Institutions. In W. Pinar (Ed.),
    Curriculum Theorizing: The Reconceptualists.
    Berkeley, California: McCutchan, 1975 (b).

Apple, Michael. The Hidden Curriculum and the Nature of
    Conflict. In W. Pinar (Ed.), Curriculum Theorizing:
    The Reconceptualists. Berkeley, California:
    McCutchan, 1975 (c).

Apple, Michael and King, Nancy. What Do Schools Teach?
    In A. Molnar and J. Zahorik (Eds.), Curriculum Theory.
    Washington, D.C.: Association for Supervision and
    Curriculum Development, 1977.

Archambault, Reginald, ed. John Dewey on Education:
    Selected Writings. New York: Random House, 1964.

Barbour, Ian. Myths, Models and Paradigms. New York:
    Harper and Row, 1974.

Barnlund, Dean. Communication: The Context of Change.
    In C. Larson and F. Dance (Eds.), Perspectives on
    Communication. Milwaukee: University of Wisconsin
    Speech Communication Center, 1968.

Barton, George. Educational Objectives: Improvement of
    Curricular Theory About Their Determination. In
    R. Tyler and V. Herrick (Eds.), Proceedings of the
    University of Chicago Conference, Toward Improved
    Curriculum Theory. Chicago: University of Chicago
    Press, 1950.

Baudhuin, Scott. A General Semantics Systems Model of
    Communication. ETC, 1974, 31, 415-424.

Bayles, Ernest. Pragmatism in Education. New York:
    Harper and Row, 1966.

Beauchamp, George. Curriculum Theory. Wilmette, Illinois:
    Kagg Press, 1968.

Belth, Marc. The Process of Thinking. New York: David
    McKay Co., 1977.

Bennett, Lerone. Frontpiece in Ladner, Joyce. The Death of
    White Sociology. New York: Random House, 1973.

Berger, Peter and Luckman, Thomas. The Social Construction
    of Reality. New York: Doubleday, 1966.

Birdwhistell, Ray. Certain Considerations in the Concepts
    of Culture and Communication. In C. Larson and
    F. Dance (Eds.), Perspectives on Communication.
    Milwaukee: University of Wisconsin, 1968.

Blanshard, Brand. Coherence as the Nature of Truth. In
    Y. Pai and J. Myers (Eds.), Philosophic Problems and
    Education. Philadelphia: J. B. Lippincott, 1967.

Bloom, Benjamin and Krathwohl, David. Taxonomy of Educa-
    tional Objectives: Handbook I, The Cognitive Domain.
    New York: David McKay Co., 1956.

Bloom, Benjamin and Krathwohl, David. Educational Objectives
    and Curriculum Development. In E. Fenton (Ed.),
    Teaching the New Social Studies: An Inductive Approach.
    New York: Holt, Rinehart and Winston, 1965.

Blumer, Herbert. Symbolic Interaction: An Approach to
    Human Communication. In R. Budd and B. Ruben (Eds.),
    Approaches to Human Communication. New York:
    Spartan Books, 1972.

Bobbitt, J. Franklin. The Elimination of Waste in Education.
    The Elementary School Teacher, 1912, 12, 260-269.

Bobbitt, J. Franklin. The Curriculum. Boston: Houghton
    Mifflin, 1918.

Bodine, Ann. Androcentrism in Prescriptive Grammar:
    Singular 'they,' sex-indefinite 'he,' and 'he or she.'
    Language in Society, 1975, 4, 129-146.

Bois, J. Samuel. Explorations in Awareness. New York: Harper and Row, 1957.

Bois, J. Samuel. Korzybski's Living Logic. ETC, 1975, 32, 165-168.

Brameld, Theodore. Patterns of Educational Philosophy. New York: Holt, Rinehart and Winston, 1971.

Brophy, Jere; Biddle, Bruce; and Good, Thomas. Teachers Make a Difference. New York: Holt, Rinehart and Winston, 1975.

Bross, Irwin. Design for Decision. New York: Macmillan, 1953.

Broudy, Eric. The Trouble With Textbooks. Teachers College Record, 1975, 77, 13-34.

Broudy, Harry; Smith, B. O.; and Burnett, Joseph. Democracy and Excellency in American Secondary Education. Chicago: Rand McNally, 1964.

Browning, Douglas, ed. Philosophers of Process. New York: Random House, 1965.

Brubacher, John. The Theory of Knowledge and Education. In Y. Pai and J. Myers (Eds.), Philosophic Problems and Education. Philadelphia: J. B. Lippincott, 1967.

Brubaker, Dale. Secondary Social Studies for the 70's: Planning for Instruction. New York: Crowell Company, 1973.

Brubaker, Dale. Creative Leadership in Elementary Schools. Dubuque, Iowa: Kendall Hunt Publishing Co., 1976.

Brubaker, Dale and Nelson, Roland. Introduction to Educational Decision Making. Dubuque, Iowa: Kendall Hunt, 1972.

Brubaker, Dale and Nelson, Roland. Creative Survival in Educational Bureaucracies. Berkeley, California: McCutchan, 1974.

Bruner, Jerome. The Process of Education. Cambridge: Harvard University Press, 1960.

Bruner, Jerome. Toward a Theory of Instruction. Cambridge: Harvard University Press, 1966.

Bruyn, Severyn. The Human Perspective in Sociology: The Methodology of Participant Observation. Englewood Cliffs, New Jersey: Prentice Hall, 1966.

Burling, Robbins. Man's Many Voices. New York: Holt, Rinehart and Winston, 1970.

Caswell, Hollis and Campbell, Doak. Curriculum Development. New York: American Book Company, 1935.

Chapanis, Alphonse. Men, Machines and Models. American Psychologist, 1961, 16, 113 - 131.

Chomsky, Noam. Reflections on Language. New York: Pantheon Books, 1975.

Cleary, Beverly. Ramona the Brave. New York: William Morrow and Co., 1975.

Counts, George. Dare the Schools Build a New Social Order? New York: John Day, 1932.

Daly, Mary. Beyond God the Father. Boston: Beacon, 1973.

DeLoria, Vine. God Is Red. New York: Dell Publishing Co., 1973.

Dewey, John. The School and Society. Chicago: University of Chicago Press, 1915.

Dewey, John. Experience and Nature. New York: Dover, 1929.

Dewey, John. How We Think. New York: D. C. Heath, 1933.

Dewey, John. Experience and Education. New York: Collier Books, 1938.

Dewey, John. Democracy and Education. New York: The Free Press, 1944.

Dewey, John. The Child and the Curriculum. In R.
    Archambault (Ed.), John Dewey on Education: Selected
    Writings. New York: Random House, 1964.

Dewey, John. Existence as Precarious and as Stable. In
    D. Browning (Ed.), Philosophers of Process. New York:
    Random House, 1965 (a).

Dewey, John. Time and Individuality. In D. Browning (Ed.),
    Philosophers of Process. New York: Random House,
    1965, (b).

Diamond, Stanley. In Search of the Primitive: A Critique
    of Civilization. New Jersey: Transaction Books, 1974.

Dunkel, Harold. Whitehead on Education. Columbus, Ohio:
    Ohio State University Press, 1965.

Fanon, Frantz. Black Skin, White Masks. New York:
    Grove Press, 1967.

Fraley, Angela. "Curriculum Classics: An Effort Toward
    Consensus." Mimeographed, Columbia Teachers College,
    1976.

Freire, Paulo. Pedagogy of the Oppressed. Translated by
    Myra Ramos. New York: Herder and Herder, 1971.

Freire, Paulo. Education for Critical Consciousness.
    Translated by Myra Ramos. New York: Seabury Publi-
    cations, 1973.

Garfinkel, Harold. Studies in Ethnomethodology. Englewood
    Cliffs, New Jersey: Prentice Hall, 1967.

George F. H. Semantics. London: The English Universi-
    ties Press, 1964.

Giorgi, Amedeo. Psychology as a Human Science: A
    Phenomenologically Based Approach. New York: Harper
    and Row, 1970.

Goldman, Peter. The Death and Life of Malcolm X. New York:
    Harper and Row, 1973.

Goodland, John; Stoephasius, Renata von; and Klein, M.
    Frances. The Changing School Curriculum. New York:
    Fund for the Advancement of Education, 1966.

Goody, Jack and Watt, I. The Consequences of Literacy.
    In P. Giglioli (Ed.), Language and Social Context.
    London: Penguin Books, 1972.

Gorman, Margaret Mary. The Educational Implications of the
    Theory of Meaning and Symbolism of General Semantics.
    Dissertation, The Catholic University of America, 1958.

Gould, Richard, ed. Man's Many Ways. New York: Harper and
    Row, 1973.

Gouldner, Alvin. The Coming Crisis of Western Sociology.
    New York: Basic Books, 1970.

Hall, Edward. The Silent Language. New York: Doubleday,1959.

Hall, Edward. Beyond Culture. New York: Doubleday, 1976.

Hayakawa, Samuel I., ed. The Use and Misuse of Language.
    Greenwich, Connecticut: Fawcett, 1962.

Hayakawa, Samuel I. Language in Thought and Action. 3rd
    edition, New York: Harcourt Brace Jovanovich, 1972.

Harris, William T. My Pedagogical Creed. The School
    Journal, 1897, 43, 813.

Harris, William T. Psychologic Foundations of Education.
    New York: Appleton, 1898.

Hedley, W. Eugene. Freedom, Inquiry and Language. Scranton,
    Pennsylvania: International Textbook Company, 1968.

Henle, Paul. Language, Thought and Culture. Ann Arbor,
    Michigan: The University of Michigan Press, 1965.

Henry, Jules. Attitude Organization in Elementary School
    Classrooms. In S. Fishman, A. Kazamias and H. Kliebard
    (Eds.), Teacher, Student and Society: Perspectives on
    Education. Boston: Little, Brown and Company, 1974.

Herrick, Virgil. The Concept of Curriculum Design. In
    R. Tyler and V. Herrick (Eds.), Proceedings of the
    University of Chicago Conference, Toward Improved
    Curriculum Theory. Chicago: University of Chicago
    Press, 1950.

Himmelman, Frank, ed. Process for Curriculum Change.
    Madison, Wisconsin: Wisconsin Department of Public
    Instruction, 1966.

Hopkins, Thomas. Interaction: The Democratic Process.
     Boston: D. C. Heath and Co., 1941.

Huebner, Dwayne. The Leadership Role in Curriculum Change.
     In F. Himmelman (Ed.), Process for Curriculum Change.
     Madison, Wisconsin: Wisconsin Department of Public
     Instruction, 1966.

Huebner, Dwayne. Toward a Remaking of Curricular Language.
     In W. Pinar (Ed.), Heightened Consciousness, Cultural
     Revolution and Curriculum Theory. Berkeley, California:
     McCutchan, 1974.

Huebner, Dwayne. Curricular Language and Classroom Meanings.
     In W. Pinar (Ed.), Curriculum Theorizing: The Re-
     conceptualists. Berkeley, California: McCutchan,
     1975 (a).

Huebner, Dwayne. Curriculum as Concern for Man's Temporality.
     In W. Pinar (Ed.), Curriculum Theorizing: The Re-
     conceptualists. Berkeley, California: McCutchan,
     1975 (b).

Huebner, Dwayne. Poetry and Power: The Politics of Cur-
     ricular Development. In W. Pinar (Ed.), Curriculum
     Theorizing: The Reconceptualists. Berkeley, California:
     McCutchan, 1975 (c).

Huebner, Dwayne. The Contradiction Between the Recreative
     and the Established. In J. Macdonald and E. Zaret
     (Eds.), Schools in Search of Meaning. Washington, D.C.:
     Association for Supervision and Curriculum Development,
     1975 (d).

Huebner, Dwayne. The Tasks of the Curricular Theorist. In
     W. Pinar (Ed.), Curriculum Theorizing: The Reconceptu-
     alists. Berkeley, California: McCutchan, 1975 (e).

Huebner, Dwayne. Toward a Political Economy of Curriculum
     and Human Development. In A. Molnar and J. Zahorik
     (Eds.), Curriculum Theory. Washington, D.C.:
     Association for Supervision and Curriculum Development,
     1977.

Jackson, Philip. Life in Classrooms. New York: Holt,
     Rinehart and Winston, 1968.

Jenkins, William. Reaction to: The Leadership Role in
     Curriculum Change. In F. Himmelman (Ed.), Process for
     Curriculum Change. Madison, Wisconsin: Wisconsin
     Department of Public Instruction, 1966.

Johnson, A. B. The Individuality of Things and the Generality of Language. In I. Lee (Ed.), The Language of Wisdom and Folly. San Francisco: International Society for General Semantics, 1949.

Johnson, Mauritz. Definitions and Models in Curriculum Theory. Education Theory, 1967, 17, 127-140.

Joyce, Bruce and Weil, Marsha. Models of Teaching. Englewood Cliffs, New Jersey: Prentice Hall, 1972

Kaufmann, Walter. Existentialism from Dostoevsky to Sartre. New York: New American Library, 1975.

King, Nancy. The Hidden Curriculum and the Socialization of Kindergarten Children. Dissertation, The University of Wisconsin, 1976.

Kliebard, Herbert. Bureaucracy and Curriculum Theory. In W. Pinar (Ed.), Curriculum Theorizing: The Reconceptualists. Berkeley, California: McCutchan, 1975 (a).

Kliebard, Herbert. Persistent Curriculum Issues in Historical Perspective. In W. Pinar (Ed.), Curriculum Theorizing: The Reconceptualists. Berkeley, California: McCutchan, 1975 (b).

Kliebard, Herbert. Reappraisal: The Tyler Rationale. In W. Pinar (Ed.), Curriculum Theorizing: The Reconceptualists. Berkeley, California: McCutchan, 1975 (c).

Kneller, George, ed. Foundations of Education. 3rd edition. New York: John Wiley and Sons, 1963.

Korzybski, Alfred. Selections From Science and Sanity. Lakeville, Connecticut: The International Non-Aristotelian Library Publishing Company, 1948.

Krug, Edward. Whose Anti-Intellectualism Should We Be Against? Teachers College Record, 1966, 67, 402-408.

Kuhn, Thomas. The Structure of Scientific Revolutions. Chicago: The University of Chicago Press, 1962.

Kurman, Paula. Research: An Aerial View. ETC, 1977, 34, 265-276.

Ladner, Joyce. The Death of White Sociology. New York: Random House, 1973.

Lee, Dorothy. Freedom and Culture. Englewood Cliffs, New Jersey: Prentice Hall, 1959.

Lee, Irving J. Language Habits in Human Affairs. New York: Harper and Row, 1941.

Lee, Irving, ed. The Language of Wisdom and Folly. New York: Harper, 1949.

Levi-Strauss, Claude. The Savage Mind. Chicago: The University of Chicago Press, 1966.

Linden, Eugene. Apes, Men, and Language. New York: Dutton, 1975.

Lione, Louise Hickman. "Now N. C. Kids Try Plege to Phlag." Charlotte Observer, 8 October 1977, p. 1.

Macdonald, James. Structures in Curriculum. In F. Himmelman (Ed.), Process for Curriculum Change. Madison, Wisconsin: Wisconsin Department of Public Instruction, 1966.

Macdonald, James. A Curriculum Rationale. In E. Short and G. Marconnit (Eds.), Contemporary Thought on Public School Curriculum. Dubuque, Iowa: Wm. C. Brown, 1968.

Macdonald, James. Curriculum and Human Interests. In W. Pinar (Ed.), Curriculum Theorizing: The Reconceptualists. Berkeley, California: McCutchan, 1975 (a).

Macdonald, James. Curriculum Theory. In W. Pinar (Ed.), Curriculum Theorizing: The Reconceptualists. Berkeley, California: McCutchan, 1975 (b).

Macdonald, James. The Quality of Everyday Life in School. In J. Macdonald and E. Zaret (Eds.), Schools in Search of Meaning. Washington, D.C.: Association for Supervision and Curriculum Development, 1975 (c).

Macdonald, James. Value Bases and Issues for Curriculum. In A. Molnar and J. Zahorik (Eds.), Curriculum Theory. Washington, D.C.: Association for Supervision and Curriculum Development, 1977.

Macdonald, James. "An Example of Disciplined Curriculum Thinking." Mimeographed, University of North Carolina at Greensboro, 1978, 9 pp.

Macdonald, James and Leeper, Robert, eds. Language and Meaning. Washington, D.C.: Association for Supervision and Curriculum Development, 1966.

Macdonald, James; Wolfson, Bernice; and Zaret, Esther. Reschooling Society: A Conceptual Model. Washington, D.C.: Association for Supervision and Curriculum Development, 1974.

Macdonald, James and Zaret, Esther, eds. Schools in Search of Meaning. Washington, D.C.: The Association for Supervision and Curriculum Development, 1975.

McQuail, Denis. Communication. New York: Longman, 1975.

Mann, John Steven. Functions of Curriculum Research. In E. Short and G. Marconnit (Eds.), Contemporary Thought on Public School Curriculum. Dubuque, Iowa: Wm. C. Brown, 1968.

Mann, John Steven. A Discipline of Curriculum Theory. In W. Pinar (Ed.), Curriculum Theorizing: The Reconceptualists. Berkeley, California: McCutchan, 1975 (a).

Mann, John Steven. Curriculum Criticism. In W. Pinar (Ed.), Curriculum Theorizing: The Reconceptualists. Berkeley, California: McCutchan, 1975 (b).

March, James. "Model Bias in Social Action." Mimeographed, Stanford University, 1977, 15 pp.

Marsh, Richard. Limiting Structures of Language and Culture. In M. Morain (Ed.), Teaching General Semantics. San Francisco: International Society for General Semantics, 1969.

Matson, Floyd. The Broken Image: Man, Science and Society. New York: George Braziller, 1964.

Matson, Floyd and Montagu, Ashley, eds. The Human Dialogue: Perspectives on Communication. New York: The Free Press, 1967.

Mead, George Herbert. The Present as the Locus of Reality. In D. Browning (Ed.), Philosophers of Process. New York: Random House, 1965.

Mehan, Hugh and Wood, Houston. The Reality of Ethno-methodology. New York: John Wiley, 1975.

Meredith, Patrick. The Structure of Communication. In L.
    Thayer (Ed.), Communication: General Semantics Per-
    spectives. New York: Spartan Books, 1970.

Molnar, Alex and Zahorik, John, eds. Curriculum Theory.
    Washington, D.C.: Association for Supervision and
    Curriculum Development, 1977.

Morain, Mary, ed. Teaching General Semantics. San Francisco:
    International Society for General Semantics, 1969.

Moran, Terence. The Language of Education. In T. Moran,
    N. Postman and C. Weingartner (Eds.), Language in
    America: A Report on Our Deteriorating Semantic
    Environment. Indianapolis, Indiana: Pegasus, 1969.

Morris, Van Cleve. Modern Movements in Educational
    Philosophy. Boston: Houghton Mifflin, 1969.

Pai, Young, and Myers, Joseph T., eds. Philosophic Problems
    and Education. Philadelphia: J. B. Lippincott, 1967.

Parker, J. Cecil and Rubin, Louis. Process as Content:
    Curriculum Design and the Application of Knowledge.
    Chicago: Rand McNally, 1966.

Pears, David. What Is Knowledge? New York: Harper and Row,
    1971.

Pepper, Stephen. World Hypotheses. Berkeley, California:
    The University of California Press, 1970.

Phenix, Philip. Realms of Meaning. New York: McGraw Hill,
    1964.

Phenix, Philip. Transcendence and the Curriculum. In W.
    Pinar (Ed.), Curriculum Theorizing: The Reconceptualists.
    Berkeley, California: McCutchan, 1975.

Piaget, Jean. Genetic Epistemology. Translated by Eleanor
    Duckworth. New York: Columbia University Press, 1970.

Pinar, William, ed. Heightened Consciousness, Cultural
    Revolution and Curriculum Theory. Berkeley, California:
    McCutchan, 1974.

Pinar, William, ed. Curriculum Theorizing: The Reconceptual-
    ists. Berkeley, California: McCutchan, 1975.

Pirsig, Robert. Zen and the Art of Motorcycle Maintenance:
    An Inquiry Into Values. New York: William Morrow, 1974.

Polanyi, Michael. The Tacit Dimension. New York: Doubleday and Company, 1966.

Postman, Neil and Weingartner, Charles. Teaching As A Subversive Activity. New York: Dell Publishing Co., 1969.

Powers, Sandra and Mamola, Claire. "Are He, His, Him Truly Generic Forms?" Paper presented at the Southeastern Conference on Linguistics, XVII, Washington, D.C., November 1977, 28 pp.

Purpel, David. "Supervision and Curriculum: Improvements for Transition." An Address to the Association for Supervision and Curriculum Development Conference, March 18, 1973, 19 pp.

Purpel, David and Belanger, Maurice, eds. Curriculum and the Cultural Revolution. Berkeley, California: McCutchan, 1972.

Quigley, Carroll. Needed: A Revolution in Thinking. In S. Dropkin, H. Full and E. Schwarcz (Eds.), Contemporary American Education, 3rd ed. New York: Macmillan, 1975.

Ramsey, Ian. Models and Mystery. London: Oxford University Press, 1964.

Richards, Mary Caroline. Centering. Middletown, Connecticut: Wesleyan University Press, 1962.

Rippey, Robert, ed. Studies in Transactional Evaluation. Berkeley, California: McCutchan, 1973.

Ryans, David. A Model of Instruction Based on Information System Concepts. In J. Macdonald and R. Leeper (Eds.), Theories of Instruction. Washington, D.C.: Association for Supervision and Curriculum Development, 1965.

Sarason, Seymour. The Culture of the School and the Problem of Change. Boston: Allyn and Bacon, 1971.

Sarason, Seymour. The Creation of Settings and the Future Societies. San Francisco: Jossey-Bass, 1972.

Sarason, Seymour and others. Human Services and Resource Networks. San Francisco: Jossey-Bass, 1977.

Saylor, J. Galen and Alexander, William. Planning Curriculum for Schools. New York: Holt, Rinehart and Winston, 1974.

Scheffler, Israel. The Language of Education. Springfield, Illinois: Charles C. Thomas, 1960.

Scheffler, Israel. Conditions of Knowledge. Glenview, Illinois: Scott Foresman, 1965.

Schwab, Joseph. The Concept of the Structure of a Discipline. Educational Record, 1962, XLIII, 197-205.

Schwab, Joseph. The Practical: A Language for Curriculum. In D. Purpel and M. Belanger (Eds.), Curriculum and the Cultural Revolution. Berkeley, California: McCutchan, 1972.

Sergiovanni, Thomas. "The Odyssey of Organizational Theory in Education: Implications for Humanizing Education." Phi Delta Kappa Research Symposium, January 1976. 42 pp.

Sergiovanni, Thomas and Starratt, Robert. Emerging Patterns of Supervision: Human Perspectives. New York: McGraw Hill, 1971.

Shaw, Francine. Congruence. In W. Pinar (Ed.), Curriculum Theorizing: The Reconceptualists. Berkeley, California: McCutchan, 1975.

Short, Edmund and Marconnit, George, eds. Contemporary Thought on Public School Curriculum. Dubuque, Iowa: Wm. C. Brown, 1968.

Smith, B. Othanel. Social Perspective as the Basic Orientation of the Curriculum. In R. Tyler and V. Herrick (Eds.), Proceedings of the University of Chicago Conference, Toward Improved Curriculum Theory. Chicago: University of Chicago Press, 1950.

Smith, B. Othanel; Stanley, William O.; and Shores, J. Harlan. Fundamentals of Curriculum Development. Yonkers-on-Hudson: World Book Co., 1950.

Smith, David. Communication Research and the Idea of Process. Speech Monographs, 1972, 39, 174-182.

Spradley, James and McCurdy, David, eds. Conformity and Conflict. Boston: Little Brown and Co., 1971.

Stake, Robert. The Countenance of Educational Evaluation. In E. Short and G. Marconnit (Eds.), Contemporary Thought on Public School Curriculum. Dubuque, Iowa: Wm. C. Brown, 1968.

Stake, Robert. Language, Rationality and Assessment. In W. Beatty (Ed.), Improving Educational Assessment and An Inventory of Measures of Affective Behavior. Washington, D.C.: Association for Supervision and Curriculum Development, 1969.

Stake, Robert, ed. Evaluating the Arts in Education: A Responsive Approach. Columbus, Ohio: Charles E. Merrill, 1975.

Stratemeyer, Florience; Forkner, Hamden; and McKim, Margaret. Developing a Curriculum for Modern Living. New York: Columbia University Press, 1947.

Taba, Hilda. Curriculum Development: Theory and Practice. New York: Harcourt, Brace and World, 1962.

Taylor, Frederick W. The Principles of Scientific Management. New York: Harper, 1911.

Thayer, Lee, ed. Communication: General Semantics Perspectives. New York: Spartan Books, 1970.

Toch, Hans and MacLean Malcolm. Perception and Communication: A Transactional View. Audio Visual Communication Review, 1967, 10, 55-77.

Tyler, Louise. A Selected Guide to Curriculum Literature: An Annotated Bibliography. Washington, D.C.: National Education Association, 1970.

Tyler, Ralph. Basic Principles of Curriculum and Instruction. Chicago: University of Chicago Press, 1949.

Tyler, Ralph and Herrick, Virgil, eds. Proceedings of the University of Chicago Conference, Toward Improved Curriculum Theory. Chicago: University of Chicago Press, 1950.

Tyler, Stephen, ed. Cognitive Anthropology. New York: Holt, Rinehart and Winston, 1969.

Weller, Richard, ed. Humanistic Education: Visions and Realities. Berkeley, California: McCutchan, 1977.

Whitehead, Alfred North. The Aims of Education. New York: The Free Press, 1967.

Whorf, Benjamin Lee. Language, Thought, and Reality. Edited by John B. Carroll. Cambridge, Massachusetts: M.I.T. Press, 1956.

Wilson, L. Craig; Shapiro, Arthur; Byar, T. Madison and
    Schell, Shirley. Sociology of Supervision. Boston:
    Allyn and Bacon, 1969.

Weintrout, Kenneth and Pratte, Richard. General Semantics:
    A Neglected Method in Philosophy of Education. ETC,
    1973, 30, 9-20.

Wolfson, Bernice. Reaction to: The Leadership Role in
    Curriculum Change. In F. Himmelman (Ed.), Process for
    Curriculum Change. Madison, Wisconsin: Wisconsin
    Department of Public Instruction, 1966.

Wolfson, Bernice. Pupil and Teacher Roles in Individualized
    Instruction. The Elementary School Journal, 1968,
    68, 357-366.

Wolfson, Bernice. A Phenomenological Perspective on
    Curriculum and Learning. In A. Molnar and J. Zahorik
    (Eds.), Curriculum Theory. Washington, D.C.:
    Association for Supervision and Curriculum Development,
    1977.

Wood, Fred and Woods, Bob. Areas of Emphasis in Doctoral
    Programs for Curriculum Practitioners Since 1969.
    Educational Leadership, 1978, 35, 395-399.

Zahorik, John. Teachers' Planning Models. Educational
    Leadership, 1975, 33, 134-139.

Zais, Robert. Curriculum Principles and Foundations.
    New York: Crowell, 1976.