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RHODES, PATRICK LAWSON

**BEHAVIORAL AND HUMANISTIC CURRICULUM MODELS: A DILEMMA-
RECONCILIATION APPROACH**

The University of North Carolina at Greensboro

Ed.D. 1981

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BEHAVIORAL AND HUMANISTIC CURRICULUM MODELS:
A DILEMMA-RECONCILIATION APPROACH

by

Patrick Lawson Rhodes

A Dissertation submitted to
the Faculty of the Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

Greensboro
1981

Approved by



Dissertation Adviser

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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RHODES, PATRICK LAWSON. Behavioral and Humanistic Curriculum models: A Dilemma Reconciliation Approach. (1981) Directed by: Dr. Dwight F. Clark, Jr. Pp. 138.

The purpose of this dissertation is to describe an emerging psychological synthesis and its relation to significant curricular dilemmas. It proposes that it is useful to treat curricular questions from a unified and broader perspective and to deal with the paradoxes that arise, rather than take a narrow and exclusive approach. It attempts to effect a tentative reconciliation between two apparently oppositional models of psychology and education, behaviorism and humanism.

This dilemma can be summed up as the recognition that both behavioral and humanistic models are useful and productive in their application to curricular processes. However, these models are usually represented as mutually exclusive and oppositional in their philosophies and operational realities. Thus, the question of which, if either, is the better approach poses a dilemma for curriculum workers.

This essay, justified, in part, by scholarly writings in education and psychology which deal with this dilemma, builds on earlier works in the same general area.

The procedures employed include source selection, the compilation and review of appropriate literature, explanation of approaches to reconciliation, and recommendations for research and action.

As a way to tying together this collection of literature, ten ideas about curriculum are proposed. This is an arbitrary number of ideas; however, they represent the combinations best summarizing the essence of the literature that provides assumptions for developing a model.

The collection of related literature aids in providing a base for the support of a reconciliation approach to behavioral and humanistic curriculum models. It is organized into two sections.

The first part, "Curriculum Conflict," is included to illustrate that the curriculum field consists of a diversity of conceptions and approaches. Unresolved problems that exacerbate conflict in the field are reviewed.

The second section, "Dilemma and Reconciliation," shows that there has been a clear split in the behavioral and humanistic approaches that are now emerging into a new synthesis.

Next, three approaches to reconciliation are explained and illustrated with figures. A synthesizing approach, a simultaneous approach, and a convergent approach are presented as a broad set of alternatives for conceptualizing the reconciliation of the behavioral-humanistic dilemma in curriculum and instruction and can be considered exploratory and tentative. They are not tied together in a model that is characterized as "comprehensive"; however, their complementarity is apparent.

Finally, it is suggested that the frameworks presented will be transcended eventually, and several new directions

for going beyond current frameworks are listed. Additionally, seven recommendations for action and research centering on the reconciliation of the behavioral-humanistic dilemma in curriculum and instruction are suggested, and a brief epilogue is presented.

ACKNOWLEDGMENTS

I would like to express my deepest appreciation to those persons who made significant contributions to the content of this essay or who otherwise aided me during its writing.

Johnna Ruth Elliott, whose love, affection, intellect, and companionship sustained me throughout this project.

Dwight F. Clark, Jr., whose expertise, leadership, accurate advice, encouragement, and affirmation of my freedom made it possible for me to pursue my own interests.

Dale L. Brubaker, whose warmth and editorial suggestions were vital contributions.

Donald J. Reichard, who has offered insightful analyses and a generous amount of his time.

P. Scott Lawrence, for stimulating and reinforcing my novel behaviors, in addition to recommending the appropriate psychological resources for this paper.

Juanita Lewis, for sharing her expertise in grammar and for typing the various drafts of the manuscript.

Robert Isenhour, Steve Janesick, David Millsaps, and Larry York for their helpful and timely suggestions.

Edwina Burruss Rhodes and George H. Rhodes for their encouragement and financial assistance.

Additionally, I would like to acknowledge the memory of a teacher which has been my inspiration. She was Doris Anne Higgins Lauten (1927-1973), an Assistant Professor at Guilford College who earned the degree of Doctor of Philosophy at the University of North Carolina at Greensboro in 1968.

TABLE OF CONTENTS

	Page
APPROVAL PAGE	ii
ACKNOWLEDGMENTS	iii
LIST OF FIGURES	vi
CHAPTER	
I. INTRODUCTION	1
My Personal Curriculum	1
Purpose	3
The Unity of All Things	4
Statement of the Dilemma	8
Justification	9
Procedures	10
Definitions	13
Summary	20
II. RELATED LITERATURE	23
Introduction	23
Curriculum Conflict	24
Dilemma and Reconciliation	65
Curriculum Ideas	108
III. TOWARD A RECONCILIATION	113
The Synthesizing Approach	114
The Simultaneous Approach	124
The Convergent Approach	126
Beyond Frameworks	129
Recommendations	131
Epilogue	134
BIBLIOGRAPHY	135

LIST OF FIGURES

Figure	Page
1. The Synthesizing Approach	117
2. The Simultaneous Approach	127
3. The Convergent Approach	130

CHAPTER I
INTRODUCTION

My Personal Curriculum

My personal curriculum is a part of a larger personal journey and consists of a collection of educational experiences that I find similar to Fisher's (1966) ideas. She wrote that the nature of one's personal understanding of the teaching-learning confrontation is a unifying center from which curriculum tends to be viewed as undivided. Part of my personal curriculum consists of my formal educational experiences, about which I will briefly comment.

I had not planned to pursue doctoral study in the field of curriculum and teaching; however, because of fortunate, and almost accidental, contact with certain professors and graduate students in the School of Education, I shifted my interests in the direction of this diverse and complex area of study. My personal curriculum includes a student career that spans three elementary schools, two middle schools, one high school, seven colleges and universities, and military training. I have come to see this personal curriculum as being remarkable for both its standardization and uniqueness. This paradox is understandable in view of the relative consistency of the curriculum in American schools, and the relative inconsistency of its effect on any one particular

person. From a personal point of view, I am certain that no one experiences the identical curriculum and that each of us has our own personal curriculum. As a result of running this course, I have developed interests in education, sociology, counseling, and psychology. Combining these academic interests with my concern with teaching makes my entry into curriculum discourse seem a natural capstone to my formal educational career.

I have begun to conceptualize curriculum and teaching as an interactive process between behavioral and humanistic models, and I admit that my conceptualizations are a function of my own personal curriculum and have been influenced strongly by the professors in my doctoral program.

I was influenced by a lecture presented by P. Scott Lawrence on June 26, 1979, which explored some of the issues in the behavioral-humanist dilemma. Lawrence asserted that there was little difference between the humanistic concern for "human understanding" and the behavioral concept of "prediction and control" and that the "active versus passive" argument is outdated. He asked if humanists really deal with the whole person, and if it is accurate to characterize behaviorists as "cold, isolated individuals." He questioned whether the objective approach detracts from subjective aesthetics and related that his objective understanding of rainbows as refractory phenomena does not diminish his subjective appreciation for them as beautiful events. He

pointed out the commonalities shared by behavioral and humanistic approaches, which include increasing freedom, teaching self-control, and opposing aversive control. That lecture, a part of my personal curriculum, stimulated me to explore the reconciliation of the behavioral-humanist dilemma.

This essay is part of my personal curriculum, and I recognize that its purpose emerges from those experiences.

Purpose

The purpose of this dissertation is to explain an emerging psychological synthesis and its relation to significant curriculum dilemmas. This essay is, in a sense, a philosophical dissertation, focusing on a philosophy as it is operationalized in two models of psychology. Two approaches to psychology, behaviorism and humanism, are important antecedents and correlates of curriculum processes and can be related. Numerous paradoxes emerge in this relationship and will be viewed as dilemmas to be reconciled rather than as problems to be solved. This reconciliation could be effected within several different approaches to philosophy and psychology, and a reconciliation that takes into account all aspects of those different approaches and their interrelationships might be ideal. Such a comprehensive reconciliation may be a possibility some day; however, it is beyond the scope of this present essay. I

will focus on a segment of such a comprehensive reconciliation. My hope is that it will provide impetus in the direction of more comprehensive models, and I believe that they can, and more importantly should, be conceptualized to aid curriculum in becoming a more coherent, communicable, and potent force for educational practice.

The purpose of this study is to advocate the reconciliation of diverse and polar curricular approaches into a broader perspective. The purpose includes a review of the related literature, model generation, explication of approaches to reconciliation, and recommendations for action and research implied by a broader perspective.

The Unity of All Things

The caption on this section is borrowed from a chapter title in The Tao of Physics (Capra, 1975), which presents a reconciliation between Western science and Eastern mysticism. This reconciliation will not be relied on to provide a theoretical base for the present essay but rather to illustrate that a seemingly impossible task is, in fact, realizable. Capra writes that

The most important characteristic of the Eastern world view--one could almost say the essence of it--is the awareness of the unity and the mutual interrelation of all things and events, the experience of all phenomena in the world as manifestations of a basic oneness. All things are seen as interdependent and inseparable parts of this cosmic whole; as different manifestations of the same ultimate reality. The Eastern traditions

constantly refer to this ultimate, indivisible reality which manifests itself in all things, and of which all things are parts. It is called Brahman in Hinduism, Dharmakaya in Buddhism, Tao in Taoism. Because it transcends all concepts and categories, Buddhists also call it Tathata, or Suchness. (p. 117)

Capra continues by pointing out the similarity of this perspective to the views of modern physics:

The basic oneness of the universe is not only the central characteristic of the mystical experience, but it is also one of the most important revelations of modern physics. It becomes apparent at the atomic level and manifests itself more and more as one penetrates deeper into matter, down into the realm of subatomic particles. The unity of all things and events will be a recurring theme throughout our comparison of modern physics and Eastern philosophy. As we study the various models of subatomic physics we shall see that they express again and again, in different ways, the same insight--that the constituents of matter and the basic phenomena involving them are all interconnected, interrelated and interdependent; that they cannot be understood as isolated entities, but only as integrated parts of the whole. (p. 118)

Clark Kerr (1972) said that a major task facing what he terms the "City of Intellect," or the university community, is to create a more unified intellectual world (p. 119). The focus of this unification is the drawing together of knowledge rather than its fragmentation. In a similar vein, Arthur Staats (1975) has taken a position against inter- and intra-disciplinary separatism and isolationism (p. 584). He states that we must strive for unification and principles that have general applicability to various concerns.

Noll (1980) has noted a lack of unity in curricular approaches, which he characterizes as polar approaches

emphasizing "basics" and "humanism." He writes that advocates of the basics movement in curriculum respond to "the widely perceived need for clarity and certainty. Most people believe that there are skills and knowledge which every person should have and which the schools should be responsible for teaching" (p. 35). However, Noll points out that within the field of curriculum

a movement fueled by humanistic psychology and the philosophical viewpoints of existential phenomenology has gained some momentum and offers specifications of a general view that stands for greater curricular emphasis on self-fulfillment, personal liberty, social justice, diversity, and pluralism. (p. 35)

He notes that the issues of freedom, control, and motivation within an educational context come from two major camps in educational psychology: the behaviorists and the humanists (p. 37).

The present essay will attempt to be additive in the drawing together of knowledge within the context of curriculum theory and practice. It is my intent to encourage dialogue rather than argument, and reconciliation rather than isolationism. That this dialogue can occur within the framework of curriculum theory and practice is evidenced by the present state of curriculum studies. It is a field with a thoughtful literature; however, it is a young field open to fresh conceptualizations and new insights. It will be said that curriculum theory, an area around which educational practice should center, has yet to become potent. If

curriculum theory is the foundation upon which educational practices are built, then it is reasonable to assert that its task is to become more influential than it is now. Further, it can be assumed that a reconciliation of significant positions in curriculum theory will increase its influence on educational practice.

Commenting on the scope of the curriculum field and conceptualizations of curriculum, Goodlad (1979) has written:

The problem of the practitioner is to gain perspective, to see connected things as related. The problem of the theoretician is to stay sufficiently close to practice to avoid assuming his own, probably preferred, world of action. It has been my belief that the prime criterion to be satisfied by an reasonably adequate conceptual system in the field of curriculum is that it would provide both perspective for the practitioner and portray practice for the theorist. I see it as a bridge between the conduct of practice and the effort to develop concepts and theories. (p. 19)

Curriculum theory and practice can be described as a constellation of diverse approaches and conceptualizations. From Ralph Tyler's behavioral objectives approach to David Purpel's humanistic ideas (Purpel, 1972), curriculum theory presents itself as a somewhat loose continuum of approaches with a variety of other conceptualizations in between. Additionally, the scope of curricular conceptualizations ranges from limited and specialized foci to all encompassing views.

This diversity in approaches and scope emerges from a common ground upon which all attempt to approach the same

collection of phenomena known as "curriculum." Although various positions may be described as oppositional polarities, they are all apparent polarities within the same context. That is not to assert that they are all describing the identical phenomenon, for there exists variation in the definition of "curriculum." However, there is agreement that "curriculum" is important enough to be considered a specialized field of study. Accordingly, the variation in curricular approaches has resulted in controversy, and this controversy will be the focus of this inquiry.

Statement of the Dilemma

The dilemma that this paper will review and attempt to reconcile is an apparent polarity in curricular thinking that has a parallel in therapeutic psychology. This dilemma is posed by the existence of two influential, either in practice or in the literature, curricular models: the allegedly "behavioral" approach and the so-called "humanistic" model. That this dilemma exists also in psychological thought, in a somewhat purer form, will be demonstrated. Both curricular models appear to be useful within an educational context, and both psychological models appear useful within a therapeutic context. However, these approaches seem to be oppositional in their underlying assumptions and operational realities. Thus, the question of which, if

either, is the better approach in terms of curriculum and teaching should be addressed.

Justification

This essay is justified and supported by scholarly literature in four related areas: psychology, general education, the doctoral dissertations in curriculum and instruction, and curriculum theory.

The psychological literature has treated the behaviorist-humanist split philosophically, as it relates to counseling and psychotherapy, and as it relates to learning. Hitt (1969), Gelso (1970), Saleebey (1975), Poppen, Wandersman & Wandersman (1976), Avila & Purkey (1977), and Krasner (1978) are among those making contributions in this area.

General education articles by Cohen & Hersh (1972), Duman (1973), Smith (1973), and Fitt (1976) have explored the meaning of the behavioral-humanist dilemma for educators. Although there seems to be an obvious connection to the psychological literature cited in the preceding paragraph, none of these articles are cited by the educationally oriented writers.

The doctoral literature in curriculum and instruction shows that a considerable amount of energy has been expended, both broadly and statistically, on conceptual or empirical studies in either behavioral or humanistic approaches to curriculum and education. However, with one exception, the

behavioral-humanist dilemma has not been addressed. Swaim (1973) wrote an exploratory dissertation, the title of which is B. F. Skinner and Carl Rogers on Behavior and Education. The abstract indicates that Swaim had limited success in achieving a reconciliation.

The fourth area of literature which justifies this study consists of the writings in curriculum which advocate improvement and new directions in curriculum theorizing especially in regard to relating theory to practice. Typical of these are works by Huebner (1976) and Goodlad (1979).

In short, these writings indicate an increased interest by curriculumists and other educators in the implications of both behavioral and humanistic models for educational practice. An accompanying confusion resulting from the conflicting claims and oppositional viewpoints of proponents of both models is also evident. The literature points to the fact that these models are, to some degree, reconcilable and that a contribution can be made by alleviating the confusion surrounding what appears to be a conflict.

Procedures

The procedures employed in this effort to accomplish the broad purpose include a selection of sources, the compilation and review of those sources, explication of approaches to reconciliation, and action and research recommendations.

A systematic search for sources considered likely to reveal literature related to this study was conducted. Dissertation indices and abstracts from 1861 to February 1981 (Dissertation Abstracts International) were examined to determine if the doctoral literature in curriculum and instruction justifies and supports this essay. It is noteworthy that the first dissertation identified in the indices as dealing with curriculum was written by Frank P. Bachman at Columbia University in 1902 and was entitled The Public Elementary School of England. A search of the Current Index to Journals in Education from 1971 to February 1981 for related literature under the headings of "behaviorism," "humanism," and curriculum related identifiers was carried out. The Psychological Abstracts from 1971 to March 1981 were scrutinized under the headings "behaviorism," "humanism," and identifiers related to history and philosophy of psychology. Bound volumes with the Library of Congress classification for curriculum (LB 1570) that were available in the university library were searched. Additionally, bibliographies from the sources selected yielded appropriate citations that, in some instances, predate those contained in the indices utilized in this study.

A somewhat unsystematic collection of sources was also pursued during the course of the literature search. Some sources were recommended by those familiar with this essay,

and others resulted from accidental discoveries or a subjective perception that they were congruent with the body of the systematically discovered sources.

The next procedure focused on a critical review of the literature in two areas. First, the literature relating to the split between and the reconciliation of behaviorism and humanism within a psychological context was examined. This literature shows that a split has existed and presents evidence that a reconciliation is a vital concern that is being addressed in the literature. Much of this literature can be considered from a broader perspective in psychology; however, it is seen that important contributions are being made from the applied areas of therapeutic psychology. Second, literature explicating dichotomous and also polar approaches in curriculum theory and practice was reviewed. This review demonstrates that there exists a parallel with the psychological literature that has significant implications for the curricular dilemma. This parallel may lead to a broader perspective within which the dilemma may be reconciled. That this curricular dilemma may be conceptualized as a behaviorist-humanist schism is demonstrated.

Sources supplementing the two major areas were also reviewed. These sources included literature from education and psychology as well as from other areas. The

compilation of the selected related literature in this paper is a procedure that may be a contribution in itself.

The approaches to reconciliation to be described in this essay focus on the explication of a creative reality implied by the two areas reviewed and, in turn, generate recommendations for action and research. The approaches described are not an attempt to propose a grand system, but rather are to interpret and draw together related concepts and to serve as a useful base from which curriculum may be conceptualized.

Definitions

Scheffler (1960) has proposed an analytic framework for definitions in education. He proposes three types of general definitions: "stipulative," "descriptive," and "programmatic."

Stipulative definitions are "to be understood in a special way for the space of some discourse or throughout several discourses of a certain type" (p. 13). Stipulative definitions are either "inventive" or "noninventive" depending on whether the term has such a prior usage.

Descriptive definitions may also contain discussion conventions; however, they also account for prior usage. "Every such definition is construable as a formula equating a defined term with other, defining, terms in a way that purports to mirror predefinitional usage" (p. 15).

Descriptive definitions do not have the arbitrary quality of stipulative definitions.

Programmatic definitions act as expressions of practical programs.

To propose a definition that now assigns such a term to some new thing may in context be a way of conveying that this new thing ought to be accorded the sort of practical treatment given to things hitherto referred to by the term in question. Similarly, to propose a definition that withholds such a term from an object to which it has hitherto applied may be a way of conveying that the object in question ought no longer be treated as the things referred to by the given term have been treated. Even if a definition is proposed that assigns the term just exactly to the objects to which it has hitherto applied and to no others, the point at stake may be to defend the propriety of the current practical orientation to such objects and to no others, rather than (or as well as) to mirror predefinitional usage. (p. 19)

A definition that does any of these three things is programmatic and embodies context as well as practical consequences in its usage.

Scheffler described educational slogans which he says are "unsystematic, less solemn in manner, more popular, to be repeated warmly or reassuringly rather than pondered gravely" (p. 36). He believes that educational slogans are rallying symbols for the key ideas and attitudes of educational movements rather than important figures in the explanation of educational theories. These slogans do not necessarily claim to facilitate communications or reflect meanings as do definitions, according to Scheffler.

Scheffler offered two definitions of the term curriculum which are employed in this study. One definition is that curriculum is "the school's formal course of study" (p. 26), and the other is that the curriculum "is defined as referring to the totality of experience of each learner under the influence of the school" (p. 23). Scheffler noted that this latter definition "has an intended consequence that no two pupils ever have the same curriculum and, further, that no two schools ever have the same curriculum, each school having as many curricula as it has pupils" (p. 23). The first definition may be construed as either descriptive or programmatic depending on the context. The second definition, he asserted, is programmatic; however, since he cited Frederick (1941) as a source of this definition, it is likely, since forty years have passed, that it is evolving into a descriptive definition. From the perspective of stipulative definitions, both definitions do, in effect, stipulate that the curriculum is the responsibility of the schools. There is an apparent overlapping of these two definitions, and it would seem that the first could be absorbed into the second. This study considers them separate and programmatic definitions which are useful in the examination of curricular questions.

This section will focus on the explanation of the general usage of "behaviorism" and "humanism," two terms central to the concepts in this paper. These stipulations

have usages that encompass numerous meanings, and concise but lucid definitions are not possible. In fact, one expert (Krasner, 1978) has written, "I will not attempt to define either term--it would be too difficult. Reading the ponderous literature on both sides only results in confusion" (p. 800). In an effort to avoid this confusion, a collection of balanced definitions from the literature is presented. Although it could be said that from Scheffler's viewpoint either term could be a descriptive definition, or even an educational slogan, their arbitrary quality classifies them as stipulative definitions in the noninnovative sense.

Hitt (1969) offered definitions of behaviorism and humanism which he asserted are the "heart of the argument" (p. 652). This writer defined the two positions by describing the assumptions held by behaviorists and humanists:

The behaviorist views man as a passive organism governed by external stimuli. Man can be manipulated through proper control of these stimuli. Moreover, the laws that govern men are essentially the same as the laws that govern all natural phenomena of the world; hence, it is assumed that the scientific method used by the physical scientist is equally appropriate to the study of man.

The humanist, on the other hand,

views man as the source of acts; he is free to choose in each situation. The essence of man is inside of man; he is controlled by his own consciousness. The most appropriate methodology for the study of man is phenomenology, which begins with the world of experience.

Poppen, Wandersman and Wandersman (1976) asserted that the breadth and diversity of humanistic and behavioral

approaches make it difficult to summarize the two positions as each is a variety of theories, assumptions, and techniques. These authors pointed out the commonalities inherent in each position as a means by which they may be defined. Behavioristic positions are characterized by the use of experimental evidence in systematic factual inquiry. "There is concern for objectivity, replication of results, and the use of a rigorous scientific method" (p. 4), in addition to a focus on the environment rather than inner causes as determinants of behavior. Commonalities in humanistic thought include an "insistence on a human model for a human psychology which is distinct from models which account for animal or mechanical behavior" (p. 5). In addition, humanists believe that human beings must be studied as conscious agents with feelings, ideals, and intentions which are important to the understanding of behavior. The authors added that "such a view of human beings has led to a concern with human growth, personal fulfillment, and self-actualization" (p. 5). These authors also clarified the often confused distinction between humanism and humanitarianism. They noted that

Humanitarianism refers to a concern for the interests of mankind, for instance, in solving human problems and relieving human suffering. In this way both behaviorism and humanism can be humanitarian, and in most instances are. But there is nothing about the two positions which logically requires a behaviorist or a humanist to be

humanitarian. Humanism refers to a focus on distinctively human interests, but this focus need not be humanitarian. This distinction is important because a number of claims for a combination of behaviorism and humanism are in actuality combinations of behaviorism and humanitarianism. (p. 5, fn)

Lefrancois (1979) defined these two terms. Behaviorism, he wrote,

denotes those theories that are concerned with the observables of behavior--that is, with the visible aspects of behavior: stimuli (that which leads to behavior) and responses (the behavior itself). The term was coined by J. B. Watson (1913) in his article "Psychology as the Behaviorist Views It." (p. 9)

Lefrancois also defined humanism and pointed out that

The term humanism is employed in psychology to describe an orientation that is primarily concerned with the humanity of people--with those characteristics of a person that are assumed to make us most human. Humanists deal largely with the affective (emotional) aspects of human behavior. They are interested in explaining our relationship to the world and to other people and in learning how an individual feels about things. The theory of Carl Rogers is one example of a humanistic position. (p. 9)

"Teaching" and "learning" are terms that will be used in this paper, and characteristic definitions from both behavioral and humanistic perspectives will be helpful. According to the behavioral literature, "teaching is simply the arrangement of contingencies of reinforcement" (Skinner, 1968, p. 5), and learning is a significant change in behavior (Skinner, 1968, p. 10). From the humanistic standpoint, teaching is the "facilitation of change and learning" through the "personal relationship between the facilitator

and the learner" (Rogers, 1969, pp. 104-106). A brief definition of learning from this same source is that it is "significant, meaningful, and experiential," involves self-discovery, and includes both "thoughts and feelings" (p. 4).

The present study describes model building, and Brubaker's (1978) definition of this process is employed. He has defined "model building" as

the process whereby one attempts to convey the essential features of a particular reality through a construct whose elements and their relationships to each other and the whole are described. The model can then lead to theories, experimental studies, and other forms of research. (p. 23)

Macdonald (1975) has also outlined a similar process for model building which has four elements: "basic intentions," "value assumptions," "the model," and "conclusions." The first element, basic intentions, specifies whether the model formulator's purposes are for "control," "understanding," or "liberation." The second part of the process is a specification of value assumptions about the "cosmos" and human nature. The model itself is presented next, and, "once constructed, must have boundaries, variables, and specify the relationships among the variables" (p. 35). The fourth part of the model will present conclusions including new insights and the practical applications of the model.

The term "behavioral objectives" are stipulated as being part of the larger behavioral model for the purposes of this essay. Difficulties arise from either the exclusion or

inclusion of behavioral objectives procedures from the behavioral model. This term could be stipulated as not being part of the behavioral model as it does not usually define contingencies as the behaviorist understands them. However, educational journals and indices treat this term as though it were part of the larger behavioral model, and numerous writers make the assumption that this is true. Since common usage appears to support the inclusion of "behavioral objectives" within the behavioral model, this essay will use the term "behavioral objectives" in that manner and will address the consequences for educational practice in so doing.

Summary

This essay emerges from the writer's own personal curriculum and asserts that one's personal understanding of the teaching-learning confrontation is a unifying center from which curriculum tends to be viewed as undivided. In this effort, curriculum and teaching are conceptualized as an interactive process between behavioral and humanistic models, although there is an awareness that there are other ways to view curriculum.

The purpose of this dissertation is to describe an emerging psychological synthesis and its relation to significant curricular dilemmas. It proposes that it is useful to treat curricular questions from a unified and broader

perspective and to deal with the paradoxes that arise, rather than take a narrow and exclusive approach. It attempts to effect a tentative reconciliation between two apparently oppositional models of psychology and education, behaviorism and humanism.

The dilemma that this paper deals with can be summed up as the recognition that both behavioral and humanistic models are useful and productive in their application to curricular processes. However, these models are usually represented as mutually exclusive and oppositional in their philosophies and operational realities. Thus, the question of which, if either, is the better approach poses a dilemma for curriculum workers.

This essay is justified, in part, by scholarly writings in education and psychology which deal with this dilemma. It builds on earlier works in the same general area. There has been only one effort on the dissertation level by doctoral students in curriculum, and this dissertation will attempt to make a contribution by filling that void.

The procedures employed include source selection, the compilation and review of appropriate literature, explication of model approaches to reconciliation, and recommendations for action and research. Every effort has been made to be objective and systematic while allowing for a subjective and unsystematic dimension to this essay.

Important terms that have been defined in the introduction include "curriculum," "behaviorism," "humanism," "humanitarianism," "teaching," "learning," "model building," and the relationship of "behavioral objectives" to the larger behavior model has been clarified. These definitions are for the purposes of this study, and it is recognized that other, equally valid definitions of the same terms exist.

CHAPTER II

RELATED LITERATURE

Introduction

This collection of related literature provides a base for the support of a reconciliation approach to behavioral and humanistic curriculum models. It is organized into two sections, the first focusing on general conceptions of curriculum, and the second dealing specifically with the reconciliation of the behaviorist-humanist dilemma.

The first part, "Curriculum Conflict," is included to illustrate that the curriculum field consists of a diversity of conceptions and approaches. Unresolved problems that exacerbate conflict in the field are reviewed.

The second section, "Dilemma and Reconciliation," shows that there was a clear split in the behavioral and humanistic approaches that is now emerging into a new synthesis. Literature closely related to this synthesis will also be included.

It should be noted that it is beyond the scope of this present essay to review the complete history of the curriculum field and all of the possible contemporary conceptions of curriculum. Similarly, all of the possible historical antecedents of the behavioral-humanist dilemma

will not be examined. It will show that the curriculum field is a rich mosaic that is sometimes confusing, and that a behavioral-humanist synthesis is being addressed in the literature.

Curriculum Conflict

This section reviews works that focus on the definition and history of curriculum, the diversity of curricular approaches, some significant issues, and some unresolved problems. Although the literature described is not intended to be a comprehensive account of the curriculum field to date, it reflects the conflict that appears to exist.

Cremin (1971) combined an historically reliable definition of curriculum with a conception of education that surpasses synonymy with "schooling" and then identified four perspectives that would immediately change. William Torey Harris's late nineteenth-century definition of curriculum was summarized by Cremin "as the accumulated wisdom of the race to be made available to individuals through a variety of institutions in a variety of modes" (p. 208). He then connected this definition with a conception of education as "the effort to define that wisdom in the large and then assist individuals in the business of sharing it more comprehensively, more economically, more self-consciously, and more critically" (p. 218). This approach would result in the change of perspective in four areas. First, the relationship

of teaching and learning in one institution with teaching and learning in another would need to be questioned. Second, the educative process would have to be conceptualized as radically individualized. Third, the diversity of curricula being defined and taught by a variety of groups would be acknowledged, and these groups would be subject to some form of public responsibility. Fourth, the interrelationships of curricula within a pluralistic societal context should be investigated in terms of definition, scope and variety.

Molnar and Zahorik (1977) presented a succinct account of the milestones in contemporary curriculum theorizing, as they see it. They traced the historical development of the curriculum field and identified several significant trends. Additionally, they commented on the present state of curriculum theorizing and made predictions as to future directions.

The authors specified that Franklin Bobbitt was the founder of curriculum as a specialized field at approximately 1918. His formulation of curriculum was intertwined with the industrial growth, increased immigration, rapid industrialization, and technological development that characterized post-World War I America. Bobbitt is said to be influenced by principles of "scientific" management in vogue during that period in the business and industrial communities, and his curricular approach was characterized by an attempt to adapt these principles to education.

Scientific management principles applied to education meant that the student was to be treated as raw material to be processed and transformed into a product. If schools were to become as efficient and effective as factories, waste in the curriculum needed to be eliminated. Just as jobs were analyzed in industry to discover their essential features, various life activities were analyzed so that they could be taught more efficiently in schools. This process resulted in the identification of numerous discrete skills and other learnings, and the emergence of specific, detailed objectives as the first and most important decision in curriculum development. (p. 2)

Bobbitt's ideas were carried on by Ralph Tyler in the 1930's who developed a curriculum planning model "the power and impact" of which "cannot be overstated," according to these authors. They have characterized it as an "ends-means model" with decisions about objectives being made prior to the decisions about means. One limitation of this model, the authors noted, is that it tends to perpetuate the status quo by not allowing for substantive changes. The authors charged that the model pioneered by Bobbitt and later Tyler has been extended by modern theorists including Taba, Goodland, Gagne, Glaser, and Popham and its substance has not been appreciably altered. They commented that "although over 50 years have passed since the emergence of the field of curriculum, Bobbitt could not quarrel with the direction curriculum development and theory have taken. His original view remains dominant today" (p. 4).

The authors pointed out that others, such as Dewey, had some small influence on curricular thinking. The notion that ends and means were integrated and dialectically related

never seriously challenged the Tylerian linear-sequential model in its impact in practice.

The authors stated their opinion that "scientism" has remained the predominant approach to curriculum work, especially in the area of curriculum planning. This conceptual schema is being subjected to increasing criticism, and new approaches to curriculum thinking are emerging. They cited James Macdonald's "helpful scheme for understanding the recent state of curriculum theorizing" which classifies curriculum theories into three interests or types:

(1) control, (2) hermeneutic, and (3) critical. "Control theories" have dominated curriculum thinking since the beginning. (Macdonald's scheme is detailed elsewhere in this paper.) The curriculum field is presently more diverse than ever before; a greater variety of substantive domains and curriculum interests exist today, and alternatives to control and rational decision-making curriculum models are numerous.

The authors indicated that the future of curriculum theorizing will see increased diversity and that divisions among curriculum positions will sharpen. They predicted that "the need for critical theory that treats perspective and practice dialectically will become more apparent" (p. 7), asserting that curriculum theorists will no longer reflexively react to the assumptions of control theory, but strike out in different directions.

Macdonald (1975) offered a framework within which curriculum theories may be conceptualized as one of three types: control, hermeneutic, or critical.

Control theories are described as a means through which "control interests" are translated into curriculum theories with a resulting acceptance of "instrumental reason or technological rationality as the modus operandi for approaching curriculum" (p. 1). These theories are intended to increase the efficiency and effectiveness of education and provide a "scientifically rational conceptualization of the relevant phenomena from which purposive rational, i.e., technical, actions may be generated" (p. 1). Macdonald identified Tyler's approach to curriculum, which is reviewed elsewhere in this paper, as the "exemplar" of control theories. He commented that the Tyler model may be operating in dual cycles: one at the curriculum level and the other at the instructional level, and pointed out criticisms of control theories:

Control is only one human interest and is not appropriate when taken in the form of a type of rationality and methodology developed in the sciences in relation to non-human objects and applied to human beings. Both scientific and technical approach mistake their efforts as being "value free" and thus cover up a fundamental aspect of curriculum and instruction, the definition and selection of values translated into goals. The control theories are embedded in a social structure in which they can only operate to facilitate a status quo which may well reduce our understanding of the human condition and facilitate the restriction of human freedom and the development of human potential. (p. 3)

The second type of theories, labeled "hermeneutic" by Macdonald, are characterized as "attempts to intentionally broaden our understanding through reinterpretation" (p. 3). Macdonald contrasted the methodology of the hermeneutic with that of the control approach:

Whereas the scientific approach calls for taking a rational grid and procedure from one set of phenomena and placing them over another (with variable adjustment), the hermeneutic methodology reflects a constant creative search for conceptual frameworks that will reveal through new interpretations a different perspective on the conditions we are concerned about. (p. 3)

Thus, hermeneutic theory is concerned with perspective rather than practice and may concern itself with such elements as curricular language systems, relationships, consciousness, and praxis. Hermeneutic theory takes an "objective" stance, but is deficient in practice. Macdonald noted that "its praxis seems not to impact the material and communal world" (p. 4).

Critical theory, the third type in Macdonald's scheme, "is an attempt to address both control and understanding, the sciences and humanities in a self reflective manner" (p. 4). Critical theory is concerned with both perspective and practice; however, its value orientation is toward human "emancipation" and its methodology is a "critical" reflection "only possible in the inter-relations of theory and praxis" (p. 4). Macdonald explained that:

A curriculum theory, as a critical theory would be predicated upon examining the basic propositions of

curriculum as socially and historically located social conventions. Further it would examine in detail the constraints placed upon the curriculum by the forming of social relations, rewards, and learning expectations in curriculum by economic and occupational interest structures, social class and power structure, and the use of language as distorted by work and power arrangements, as well as the form of the language itself. (p. 5)

Critical theory, then, moves curriculum theorizing toward a broader perspective.

Eisner and Vallance (1974) developed five "general orientations" to curriculum, saying that "writers on curriculum and makers of curriculum employ beliefs or values that are characterized by one or more of these five orientations" (p. 193). The categories are: "curriculum as the development of cognitive processes"; "curriculum as technology"; "self-actualization, or curriculum as consummatory experience"; "curriculum as social reconstruction-relevance," and "curriculum as academic rationalism."

"Curriculum as the development of cognitive processes" (p. 5) is described as focusing on the development of intellectual processes and cognitive skills. It is a process-oriented approach that emphasizes content-independent cognitive skills and the understanding of the dynamics of learning. Perceptual processes and the learner as an interactive and adaptive part of an open-ended growth-oriented system are central concerns of this orientation to curriculum.

"Curriculum as technology" (p. 7) conceptualizes the function of curriculum as developing efficient means to facilitate learning for predetermined ends. This approach is characterized by a process rather than a content orientation, and it rests on "stable" assumptions about the nature of learning. The assumptions include the views that learning can be seen as systematic, predictable, and controllable.

"Self-actualization, or the curriculum as consummatory experience" (p. 9) is a "value-saturated" approach which emphasizes purpose and integration on a personal level. The purpose of the curriculum is seen as providing self-actualizing or consummatory educational experiences for each learner. It is both content and process oriented, with a focus on the value assumptions underlying the content that is taught and with a process that emphasizes personal growth and liberation.

The "social reconstruction-relevance" orientation to curriculum focuses on the role of education within a societal context. There is an emphasis on social reform and future directions of society, and the schools are often seen as instruments for or against change. Eisner and Vallance pointed out that a basic assumption of this orientation is that the individual educational development and the larger social context are interdependent. This orientation includes those who advocate "technological adaptation" in education as

well as those who demand that schools actively serve as tools for social change.

The fifth orientation to curriculum, "academic rationalism," is described as the most "tradition-bound" of all, emphasizing the acquisition of great ideas and access to significant cultural products. Education is conceptualized as the transmission of classical culture in order to develop the individual learner's intelligence and sharpen his or her thought. The focus of the curriculum in this orientation is on the traditional disciplines, and the "practical" is often ignored, according to the authors.

Eisner and Vallance went on to comment that fallacies about formalism, content, and universalism are related to curriculum orientations. Briefly, it was the authors' opinion that neither process nor content should be considered paramount in approaches to curriculum and that no content area is universally important.

The five orientations that the authors presented do not directly reflect either a behavioral or humanistic viewpoint although it could be argued that each contains elements of one or the other, or both, to a greater or lesser extent. The authors stated that curriculum can be conceptualized in terms of psychological models, and stated their rationale for avoiding this approach:

Psychological models also differentiate between conceptualizations of schooling. Such differences can often be reduced to a disagreement as to the model of

learning presumed by each since any conceptualization of education reflects some assumptions as to how children learn--ranging from behavioral S-R models at one extreme to humanist or existential models at the other. But to specify a psychological continuum would be hazardous since psychology itself is at least as multidimensional as education and, furthermore, it is difficult to obtain agreement on the terminology. For these reasons we have chosen not to differentiate explicitly the writings in curriculum by the psychological models to which they implicitly refer. Nevertheless, it is clear that any comprehensive scheme of curriculum issues must be able to at least accommodate these differences; the orientations we have formulated seem to make such accommodation possible. (p. 4)

The articles reviewed demonstrate that curriculum can be conceptualized by differing classifications, definitions, and schemes. The purpose of this paper is to examine behavioral and humanistic approaches, what Eisner has termed "curriculum as technology" and "self-actualization, or curriculum as consummatory experience," respectively. It may be most appropriate to view these two as psychological models, although Macdonald's inventive scheme can be a useful method for gaining perspective. Macdonald's favorite target appears to be the writings of Ralph Tyler. The following is a description of the "Tyler Rationale" with some clarification of and reaction to his model.

Ralph Tyler (1949) developed a rationale that has been described as the dominant curriculum model in the United States. The Tyler Rationale is a curriculum-planning framework which is organized around four questions which appear to be best described as an ends-means or linear-sequential model. These 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? (p. 1)

An answer to the first question may be formulated by stating objectives. The sources for these objectives, according to Tyler, are studies of learners, studies of contemporary life outside the school setting, suggestions from subject specialists, the use of philosophy, and the use of a psychology of learning. He recommended that objectives should be stated in terms of changes to take place in students' behavior within the context of the content or area of life in which this behavior is to operate. He concluded that

It should be clear that a satisfactory formulation of objectives which indicates both the behavioral aspects and the content aspects provides clear specifications to indicate just what the educational job is. By defining those desired educational results as clearly as possible the curriculum-maker has the most useful set of criteria for selecting content, for suggesting learning activities, for deciding on the kind of teaching procedures to follow, in fact to carry on all the further steps of curriculum planning. We are devoting much time to the setting up and formulation of objectives because they are the most critical criteria for guiding all the other activities of the curriculum maker. (p. 62)

Tyler then discussed the second question and defined "learning experience" as "the interaction between the learner and the external conditions in the environment to which he

can react" (p. 63). He went on to state that learning takes place through the active behavior of the student and that the teacher's role is "the manipulation of the environment in such a way as to set up stimulating situations" (p. 64) that will elicit the desired behavior. The author suggested five general principles in selecting learning experiences: the student must have experiences that afford opportunity to practice the behavior implied by the objective; such behavior should be satisfying to the student; these experiences must be within the range of possibility; many experiences can be employed to attain the same objective; and the same learning experience will usually result in several outcomes. He pointed out that learning experiences include the development of thinking skills, acquiring information, developing social attitudes, and developing interests.

Tyler then addressed the third element of his model by arguing for the necessity of "organization." His view of learning is that it is cumulative and therefore "learning experiences must be put together to form some kind of coherent program" (p. 83) which necessitates the organization of learning experiences into units, courses, and programs. He wrote that there are three major criteria for effective curricular organization: continuity, sequence, and integration. "Continuity refers to the vertical reiteration of major curriculum elements" (p. 84), and sequence "emphasizes the importance of having each successive

experience build upon the preceding one but to go more broadly and deeply into matters involved" (p. 85) than continuity. "Integration," according to Tyler, "refers to the horizontal relationship of curriculum experiences" (p. 85). The horizontal relationship should serve to unify the learning experiences. It is important in this model to identify the elements which serve as "organizing threads" in a particular curricular design. These elements include basic concepts, values, and skills. Tyler went on to discuss some common organizing principles in the curriculum and cited chronological organization as an example. He pointed out that this type of organization may be appropriate for the study of history, but not for other areas. He wrote that other organizing principles include

increasing breadth of application, increasing range of activities included, the use of description followed by analysis, the development of specific illustrations followed by broader and broader principles to explain these illustrations, and the attempt to build an increasingly unified world picture from specific parts which are first built into larger and larger wholes. Since there are so many possible organizing principles, it is important that in working upon any particular curriculum possible principles of organization are examined and decisions made tentatively to be checked by actual tryout of the material to see how far these principles prove satisfactory in developing continuity, sequence, and integration. (p. 98)

Tyler added that there must be an "organizing structure" for the learning experiences and that structural elements exist at several levels. At the lowest level are found lessons, topics, and units which are organized at the intermediate

level into courses. Courses are organized on a higher level by subjects, broad fields, core curricula, and fourth structure, which Tyler described as "a completely undifferentiated structure in which the total program is treated as a unit" (p. 98). He suggested that the process of planning a unit of organization involves agreement on the general scheme of organization, the general organizing principles to be followed, and the lowest unit to be employed. In addition, he suggested the development of flexible plans for teachers and using "pupil-teacher planning."

Tyler asserted that the evaluation process, step four in his rationale, should be designed to determine how well the objectives in step one are being met.

It is only after the objectives have identified, clearly defined, and situations listed which give opportunity for the expression of the behavior desired that it is possible to examine available evaluation instruments to see how far they may serve the evaluation purposes desired. (p. 113)

He advocated the employment of paper-and-pencil tests, observation, and sampling procedures in evaluation, emphasizing the importance of pre- and posttesting and also recommending follow-up studies as appropriate evaluation elements. He stated that evaluation procedures should be objective, reliable, and valid and that such data would aid the teacher and the curriculum planners. He pointed out that planning is a continuous process and evaluation aids in

"replanning, redevelopment and then reappraisal" (p. 123) within the context of a continuing cycle.

Tyler has been accused of being rigid and prescriptive in his views, and it may be useful to cite several lines from his introduction to put his writing in perspective. He wrote about Basic Principles:

It is not a manual for curriculum construction since it does not describe and outline in detail the steps to be taken by a given school or college that seeks to build a curriculum. This book outlines one way of viewing an instructional program as a functioning instrument of education. The student is encouraged to examine other rationales and to develop his own conception of the elements and relationships involved in an effective curriculum. (p. 1)

There is a question as to whether Tyler can be labeled a "behaviorist," as Macdonald and others have so confidently asserted. The term "behavioral objectives" has been stipulated as part of the larger behavioral model for the purposes of this essay. So, by definition Tyler is a behaviorist. Support for this notion includes his deterministic orientation, his emphasis on behavior, and the specification of behavioral objectives. His view of learning is that it is environmental and cumulative, and he sees the teacher's major task as that of manipulating environmental variables. His orientation to evaluation seems congruent with behavioral procedures, and he cites E. L. Thorndike for support of his approach. Additionally, a number of curriculum workers have labeled him a

behaviorist probably because he represents behaviorism as they understand it.

On the other hand, there is evidence against labeling Tyler a behaviorist, which includes the facts that he never did so himself, and, other than using the term "behavior" extensively, he does not employ the vocabulary of behavioral psychology at all. His "psychology of learning" makes no use of classical or operant conditioning or the concept of contingencies. It should be pointed out that Tyler was a contemporary of Watson and Skinner and that while behavioral psychology was not as highly developed then as now, it was certainly developed to the point that it could have been incorporated into Tyler's scheme if he had so desired. The most compelling argument against seeing Tyler as a behaviorist is that his model is an incomplete embodiment of the behavioral model. It may be more accurate to label him as an "empiricist" or a "quasi-behaviorist."

Perhaps Tyler's connection with Thorndike is at the root of the problem that some contemporary curriculumists have with the behavioral approach in general. In an article that stridently urges curriculum workers to avoid the "seamy" (p. 309) heritage of behaviorism (Franklin, 1976), some of Thorndike's shortcomings are pointed out. This author presented persuasive evidence that Thorndike held a narrow and specific view of learning, advocated the use of psychology for social control, saw "objectivity" as an ultimate good,

and was racist and elitist in his social views. All of this may be true, but Franklin's warning to avoid resurrecting "Thorndike's psychology as a foundation for contemporary curriculum discourse" missed the point, which is that Thorndike's work is not identical to that of Skinner, Malott, Staats, Bandura, or a number of other recent conceptions of the behavioral approach. It would have been more appropriate for Franklin to refute Skinner's conceptions, rather than to imply that all contemporary behaviorists are identical to Thorndike. This article did, however, demonstrate that misconceptions can result from a broad labeling process that characterizes all "behaviors" as representing the identical conceptual approach.

On the subject of "learning," Kiester (1978) listed the areas of agreement and disagreement between Ralph Tyler and B. F. Skinner. The results of an interview with Tyler reveal that

He agrees with Skinner that learning must come in small steps, must be immediately reinforced, that a feedback mechanism must be established, and that there must be the opportunity to transfer the learning to another situation. Unlike Skinner, however, he believes that human beings need to know why they're learning if they are to learn effectively. "Pigeons can respond to rewards and punishment without knowing what they're trying to do," he says, "but humans must know where they're going. They must have a cognitive view. It's hard to tell what the cognitive view of a pigeon is." (p. 34)

A similar thought was presented by Bakan (1965), who humorously commented on the choice of domesticated lower animals as the subjects-of-choice in research. He wrote

that "The muteness of animals insures that they will not complicate the situation with reports on their thoughts or feelings or wishes" (p. 188).

English, Winters, Lewis, Huebner, Tanner and Macdonald (1980) contributed concise responses to the question "Is the Tyler Rationale a suitable base for current curriculum development?" Four of the responses were affirmative, and two opposed the contention that the Tyler Rationale is, in fact, suitable for current curriculum development needs.

On the affirmative side, English asserted that the Tyler Rationale "works" because it aids practicing school personnel "who must be responsive to minimum competencies, statewide testing mandates, efforts by the states and the feds to apply standards of quality, taxpayer resistance, and public scrutiny." Winters supported the continued employment of the Tyler Rationale as, in her opinion, it provides the planners and writers of the curriculum with "specific guidelines," and Tanner claimed that the critics of this position have failed to develop suitable alternatives. Lewis is a fan of the Tyler Rationale because it is "systematic," but advocates the employment of findings from the social sciences to develop decision-making techniques. These responses supporting the continued use of the Tyler Rationale lend credence to the view that it is, in essence, a bureaucratic convenience which benefits administrators rather than students and teachers.

Huebner takes the position that the Tyler Rationale's usefulness has expired. Huebner pointed out that the Tyler Rationale served a unifying purpose during the 40's and 50's and permitted "greater centralization and necessary control over curriculum development." He stated that the major problem with this approach is that it does not provide a suitable curriculum forum for grounding the questions of value in education.

We have two questions of value, and one of technology. How are we, as adults, to live with and respond to the young and those not yet educated? What intellectual, technical, and social resources are to be given to the young? How can educators bring together the world's wealth and the young so both are valued? (p. 5)

Huebner did commit the mistake of criticizing the Tyler Rationale because of its "behavioral" nature. The inaccuracy of identifying Tyler's position with a behavioral approach, this is, conditioning models, is apparent to anyone familiar with both the former and the latter. Huebner would be on firmer ground to criticize Tyler for not being behavioral, in the conditioning sense, and pointing out the ignorance of this model's proponents who think that it is.

Macdonald added his dissent by pointing out that the Tyler model does not represent the complex realities of the nonlinear curriculum development processes which embody a multiplicity of interacting factors. He pointed out that curriculum has been reduced to a so-called "technical" process that is "devoid of concern for the fundamental moral,

ethical, political, and aesthetic aspects of curriculum." He added that "curriculum is as much or more who makes the decisions, and what the personal and subjective points of view of the participants are."

Skinner (1968) identified the contingencies of reinforcement under which learning occurs as: "(1) an occasion upon which behavior occurs, (2) the behavior itself, and (3) the consequence of the behavior" (p. 4), and that teaching is the "arrangement of contingencies of reinforcement" (p. 5). He stated that teaching and learning traditionally have been explained as the result of doing, or experience, or trial and error; and that if these three notions are combined they represent the concept of contingencies of reinforcement as they apply to education.

The author stated that behaviorists have identified principles that allow learning to be conceptualized as a science; however, usual classroom practice is a "great shock" to him (p. 14) because of the pervasiveness of aversive control, failure to design effective contingencies, the lack of frequent reinforcement, and skillfully developed programs. He pointed out that both teachers and pupils are unhappy with usual classroom practice and called for the improvement of teaching based on the science of behavior.

Skinner stated that a variety of mechanical, electrical, electronic, audio, and visual devices can be employed to improve teaching and education. He described one machine

used to teach mathematics:

The important features of the device are these: reinforcement for the right answer is immediate. The mere manipulation of the device will probably be reinforcing enough to keep the average pupil at work for a suitable period each day, provided traces of earlier aversive control can be wiped out. A teacher may supervise an entire class at work on such devices at the same time, yet each child may progress at his own rate, completing as many problems as possible within the class period. If forced to be away from school, he may return to pick up where he left off. The gifted child will advance rapidly, but can be kept from getting too far ahead either by being excused from arithmetic for a time or by being given special sets of problems which take him into some of the interesting bypaths of mathematics.

The device makes it possible to present carefully designed material in which one problem can depend upon the answer to the preceding problem and where, therefore, the most efficient progress to an eventually complex repertoire can be made. Provision has been made for recording the commonest mistakes so that the tapes can be modified as experience dictates. Additional steps can be inserted where pupils tend to have trouble, and ultimately the material will reach a point at which the answers of the average child will almost always be right.

If the material itself proves not to be sufficiently reinforcing, other reinforcers in the possession of the teacher or school may be made contingent upon the operation of the device or upon progress through a series of problems. Supplemental reinforcement would not sacrifice the advantages gained from immediate reinforcement and from the possibility of constructing an optimal series of steps which approach the complex repertoire of mathematical behavior most efficiently.
(p. 25)

Skinner pointed out that effective teaching machines have several important features.

The student must compose his response rather than select it from a set of alternatives, as in a multiple-choice self-rater. One reason for this is that we want him to recall rather than recognize--to make a response as well as see that it is right. Another reason is that

effective multiple-choice material must contain plausible wrong responses, which are out of place in the delicate process of "shaping" behavior because they strengthen unwanted forms. Although it is much easier to build a machine to score multiple-choice answers than to evaluate a composed response, the technical advantage is outweighed by these and other considerations.

A second requirement of a minimal teaching machine also distinguishes it from earlier versions. In acquiring complex behavior the student must pass through a carefully designed sequence of steps, often of considerable length. Each step must be so small that it can always be taken, yet in taking it the student moves somewhat closer to somewhat competent behavior. The machine must make sure that these steps are taken in a carefully prescribed order. (p. 35)

Skinner argued that "the success of such a machine depends upon the material used in it" (p. 39) and that the design of programmed materials is no easy task. He illustrated the difficulty of designing effective programs by presenting several examples, commenting that

Whether good programming is to remain an art or to become a scientific technology, it is reassuring to know that there is a final authority--the student. An unexpected advantage of machine instruction has proved to be the feedback to the programmer. (p. 49)

Skinner confronted the concerns of those who fear that teaching machines will replace teachers, and attempted to clarify the machine-teacher relationship.

Will machines replace teachers? On the contrary, they are capital equipment to be used by teachers to save time and labor. In assigning certain mechanizable functions to machines, the teacher emerges in his proper role as an indispensable human being. He may teach more students than heretofore--this is probably inevitable if the worldwide demand for education is to be satisfied--but he will do so in fewer hours and with

fewer burdensome chores. In return for his greater productivity he can ask society to improve his economic condition. (p. 55)

He stated that education and Western society as a whole are moving away from aversive practices and that "a school system must be called a failure if it cannot induce students to learn except by threatening them for not learning" (p. 57). This form of education is incongruent with the values of democratic societies, and teaching machines are one means by which inefficient and harmful educational practices can be ended, according to the author.

Skinner commented that behavioral principles, and teaching machines designed from those principles, have the potential for being applied positively to education in addition to the possibility of being misused.

It could well be that a technology of teaching will be unwisely used. It could destroy initiative and creativity; it could make men all alike (and not necessarily in being equally excellent); it could suppress the beneficial effect of accidents on the development of the individual and the evolution of a culture. On the other hand, it could maximize the genetic endowment of each student; it could make him as skillful, competent, and informed as possible; it could build the greatest diversity of interests; it could lead him to make the greatest possible contribution to the survival and development of his culture. (p. 91)

Skinner addressed the issue of why, in his opinion, teachers fail. He stated that analyses of learning processes and teaching methods are extraordinarily neglected, and requests or demands for additional money are the usual

approaches to the improvement of education. He stated that the argument is that

We should build more and better schools. We should recruit more and better teachers. We should search for better students and make sure that all competent students can go to school or college. We should multiply teacher-student contacts with films and television. We should design new curricula. All this can be done without looking at teaching itself. We need not ask how those better teachers are to teach those better students in those better schools, what kinds of contact are to be multiplied through mass media, or how new curricula are to be made effective. (p. 93)

Skinner pointed out that the new teacher rarely has any training in teaching, but rather teaches as he or she has been taught. This usually includes strong elements of aversive control, a technique which Skinner finds counter-productive as it leads to escape, counterattack, inaction, and emotional accompaniments as responses from students. He pointed out that it is not difficult to explain the use of aversive control.

Systems which are basically aversive have produced well-disciplined, obedient, industrious, and eventually informed and skilled students sometimes to the envy of teachers who cannot skillfully use the same techniques. Even the students themselves may be impressed and may return years later to thank their teachers for having beaten or ridiculed them. (p. 101)

He claimed that a less coercive pattern in education is necessary to induce students to learn and that the most important element missing in classrooms is positive reinforcement. He went on to say that

teaching may be defined as an arrangement of contingencies of reinforcement under which behavior changes. Relevant contingencies can be most successfully analyzed in studying the behavior of one student at a time under carefully controlled conditions. (p. 113)

Skinner also recommended that "the behavior of the establishment" (p. 227) be analyzed in terms of behavioral principles. Administrators, teachers, educational researchers, policy makers, and those who support education are all subject to contingencies of reinforcement "which may need to be changed to improve education as an institution."

In a later work (Skinner, 1971), the author emphasized that

We need to design contingencies under which students acquire behavior useful to them and their culture-- contingencies that do not have troublesome by-products and that generate the behavior said to "show respect for learning." It is not difficult to see what is wrong in most educational environments, and much has already been done to design materials which make learning as easy as possible and to contingencies, in the classroom and elsewhere, which give students powerful reason for getting an education. (p. 149)

The following article represents an elemental behavioristic approach to curriculum. It is included to show that a "pure" behavioral model can be adapted to educational practice.

Silverman (1974) described how the "S-R reinforcement model" can be applied to education. His focus is on adapting the model to instructional planning, and he describes it as consisting of

a particular form of behavioral analysis in which behavior is represented in terms of the association between stimuli (S) and responses (R), and learning is represented in terms of the systematic changes in S-R associations that occur when reinforcements are appropriately correlated with responses. The term reinforcement refers to the events that strengthen responses. (p. 65)

This model leads to an analysis of instruction in terms of the fundamental learning factors of responses, reinforcements, and stimuli. The author stated that this model indicates three essentials for learning:

(1) The learner must make the response which he is to learn. He learns what he does. (2) The responses must be strengthened. Learning progresses as the responses in question are reinforced and increase in probability. (3) The responses should be put under the control of particular stimuli; these stimuli will set the occasion for the occurrence of the responses. (p. 65)

Silverman then listed questions which should be asked in the planning of instruction based on the S-R reinforcement model. These questions were organized under three categories: responses, reinforcement, and stimuli.

In the area of responses, the author's first question was "What are the responses to be learned?" (p. 66). Silverman's reply was that effective teaching is based on the identification of responses to be reinforced and that this model focuses on overt behavior. He acknowledged, however, that much learning activity may be covert in nature. The second is: "Are the responses to be learned already in the learner's repertoire of responses, or are they novel and unfamiliar responses?" (p. 66). This question was intended

to clarify the learner's relationship to the subject matter in terms of his or her learning history. Fourth, Silverman asked, "What responses might compete with the responses to be learned?" (p. 67). This aspect of responses must be examined, according to the author, because competing responses may retard learning. The author's fifth and final question relating to responses was: "What can be done to reduce the probability of competing responses?" (p. 67). He responded that "selective reinforcement" and "extinction" are most effective in this area and cautioned against the use of "punishment":

If punishment is to be an effective suppressor, it must be strong. However, strong punishment introduces undesirable factors into a learning situation, often making the situation aversive by evoking emotional responses that may in turn provide another source of competing responses. (p. 68)

In the area of reinforcement Silverman listed two questions, the first of which is: "What reinforcers will effectively strengthen the responses to be learned?" (p. 68). He then pointed out that reinforcers vary along individual and situational dimensions, and that what is reinforcing to any particular individual in any particular situation must be determined by "systematic observation." The second question was: "How can reinforcers be most effectively used?" (p. 68). He stated that reinforcement must be immediate, that the learner's deprivation or satiation in regard to a reinforcer must be taken into account, and that "intermittent" reinforcement is often most effective.

Silverman noted three questions to be asked in regard to "stimuli." First, "What stimuli are to control the responses?" (p. 69). Clarifying this question involved identifying stimuli and responses correctly and focusing on making the stimuli comprehensible to the learner. Second, "How should stimuli be associated with responses?" (p. 69). The author stated that according to this model, a stimulus and a response should be paired in the presence of a reinforcer to achieve this association.

Silverman dealt with the concept of "motivation" by stating that a highly motivated student is one "for whom a particular reinforcer or a variety of reinforcers is effective" (p. 71). Conversely, a poorly motivated student is one for whom few if any reinforcers are effective.

Additionally, the author commented on this model's relationship to "retention" and the "transfer" of learning, stating that retention is increased by using intermittent schedules of reinforcement and by increasing the number and variety of stimuli associated with a particular response. Also, "retention is helped by seeing to it that no new responses are associated with the relevant stimuli between the time of learning and the time of retention testing" (p. 77). The transfer of learning, he said, is influenced by the similarity between the learning task and the task to which the transfer is being made.

Silverman concluded the presentation of this model with the assertion that

An analysis of a teaching problem in terms of the S-R reinforcement model does not lead directly to the use of specific instructional techniques, nor does such an analysis necessarily suggest devices or specialized training aids. Techniques, aids, and devices are developed in terms of the questions raised by the language and model of analysis of the model. (p. 78)

However, he added that since this model implies a one-to-one teacher and student relationship, the use of technological devices may be desirable.

Two articles illustrated the humanistic approach to curriculum. Purpel and Belander (1972) presented rationale, and Bridges (1978) described and criticized humanistic education.

Purpel and Belanger (1972) sketched a framework for a humanistically oriented curriculum by stating the values and beliefs that they see as important undergirdings for such a model. They asserted that the value base of a humanistic curriculum model should include greater emphasis on self-fulfillment, self-renewal, personal liberty, self-awareness, self-learning, and social justice with freedom for fulfillment for all. In addition, the authors value "greater commitment to the active pursuit of fundamental social change in a moral and rational context," and "a profound commitment to a society that celebrates not merely tolerates diversity and pluralism" (p. 73). The authors believed that more

personal, emotive, and intuitive forms of knowledge should be encouraged and that "it is imperative that human needs be the central criteria in the process of inquiry" (p. 73).

Bridges (1978) criticized humanistic education from three perspectives: classroom milieu, the learner as a person, and the subject matter.

Classroom milieu is characterized by an individual and personal freedom to learn, a focus on "unstructured" learning situations, and the teacher as a facilitator or resource person. The personal freedom to learn is based on the concept that significant learning begins with the learner's need to know and subsequent self-initiated learning activities, rather than external rewards and punishments. Bridges stated that this natural process "by which we learned what we wanted to know is a model for this aspect of humanistic education" (p. 72). However, the presumption that the learner is aware of his or her own needs is not always valid, and humanistic education has not adequately dealt with those learners who have a legitimate need for structure. He stated that "much of the difficulty with the conduct of an unstructured classroom or course comes from an incomplete embodiment of the model on which it is based" (p. 73). That is, in the natural environment, this model combines a context of choice which is unstructured with resources or means which may be highly structured. The author stated that

If we are going to adapt this significant learning model to institutional education, we must be clear that it is within the institution (rather than within the particular classroom) that freedom from structure is needed, so that people can gain access to whatever resources their needs demand. These resources, once again, will tend to be structured--though they will certainly not consist mainly of "courses" on traditional subjects. (p. 73)

He went on to say that the classroom milieu should also be oriented toward students who are not aware of their needs or what they want to know. He sees one important contribution of humanistic education as helping persons discover their own deepest needs-to-know so that the institution can then provide ready access to appropriate resources.

From the perspective of the "learner as a whole person," Bridges affirmed the value of awareness or sensitivity exercises that allow students "to locate themselves within the interpersonal matrix of a class" (p. 74) as long as the need for them emerges from the situation itself rather than a desire to engage in technique as an end in itself. The author pointed out that these exercises employed inappropriately and mechanistically violate the spirit of humanistic education and may be unnecessary when the "whole person" is obviously present.

Humanistic educators often overlook this fact and launch enthusiastically into some cunning tactic to combat non-existent disinterest. Perhaps you have gone to "An Evening with X," one of those chances to hear a leading humanist tell you what is on his mind these days. You have come for just that--to hear what he is thinking--and he starts you off with warm-ups to meet one another and try to get you really present. Then, remembering to be really unstructured, he asks you what you want to hear (Hell, you came to hear him, right?) and says pious

things about how no one can really teach anyone anything. Pretty soon the man you came to hear is playing the neutral role of facilitator in a lot of audience interaction. (p. 75 fn)

Ironically, the use of such an approach inappropriately may foster authoritarianism and subvert the goal of reaching and involving the "whole person." However, Bridges did emphasize the importance of fostering the relationship between the learner as a person and the subject matter as a major element of the humanistic approach to education.

In his critique of the third perspective, the subject matter, Bridges reported that some humanistic educators argue that subject matter is not relevant.

The point of education (so runs this argument) is deepened sensitivity, heightened awareness and enhanced self-expressiveness. If that is the case, then whatever we are purporting to teach is only a vehicle toward these goals. But then, one discovers history and biology and economics are mighty cumbersome vehicles compared to some kind of quasi-therapeutic group experience. (p. 76)

Bridges asserted that this is a fallacy and that such an approach would justify the criticism that humanistic education focuses on nothing but its own process. He stated that this is not a tenet of humanistic education and that process is important in relation to subject matter. Process, in proper perspective, will be seen as supplemental and as articulating the relationship between the learner's own experiencing and the subject matter in order to transform the subject matter. That is, "when a person's need is allowed to shape the substance, then any subject matter is transformed" (p. 78).

Bridges characterized much of the traditional approach to subject matter as impersonal, deterministic, and mechanical. He advocated an approach which fosters personal involvement, creativity, and "choicefulness" as central to the learner's relationship to the subject matter. A humanistic approach, he stated, has the potential to accomplish this.

He summed up his critique by offering some implications of the humanistic approach for teachers:

Where does all this leave an actual teacher in this land at this moment of time? In most cases it leaves him in a bad way, for it leaves him trying to do in his classroom what the institution as a whole ought to be doing. It forces him to be a resource clearing house for those whose aims are clear and a setting for self-exploration for those whose aims are undefined. It forces him to convert whatever he has to offer to both groups into course units of a predetermined weight and length. Yet these matters that we have been discussing may clarify that teacher's situation as well, and may remove some of the false dilemmas that complicate it unnecessarily. They may do so by distinguishing between structures that should be abandoned because they are a substitute for personal choice and those that should be developed because they serve a goal-related purpose. They may do so by distinguishing between the ends and the means of affective education and by exploring the relation of subject matter to personally significant learning. And finally, they may do so by showing that behind the multiple faces of this entity is something solid and coherent. (p. 78)

Carl Rogers (1969), a leading proponent of the application of humanistic psychology to education, has written about the importance of the interpersonal relationship in learning. He stated that "teaching is a vastly overrated function" (p. 103) and that the traditional description of the teacher's role is grounded in three faulty assumptions.

First, the assumption that the teacher is to impart knowledge or skills in addition to showing, guiding, and directing the student is faulty because it is more efficient to use a book or programmed instruction. Second, the author stated that no one can legitimately decide, from "a superior vantage point" (p. 103), what someone else needs to know. In addition, he stated that the "assumption that what is taught is learned; what is presented is what is assimilated" is "obviously untrue" (p. 104) and invalidates the popular notion of coverage.

Rogers asserted that teaching and the imparting of knowledge or skills made sense in an unchanging environment, but that modern man lives in an environment which is continually changing. Therefore, the goal of education should be the facilitation of change and learning.

The only man who is educated is the man who has learned how to learn; the man who has learned how to adapt and change; the man who has realized that no knowledge is secure, that only the process of seeking knowledge gives a basis for security. Changiness, a reliance on process rather than upon static knowledge, is the only thing that makes any sense as a goal for education in the modern world. (p. 104)

Rogers went on to describe how that goal can be achieved and how an educator can encourage "self-initiated, significant, experiential, 'gut-level' learning by the whole person." He wrote that

the initiation of such learning rests not upon the teaching skills of the leader, not upon his scholarly knowledge of the field, not upon his curricular planning,

not upon the use of his audiovisual aids, not upon the programmed learning he utilizes, not upon his lectures and presentations, not upon an abundance of books, though each of these might at one time or another be utilized as an important resource. No, the facilitation of significant learning rests upon certain attitudinal qualities which exist in the personal relationship between the facilitator and the learner. (p. 106)

The author described three sets of attitudes or qualities which facilitate learning. These attitudes are said to distinguish a "facilitator" from a traditional "teacher."

First, and most basic, is the attitude of genuineness or realness on the part of the facilitator.

When the facilitator is a real person, being what he is, entering into a relationship with the learner without presenting a front or facade, he is much more likely to be effective. This means that the feelings which he is experiencing are available to him, available to his awareness, that he is able to live these feelings, be them, and able to communicate them if appropriate. It means that he comes into a direct personal encounter with the learner, meeting him on a person-to-person basis. It means that he is being himself, not denying himself. (p. 106)

The second essential attitude of the facilitator for effectiveness in the learning process is that of prizing, acceptance, and trust.

It is a caring for the learner, but a non-possessive caring. It is an acceptance of this other individual as a separate person, having worth in his own right. It is a basic trust--a belief that this other person is somehow fundamentally trustworthy. Whether we call it prizing, acceptance, trust, or by some other term, it shows up in a variety of observable ways. The facilitator who has a considerable degree of this attitude can be fully acceptant of the fear and hesitation of the student as he approaches a new problem as well as acceptant of the pupil's satisfaction in achievement. Such a teacher can accept the student's occasional apathy, his erratic

desires to explore by-roads of knowledge, as well as his disciplined efforts to achieve major goals. He can accept personal feelings which both disturb and promote learning--rivalry with a sibling, hatred of authority, concern about personal adequacy. What we are describing is a prizing of the learner as an imperfect human being with many feelings, many potentialities. The facilitator's prizing or acceptance of the learner is an operational expression of his essential confidence and trust in the capacity of the human organism. (p. 109)

The third element which establishes the kind of classroom climate that Rogers advocates is empathetic understanding or the ability to understand the student's reactions from the inside. The author stated that if the facilitator has an awareness of the way the process of learning seems to the student, the likelihood of significant learning is increased.

This attitude of standing in the other's shoes, of viewing the world through the student's eyes, is almost unheard of in the classroom. One could listen to thousands of ordinary classroom interactions without coming across one instance of clearly communicated, sensitively accurate, empathetic understanding. But it has a tremendously releasing effect when it occurs. (p. 112)

Rogers summed up the importance of these three sets of attitudes by writing that

Those attitudes which appear effective in promoting learning can be described. First of all is a transparent realness in the facilitator, a willingness to be a person, to be and to live the thoughts of the moment. When this realness includes a prizing, a caring, a trust and respect for the learner, the climate for learning is enhanced. When it includes a sensitive and accurate empathetic listening, then indeed a freeing climate, stimulative of self-initiated learning and growth, exists. (p. 126).

Rogers also addressed the behavioral-humanist dilemma which he describes as a deep paradox with which we must learn to live.

A part of modern living is to face the paradox that, viewed from one perspective, man is a complex machine. We are every day moving toward a more precise understanding and a more precise control of this objective mechanism which we call man. On the other hand, in another significant dimension of his existence, man is subjectively free; his personal choice and responsibility account for the shape of his life; he is in fact the architect of himself.
(p. 275)

In the exploration of signification issues relating to the use of objectives, Gagne (1972) and Kneller (1972) assumed positions for and against, respectively, the use of behavioral objectives in education.

Gagne affirmed the validity of behavioral objectives in education by arguing that they aid communication among and between the various participants in an organized educational system. He stated that constructing behavioral objectives adds legitimacy to such an organized educational system as they communicate what the student will have learned from instruction and what class of performances he or she will then be able to exhibit. He assumed that predefined objectives are legitimate and criticized the opponents of objectives for their vagueness and lack of certainty.

Kneller, on the other hand, rejected the use of behavioral objectives for three reasons. First, the task of developing

group and individualized behavioral objectives is too time-consuming and complex. Second, behavioral objectives tend to exclude idiosyncratic learning, and, third, the assumption that learning, knowing, and behaving are synonymous is a false assumption. Kneller suggested the alternative of "specified" objectives constructed by the teacher and based on his or her own model of learning. The purpose of these objectives would be to take the student's talents and choices into account, communicate expectations to the student, and make the student aware of his or her peers' achievements.

These two articles had limitations in that Gagne paid no attention to the process of learning on an individual basis, and Kneller misrepresented the behavioral model and refuted its research with his opinions.

Macdonald and Clark (1974) summarized the "empirical state of the art in curriculum making" by noting the lack of productivity, from a research standpoint, in separating curriculum from instruction. They proposed that the smallest researchable unit is the "treatment" which consists of objectives, materials, media, methods and the isolatable subvariables within each of these areas. They also pointed out that there is a paucity of data concerning the outcomes of treatments in relation to individual learners.

The authors see the current state of the art in terms of summative evaluation, the development of curricula in social settings other than the instructional setting,

individual variation in the learner, the problems of objectives, and the relationship of objectives to media.

Summative evaluation focuses on measurable achievement elements and treats the process of curriculum making as a given. This is a clear phenomenological/empirical separation that divides curriculum from instruction. A wholistic conception of the curriculum and curriculum making is necessary for effective research enterprises.

These authors pointed out that curricula are developed in social settings that are different from instruction settings. Thus they have a collection of "social roles, rewards, status and prestige opportunities" that are different from the variables existing in instructional settings. The variables are usually unknown or unpredictable during the developmental process.

Additionally, individual variations in learners are seen as major influences upon what learning takes place in the curriculum. The authors doubted the validity of the curriculum development logic chain that excludes these social system variables in addition to ignoring the differences in individual learning.

The authors asserted that problems with curricular objectives arise when the questions of curricular scope and significance are framed in the context of a discipline, social need, or learner preference. These three referents must be integrated through value judgements. They pointed

out that objectives are inherently value-laden and cited evidence that these value assumptions should be clearly stated before analyzing society, knowledge, and learner needs as the bases for objectives formulation. They wrote that "curriculum development is a continuous process of making human value judgements about what to include and exclude, what to aim for and miss, and how to go about it, albeit aided and abetted by technical and scientific data and processes" (p. 408).

It was pointed out that vague and directionless objectives may be generated if they are not developed within the context of materials, media, and methods; however, further difficulty arises if this constellation is separated from the actual classroom experience. McLuhan's "the medium is the message" slogan was cited to illustrate that style may be as important as content, and that the a priori development of content may be ineffective in practice.

What is needed, Macdonald and Clark concluded, is a focus on the critical value questions by curriculumists. These value questions focus on the referents of society, knowledge, and the learner; value questions about priorities among the referents and selection from each should be a focus of the curriculum researcher or worker. "The crux of value problems rests in the decision-making process and the suggested events and/or behaviors that are involved," the authors wrote. They pointed out that the fundamental

problems are moral and suggested a clarification of goals and the selection of values to be pursued.

So far, the literature described illustrates that the curriculum field is, to some extent, characterized by conflict. It has been shown that there are numerous schemes by which curricula can be classified, conceptualized, and analyzed. No one scheme emerges as the best way. Several important elements in the literature clarify and add perspective to the collection of works that follow. First, a psychological approach to curriculum models is legitimate as long as the terminological difficulty to which Eisner referred is overcome. Second, both humanistic and behavioral models appear to generate conflict, and both seem to have advantages as well as drawbacks. Next, the Tyler Rationale continues to have strong support although its critics raise questions about its limitations. Also, it has been shown how the Tyler model differs from a true behavioral model. Fourth, the point that learning is an individual process that curriculum makers should take into account has been made. Finally, unresolved problems centering on value questions, especially as they relate to objectives, have been reviewed.

Dilemma and Reconciliation

This section will describe literature that deals with the schism and synthesis of the behavioral and humanistic models in psychology and education. There is a small body of literature dealing with the behavioral-humanist dilemma compared to the extensive writings that argue for or against one of the models. These works move beyond the limited perspective of advocating one position while denigrating the other and are characterized to some extent by an attempt to unify these two approaches. The purpose of this essay is to add to that small, but growing body of literature. Additionally, a number of works that are closely related to the reconciliation of the behaviorist-humanist dilemma have been organized into this section.

As an introduction, Hilgard's thoughts on the puzzling history of psychology's influence on education are described.

Hilgard (1976) wrote that the psychology of learning and educational practices should "fit together as hand-in-glove" (p. 203), but there is little to suggest that this is, in fact, the situation. Hilgard termed the relationship between the two "puzzling," but asserts that it can be understood and improved. He stated that from a historical point of view, psychologists have demonstrated little interest in the application of their findings to educational settings on a sustained basis. Additionally, educators have

had difficulty interpreting the often ambiguous data generated by psychological research and have found few clear guidelines for its application.

Hilgard summarized his thoughts on how psychology and educational practice can form a more harmonious relationship by outlining four difficulties which must be addressed:

First, educational psychologists, in the study of classroom learning, have identified themselves too much with the general experimental psychologists who study learning with different goals in mind. Second, educational psychologists, as previously noted, have had too little responsible relationship to instruction in the schools, especially in the planning and managerial aspects. Third, the caution that researchers feel about their findings means that they are seldom willing to make effective prescriptions based on conclusive thinking. Fourth, the institutional characteristics of the school make it difficult for changes to be influenced by research findings. Schooling is more likely to be influenced as a result of pressure groups, popular fads, or available funds. (pp. 216-217)

Confrontations between humanist Carl Rogers and behaviorist B. F. Skinner occurred in 1956 and again in 1962 (Rogers & Skinner, 1956, 1976). The different positions proposed in these debates have often been cited to illustrate their irreconcilability. According to Skinner,

Man's behavior is primarily the result of his environment; that a science of behavior must rely on objective measures of observable behaviors; that the "inner man" might exist but that this subjective self is unimportant in controlling his behavior; and that man can control his own behavior by the application of the principles of operant conditioning. (Rogers & Skinner, 1976, p. 4)

Rogers' opposing view was that

Man's behavior was primarily a result of his self and the self actualizing forces; a science of man should rely primarily on the subjective aspects of human behavior; unless man creates a society where the individual can become freer, totalitarian society will result. (p. 5)

This polarization led to the conclusions of a later dissertation, which stated

The nucleus, vitality, of Skinner's thought is a desire for control, of Rogers' thought a desire for lack of control. Such contrary desires are irreconcilable. To follow the desires of either man leads one in the opposite direction from that indicated by the desires of the other. An educator, therefore, cannot follow both approaches simultaneously. Skinner desires an educational environment which yields precise control and predictable terminal behavior; the product is most important in his view. Rogers desires an educational environment which allows maximum personal choice; the process is most important in his view. To choose one scheme is to undermine the goals of the other. To try to follow suggestions from both is, essentially, to abandon both. (Swaim, 1973, p. 4957-A)

There were, however, points of agreement during both debates. During the first, Rogers reported that

I am sure that we agree that man--as individuals and societies--have always endeavored to understand, predict, influence, and control human behavior--their own behavior and that of others. I believe that we agree that behavioral sciences are making and will continue to make increasingly rapid progress in the understanding of behavior, and that as a consequence the capacity to predict and control behavior is developing with equal rapidity. I believe we agree that to deny these advances, or to claim that man's behavior cannot be a field of science is impossible. (1956, p. 1060)

During the second debate, Rogers and Skinner agreed that a broad view of behavior sciences is necessary for the understanding of human behavior; that understanding changes as a

result of debates and dialogues between behaviorists and humanists; that inner subjective feelings do, in fact, exist; and that releasing the "inner freedom" of persons is an important goal of psychology. Rogers stated that freedom is a phenomenological, as well as an objective reality which exists alongside scientific reality.

Hitt (1969) wrote that the purpose of his article was to analyze the argument between the behaviorist and the phenomenologist by presenting and analyzing two different models of humans. He employed the terms "man" and "phenomenologist" in his writings; however, this presentation will substitute the terms "humans" and "humanist," respectively, as the former is a nonsexist description and the latter is considered synonymous.

Hitt attempted to define the behaviorist and humanist positions by describing how each views humans and what methodology is deemed appropriate for their study:

The behaviorist views the human as a passive organism governed by external stimuli. The human can be manipulated through proper control of these stimuli. Moreover, the laws that govern the human are essentially the same as the laws that govern all natural phenomena of the world; hence, it is assumed that the scientific method used by the physical scientist is equally appropriate to the study of humans.

The humanist views the human as the source of acts; he is free to choose in each situation. The essence of the human is inside the human; he or she is controlled by his or her own consciousness. The most appropriate methodology for the study of the human is phenomenology, which begins with the world of experience. (p. 652)

The author then listed ten "arguments" between the behaviorist and humanist camps and maintained that there is support for both sides of the controversy.

The first contrasting view is that humans can be described meaningfully in terms of their behaviors, or humans can be described meaningfully in terms of their consciousnesses. Hitt asserted that it is apparent that psychologists have been dealing with two different aspects of humans: "actions" and "self-awareness." He says that humans can be described in terms of either behavior or consciousness or both. In his opinion, "behavior is more accessible to scientific treatment, but the systematic study of consciousness might well give the psychologist additional understanding of man" (p. 653).

The second contrasting view is that humans are predictable, or humans are unpredictable. Hitt pointed out that there have been both notable successes and notable failures in attempts to predict human behavior. He wrote that it is difficult to take issue with the determinist view that there are sufficient causes for human actions; however, it is apparent that these causes may be unknown to either the observer or the subject. He concluded that we must see humans as both predictable and unpredictable.

The third contrasting view is that humans are information transmitters, or humans are information generators. Hitt pointed out that the information-transmitting model is very compelling because of its rigor

and precision, its compatibility with empiricism and stimulus-response theory, and its cumulative nature. On the other hand, humans identify new problems, generate new ideas and theories, formulate new courses of action, and even formulate "new models" of humans. He asserted that "to say that all of these human activities are merely a regrouping or recombining of existing elements is an oversimplification, a trivialization of human activity" (p. 654). His conclusion was that humans can be viewed as both a dependent variable and an independent variable within the context of this argument.

The fourth contrasting view is that humans live in an objective world, or humans live in a subjective world. The heart of this argument rests on two types of knowledge that Hitt identified. He said that humans can objectively know about something and also subjectively experience something and that these two forms of knowledge are not the same. He wrote that the world looks at humans, and humans look out at the world. The methods of science can be employed to explore the objective aspects of humans and the methods of phenomenology can be applied to the subjective aspects, and the psychologist should attempt to understand both worlds.

The fifth contrasting view is that humans are rational beings, or humans are irrational beings. Hitt pointed out that human actions are guided by both empirical knowledge and value judgement. "Empirical knowledge belongs to the

rational world, whereas value judgement often belongs to the arational world" (p. 654). Hitt viewed rationality and irrationality as being on the same continuum whereas arationality is not. He concludes that in order to achieve greater understanding of humans, both the rational and arational worlds must be investigated.

The sixth contrasting view is that one human is like another human, or each human is unique. Hitt pointed out that there is evidence to support the possibility of developing general laws of human behavior, especially the work of the behavioral psychologists and cultural anthropologists. However, he pointed out, no two persons live in exactly the same environment, and there are thousands of possible gene combinations and environmental determinants that support the notion of individual uniqueness. Therefore, humans are governed by general laws that apply to all persons, but are individually unique in a nontrivial way.

The seventh contrasting view is that humans can be described meaningfully in absolute terms, or humans can be described meaningfully in relative terms. The author asserted that on the one hand there appear to be some irrefutable absolute natural laws such as conditioning principles to humans, but on the other hand absoluteness in the area of standards is arbitrary. For example, what is natural behavior? Depending on what aspect of human

behavior is being described, it can be meaningfully described in either absolute terms or relative terms, he concluded.

The eighth contrasting view is that human characteristics can be investigated independently of one another, or must be studied as a whole. The author stated that useful results have resulted by investigating a single characteristic independently of other characteristics, but the importance of the interactions and interdependencies operating in any given situation is apparent. He stated that analysis is necessary for systematic understanding, and synthesis is essential in order to understand the interactions and interdependencies, and that an interplay between analysis and synthesis should be the most effective strategy for the behavioral scientist.

The ninth contrasting view is that the human being is a reality, or the human being is a potentiality. Hitt posed the question as to whether we can study humans as an actually existing entity, such as any other complex system, or as a constantly emerging or becoming dynamic entity. He answered that humans can be reliably measured in some respects as any other complex system, but that humans are changeable and can become something quite different from what they were in the past. Therefore, a human represents objective existence, yet can move toward any one of many different states that are essentially unpredictable.

The tenth contrasting view is that humans are knowable in scientific terms, or humans are more than we can ever know about them. Hitt noted that this argument is basic to the entire study of humans and is closely tied to all of the other contrasting views. He wrote that the view that persons are scientifically knowable has its roots in antiquity, was a concern when the first experimental psychology laboratory was founded in 1879, and is supported by the recent experimental and field studies in the areas of behavioral and social sciences. However, he asserted, the theory of evolution points toward human transcendence, and the process of gaining new knowledge about themselves changes human beings. Therefore, he suggested, humans are "open systems." He concluded that humans are "scientifically knowable--at least to a point. Yet there is no evidence to support the idea that humans are--or ever will be--completely knowable" (p. 657).

Hitt offered four general conclusions after analyzing and commenting on the ten contrasting views. First, the behaviorist-humanist debate is not just an academic exercise because the acceptance of either model has important implications for the influencing of human activities in education and other areas. Second, it would be premature for psychology to accept either model as the "final model" as there is truth in both views. Third, both models may be useful depending upon the problem under study. He suggested

that the humanistic model may be appropriate for the study of creativity while the behavioral model could be useful in examining environmental determinants. Finally, he asserted that proponents of both points of view "should listen to each other," attempt to understand both points of view, and encourage "dialogue" (p. 657).

Krasner (1978) examined what he termed the behaviorist-humanist "dialogue" in a historical context which points out the commonality of roots in terms of philosophical influences and social objectives.

The author asserted that the humanists have developed a lexicon of pleasant terms such as self-actualization, personal growth, sensitivity, dignity, and trust whereas the behaviorists have developed a far scarcer lexicon, with terms such as reinforcement, contingencies, stimulus control, and behavioral management. He hypothesized that

to the extent that there is any similarity between these descriptive terms and human behavior in real environments, both sets of postulates about human behavior are relatively correct and, when reduced to specific operations of measurement, describe the same processes. (p. 799)

Krasner stated that a problem has been generated as both protagonists "hide behind big brother metaphors that explain everything and protect them from the evil of their opponents" (p. 799). Behaviorism, he wrote, hides behind the metaphor of science, and humanism itself is, in fact, a metaphor. These metaphors and labels have become reified and

serve as slogans and rallying cries and have implications for professional behavior. One major implication is that professionals in the fields of psychology, psychiatry, social work, and education are reinforced by the academic, professional, and scholarly community for the "development of new labels, controversy, leadership of new movements, publications, symposia, the development of associations with individual labels, leaders, splinter groups, disciples, interpreters, dissenters, and slogans" (p. 800).

Krasner listed seven commonalities that these two approaches share and implied that there exists a greater degree of resemblance than is generally acknowledged. The commonalities are: a desire to create a better world; a belief in individualism, freedom, and human dignity; the "fallibility-probability" conceptual parallelism; the rejection of the disease model of undesirable human behavior; optimism as to the changeability of individual behavior; a break with authority and tradition; and the hypothesis about the locus of human behavior that is both situational and interactive.

This author also offered the interesting notion that it is appropriate that Carl Rogers be seen as "scientific" and B. F. Skinner as "humanistic." He supported this position by noting that Rogers initiated and stimulated research, from the scientific standpoint, in his early work. Krasner asserted that "we have a clear cut candidate for the

originator of the behavior modification movement in Carl Rogers" (p. 801). Likewise, B. F. Skinner, who espoused the humanistic values of happiness and fulfillment for individuals, an individualism that was referenced to the rights and desires of the group, and the equality of women in Walden Two, can be labeled a "humanist." The author commented that "it is puzzling why the followers of the humanist Skinner and the scientist Rogers did not realize that a united social movement of these two forces would have had even greater impact on psychology and American society than actually occurred" (p. 803).

Krasner noted that a discussion of the future of the humanist-behaviorist dialogue represents a combination of observation, prediction, and wish. He sees that some of the proponents of both positions would decrease mutual battling and join against the common foe of explaining behavior in terms of mentalistic pathology and join the mutual goal of "developing a broader methodology for assisting people to design their own environments for a humane, humanistic world of 'reasonably satisfied' people" (p. 803). In addition, he sees a convergence of the objectivity-subjectivity positions which acknowledges that true objectivity has its limits.

Krasner also predicted that an increasing focus on the value decisions of the influencer, or trainer, of behavior will become important in this dialogue. He sees the future

of this dialogue as residing "in the emergence of new models and approaches to conceptualizing and changing human behavior" but points out that there will be "serious opposition" to the emerging humanist-behaviorist-environmentalist position because it threatens "authority" and "elitist expertise" (p. 803).

Bandura (1969) stated that freedom and determinism are not incompatible from the perspective of social learning theory. He wrote that

Whether freedom and determinism are compatible or irreconcilable depends upon the manner in which causal processes are conceptualized. According to prevailing theories of personality, human actions are either compelled from within by concealed forces or externally predetermined. If individuals were merely passive reactors to external influences, then their behavior would be inevitable; it would be absurd to commend them for their achievements or to penalize them for their transgressions. It would be more sensible, from this point of view, to praise and chastize the external determinants. But since these events are also determined by prior conditions, the analysis results in an infinite regression of causes. Some degree of freedom is possible within a deterministic view if it is recognized that a person's behavior is a contributing factor to subsequent causal events. (p. 88)

Gelso (1970) explored the freedom-determinism controversy, which he described as an "ancient philosophical issue," with the aim of resolving it within the framework of a paradox. He described this issue as focusing

upon whether man's behavior either is determined by factors outside of his control or is the result of his own free choices. Are man's actions, thoughts, and feelings completely determined by antecedent and attendant factors or, conversely, is man at least to

some extent a free agent, capable of free choice and able to transcend the influence of his environment and genetic makeup? (p. 271)

Gelso pointed out that this issue is still quite alive within the discipline of psychology, but has received little attention by counselors because of several factors that appear to relate also to curriculum workers. He pointed out the practical nature of counseling which deemphasizes philosophical undergirdings, that the "scientist" model has been adopted by relatively few counselors, and that counselors traditionally see humans as "free agents." He saw a trend toward more philosophical, empirical, and model-building activities on the part of counselors during which the freedom-determinism issue will become more prominent. He pointed out that this issue is bound to provoke conflict.

The author outlined the "logic of scientific determinism." The basic tenets of this position are that all human events are determined by causal factors which are a person's past environment, genetic endowment, and present stimulus situation. Behaviors, thoughts, or feelings are functions of the interaction of the three. The deterministic position asserts that inner states either have no functional relationship with behavior, or that inner states are a function of antecedent, attendant, and genetic factors.

Gelso offered several definitions that can be described as mainstream deterministic vocabulary. "Determinism" used

in a generic sense may refer to such diverse forms as mechanistic, teleological, psychic, and others. "Causes" may refer to physical, chemical, biological, psychological, social, rational, cultural, economic and other factors. "Freedom" is the absence of causes, and the terms "causal relationship" and "functional relationship" are synonymous, as are the terms "cause" and "control."

The opponents of determinism have offered eight general objections, in an attempt to refute the causality model.

First, each human is unique and not amenable to causal description and predictability. Second, even if causal order exists, human behavior is too complex for any permanent discoveries in this area. Third, human behavior is oriented to future goals and is determined by these goals. Fourth, a causal model of human behavior negates the importance of choices, responsibility, punishment, and guilt. Fifth, the determinist can not argue that the acceptance of determinism was through choice since it was conditioned. Sixth, in view of Heisenberg's Uncertainty Principle as applied to physics, it seems impossible to attempt to predict complex human behavior. Seventh, since physicists accept "change," how can complex human behavior be assumed to be completely determined? Eighth, deterministic psychology is tied to an outdated mechanistic physics concept and therefore invalid.

Gelso responded to these objections by noting "fallacies" in the arguments and suggesting that

misinterpretation of the deterministic position is the cause.

Indeed, a close examination of the above arguments suggests that most of them are not relevant to whether or not strict determinism in human affairs is a valid assumption. In summary, Arguments 1, 2, and 6 refer to the likelihood of ever finding all of the causes of behavior, and not to whether causes exist; Arguments 3 and 8 essentially criticize one type of determinism (i.e., mechanistic-physicalistic); and 3 substitutes in its place another type, that is, teleological determinism. Argument 4 refers to the undesirability of determinism, since the subjective adoption of such a belief may have negative practical and moral consequences. Argument 5 curiously implies that if determinism is valid, a determinist cannot argue for its validity, since his beliefs are determined. This argument ignores the possibility that reality (the world as it is) is one of the major determinants of beliefs. Finally, Argument 7 equates chance with freedom. However, since chance is more likely to lead to randomness, one could hardly suggest that people are free when their behavior is determined by chance factors. (p. 273)

It is important to note here that Gelso was not making a case against free will, but was refuting anti-determinism. By noting some basic misunderstandings of the deterministic language including terms such as "freedom" and "control," he pointed out that it is "unlikely that the validity of strict determinism can ever be ultimately 'proven'" (p. 274), but that when human behavior is viewed objectively there is little support for the notion that this behavior is free from causation.

Gelso commented that the "logic and necessity of subjective freedom" is culturally reinforced, and is neither uniquely American nor restricted to Western culture. Many professionals "do not accept strict determinism because

people, including psychologists, continuously experience the introspective realness of freedom" (p. 274). He pointed out that although determinism appears to be a logical and scientifically useful construct, few people can live as though they are determined objects. Psychologically healthy persons, as contrasted with neurotics and psychotics, are more likely to see themselves as experiencing freedom of choice. He stated that "persons not only do, but in a very real way, need to experience freedom subjectively" (p. 275), and that there is a probability that this subjectively experienced freedom of choice is actually an important determinant of behavior:

The introspective realness of the experience of freedom of choice, independent of one's learning history and present environmental influences, is what seemingly non-deterministically theorists such as Rogers and Maslow imply in their writing. While frequently misinterpreted, careful scrutiny of Rogers' work reveals that he is deterministic when viewing man from an objective, scientific perspective. Only when he discusses the inner experience of man does Rogers propose a free-choice model. (p. 275)

Gelso resolved this issue by suggesting the existence of a "two-dimensional paradox" in which strict determinism and free will are both necessary and valid assumptions. However, they are valid and necessary along two separate, and mutually exclusive, dimensions which utilize different sources of information. These dimensions can be termed the "objective-scientific-outer dimension" and the "subjective-ascientific-inner dimension" and can be conceptualized as

being experienced alternately in the temporal sense. Thus, Gelso was arguing against the simultaneous experiencing of both dimensions but, since he did not specify a temporal frame of reference, he did not rule out the subjective perception of both occurring at the same time.

Specifically, Gelso described the objective-scientific-outer dimension as human behavior determined by antecedent and attendant conditions. A person's source of information is himself, objectively and analytically examined apart from his own inner experiencing. This mode of information may also operate when "objectively" observing other persons and analyzing the causes of their behavior. The subjective-ascientific-inner dimension has as its source of information a person's own subjective experiencing or the empathetic experiencing of another person. This dimension is useful as the experiencing of oneself or another as fully determined may have "disastrous" consequences. He added that "when conceptualizing behavior on this dimension, persons can be seen as active rather than simply reactive, as subjects rather than determined objects, and as 'pilots' rather than 'robots'" (p. 276). These two different models of reality emerge when humans view themselves and others from the perspectives of two different sources of information.

Gelso concluded by suggesting that we will have to live with the contradiction of both free-will and deterministic models as valid and useful and accept the possibility of

"multiple realities" (p. 277). He recommended that future research and thinking be aimed at clarifying "(a) the extent to which and (b) the crucial points at which persons should be experienced subjectively as free agents or analyzed objectively as determined objects" (p. 277). Such research would be difficult to conceptualize and implement, **but**, he added, "Is this not the case in most meaningful areas of human interaction?" (p. 277).

Ricks, Wandersman, and Poppen (1976) reported that their principal interest is "the degree to which the humanist and behaviorist positions, each of which has its own integrity and theoretical coherence, may be converging into a new synthesis" (p. 383). They do not expect a total convergence of the two positions, and even if that were possible, they have doubts regarding the productiveness of such a complete merger. However, they stated that we appear to be on the verge of a creative synthesis that can unite large parts of the two approaches "into a broader social developmental view of the human being as an active organizer of his own particular environment over time" (p. 384). Such a synthesis is important as it has the potential to revitalize the understanding of human nature, choice, freedom, and the meanings commonly imparted to life. There is a better climate for a synthesis now the name-calling, sloganeering, and bitter attacks that have separated and polarized the two positions appear to be past history.

The authors pointed out some of the attempts at synthesis including efforts to de-emphasize the humanist-behaviorist dichotomy, the attachment of the label "humanistic" to behavioral programs (when "humanitarian" would have served more appropriately), and the integration of concepts from both positions. The work in social learning is a type of "behavioral humanism"; Gilda Gold's "affective behaviorism" is a composite of behavioral and humanistic goals and methods. Additionally, Allan Goldstein's approach to assertiveness training is a synthesis of behavioristic methods and humanistic goals.

The authors rejected the notion that the "paradigm clash between humanism and behaviorism can only be resolved on non-empirical grounds" (p. 384). They presented four declarative conclusions and offered evidence for each.

First, "Neither behaviorism nor humanism is reducible to the other, and neither can be completely incorporated into the perspectives of the other" (p. 385). Behaviorism cannot be reduced to humanism because the latter position presently has no way of incorporating the multiplicity of behavioral techniques within its framework. However, within a therapeutic context, the so-called "nonspecific factors" of the therapist's personal contribution have been specifically and operationally described in terms of warmth, empathy, genuineness and the like. Humanism cannot be reduced to behaviorism presently as the humanistic view of

the complex behavioral paradigm is often a one-dimensional and simplistic stereotype. The authors asserted that "what is needed is not submission of one system to the other, or translation of the language of one approach into the language of another, but a creative synthesis of the two." Each system can complement and fill in the weaknesses of the other.

Second, "Humanism and behaviorism are reconcilable" (p. 387). The authors opposed the arguments that the two are diametrically opposite views and that coexistence or detente is the closest reconciliation they can tolerate. There are so many areas of agreement that it is no longer necessary to continue to see the two sides as opposites. That progress beyond mere coexistence is possible is evidenced by the employment of the most popular of several possible syntheses: the use of behavioristic techniques to reach humanistic goals. Other syntheses are also possible.

Third, "Existing areas of agreement provide the growing points around which new syntheses of humanism and behaviorism are already developing" (p. 390). Four areas of agreement are presented as evidence in support of this claim: (1) It is easy to associate "humanism" with "humane," but the indications are that behaviorists are just as value prone to alleviate suffering and promote development as are humanists. (2) Both humanists and social-learning therapists are concerned with the person as an active organism. (3) The

methods of humanists and behaviorists may lead to similar results. (4) Both are willing to subject experience to research results. The authors amplified this point by noting Rogers' pioneering empirical studies on psychotherapy and the behaviorists' willingness to follow. However, they said that the Rogerians have had a tendency to have their ideas governed by dogma rather than natural consequences.

Fourth, "Broader perspectives may incorporate both humanism and behaviorism into more comprehensive positions" (p. 391). "Both traditional humanism and laboratory-based behaviorism were in trouble as soon as they tried to conceptualize the interactions of the person with his natural environment" (p. 391). The authors explained that

This lack of concern for the environment may account for the solipsistic quality of many humanistic interior journeys. Humanists might do better here if they remained aware of the human environment, and of man as a social animal whose autonomy grows as he increases his options in society, not as he withdraws from it. (p. 391)

The authors recommended the development of broader perspectives which are oriented around some conception of the person's development over time in a society that is itself changing. These broader perspectives would recognize "empirical interconnectedness" as a postulate.

Staats (1975) wrote that general conceptions about human nature have been based on theology, world views, and scholarly or scientific traditions. These conceptions are

important, he said, because they form the bases for social actions and decisions. The objective versus subjective positions as conceptions of human behavior constitute an ancient philosophical argument that is also a continuing theme in psychology and other social sciences. Staats pointed out that the dichotomization of psychology into conceptions that view human behavior as either internal, mental, and subjective or external, behavioral, and objective gained impetus through the efforts of the supporters of early "elemental behaviorism" who were reacting against the late nineteenth-century introspectionist school of psychology. He said that

It was John Watson, the first self-conscious behaviorist, who indicated the drawbacks to the subjective method of introspection as the basis for a science of psychology. He rejected the method of introspection and indicated, rather, that the objective, public observation of behavior and the stimuli that influenced behavior were the proper subject matter of psychology. He rejected concern with such matters as feelings, thoughts, images, perceptions, sensations, and so on, unless they were specified by direct observations of behavior. (p. 462)

The author pointed out that Watson's position was a useful corrective for the problems of the psychology of his day, but that it has been unnecessarily continued by present-day radical and elemental behaviorists.

Such concepts as attitudes, feelings, interests, purposes, goals, awareness, perceptions, communication, values, meaning, and so on are still not considered, even though theoretical and methodological developments, as has been indicated, have made this possible. Thus, elemental behaviorism has influenced a considerable

number of contemporary psychologists to ignore internal responding, limiting themselves to concern with instrumental behaviors. This influence has led to inconsistencies in some positions, including internal response concepts in some analyses but not in others. For example, some social learning theories have considered attitudes to be inconsequential to the determination of the individual's instrumental behavior, while accepting other internal response concepts. (p. 463)

Staats listed fourteen characteristics and concerns dividing the humanistic and behavioristic approaches to the study of man. By "behavioristic approach," he meant an elemental and operant type of behavioral psychology which categorically denies and excludes internal events from its explanation of human nature. The issues are listed with the humanistic positions on the left and the elemental behavioristic positions on the right.

- | | |
|---|--|
| 1. Subjective events | 1. Objective events |
| 2. Holistic (man as a whole) | 2. Atomistic (elementary principle) |
| 3. Naturalistic observation | 3. Laboratory observation |
| 4. Individual (Ideographic) | 4. General (Nomothetic) |
| 5. Qualitative description | 5. Precision and measurement |
| 6. Understanding | 6. Prediction and control |
| 7. Self-determination, freedom, spontaneity in causation | 7. Scientific determinism, mechanistic in causation |
| 8. Originality, creativity, and activity | 8. Passive respondent, automatonism |
| 9. Self-actualization, personal growth, personality development | 9. Conditioning; behavior modification, and behavior therapy |
| 10. Values in science | 10. Valueless science |
| 11. Applied concern with human problems | 11. Basic, pure science; science for science's sake |
| 12. Purpose and goals, future causation | 12. Prior and present causation |

13. Insight and awareness
 14. Biological explanation
 of human behavior

13. Conditioning
 14. Environmentalism
 (p. 462)

Staats proposed that a rapprochement of a number of these divisive characteristics and concerns can be effected through the "social behaviorism" paradigm which he has constructed. This paradigm is comprehensive and complex and will not be reported in detail for this essay. It is essentially a behavioral approach that includes classical and operant levels as well as attitudinal, emotional levels. Staats sees attitudes as part of a behavioral repertoire that directs behavior. They are products of conditioning processes and are also causes. He proposed a three-function learning theory, an emotional-motivational mechanism, and a personality system. His "A-R-D" theory sees social interaction as an important part of human behavior. The Staatsian approach activity works for compatibility with clinical, educational, and developmental psychology, psychometrics, social and biological sciences, as well as humanism. It is the prominent addition of the attitudinal, emotional, and personality level which distinguishes his work from that of earlier behaviorists, against whom much of the criticism of the humanists has been directed, primarily because of their denial of internal, mental events.

The author wrote that it is unfortunate to reject one approach at the cost of the other as they can be unified

under a common framework of social behaviorism. This type of rapprochement would have the following salient features:

(1) emotional and cognitive events and overt instrumental behaviors can be dealt with in the framework of the same principles, (2) this can be done in an empirical manner, (3) verbal reports of subjective experiences can index subjective states, and (4) subjective states are causes, not epiphenomena. (p. 463)

"Awareness," according to Staats, can be behaviorally described as the individual's recognition of the contingencies in which he or she is involved. Concern with the individual and his or her history is compatible with an approach that examines the elemental, general laws of behavior if a personality level to the theory is included. Staats proposed a reconciliation on the issue of purpose and scientific causation by reporting that

scientific causation moves along a time dimension--earlier events can determine later events, but not the converse. Future events do not affect events that have already happened. When it is said that man's goals affect his present behavior, and the goals are conceived as events in the future, then this abrogates the "rules of causality" that have generally been found in science. Elemental behaviorism has not resolved this dilemma, restricting itself to the study of present events that affect the behavior of the organism.

How then is the dilemma to be resolved? It is suggested that future events, in a sense, can be conceived of as determining behaviors that occur before those events. This is "in a sense," however, for it is actually the reasoning and planning sequences of the individual that are relevant to those future events and determine the individual's action. (p. 472)

Staats continued by explaining the paradox of personal freedom and scientific determinism from his point of view.

What seems like a pair of mutually exclusive, antagonistic positions, however, need not be. Human behavior can be considered caused by other material, natural events--not uncaused (spontaneous), capricious, or supernaturally caused events--without rejecting the originality, activity, and self-direction characteristic of man and the experience of freedom and spontaneity. It is suggested that the laws of learning, elementary and human, are causative laws and the individual is what he has learned, and he is affected also by the present conditions to which he is subjected. The personal freedom, self-direction, creativity, and spontaneity that we experience can involve the way that individuals extend their past learning through reasoning, planning, purposeful goals, and so on, many times including original combinations of behavior that have not been learned. (p. 477)

He added that the phenomenological experience of determining one's own behavior arises from self-observation of causal processes and that "a theory of man must have a place for this pervasive experience of inner self-determination" (p. 478).

He then addressed the issue of values in science and humanism and pointed out that the study of humans can be scientific and planned in regard to human and social problems and "be humanistic in its values concerning human welfare" (p. 489). He concluded his discussion by calling for a unified general conception of human behavior:

There are essential aspects of both that can be combined to yield a framework for studying human behavior, for treating problems of human behavior, and for making decisions with respect to ourselves and others. Such a philosophy of human science, it is suggested, is more complete, less erroneous, and more productive than

either approach alone. Establishing a unified general conception of man is an important part of the task of providing a paradigm that can deal with the various aspects of the study of man. Prejudices that are outgrowths of one or the other philosophical position can only continue to represent barriers to a unified approach. (p. 490)

This brief report of certain aspects of Staats' position shows that he is undoubtedly a "behaviorist"; however, he is a humanist in that he believes in emotions and the potency of inner events. He shares the humanists' views that elemental behaviorism can be criticized as a limited explanation of human behavior. Staats' conception is more than a behavioral explanation of humanism as it actually adds a phenomenological level to behavioral thought. Most importantly, Staats demonstrates that behavioral and humanistic positions can be reconciled, if not unified.

The following three articles are from the behavioral perspective and serve to clarify two important issues. The articles by Hayes and Maley (1977) and Lipinski and Lawrence (1973) focus on "control," and the selection from Malott (1973) introduces the idea of "conceptual analysis" from a humanistic behavioral perspective. Following these articles will be some ideas from Macdonald on an emerging new scientific consciousness, which is one of the themes of this essay.

Hayes and Maley (1977) addressed the issue of coercion and control from both the behavioral and legal viewpoints and asserted that confrontation between these two perspectives

is a result of "different language games" (p. 87) or language systems. The language system of the legal profession is seen as similar to the language of humanists; that is, it is "mentalistic." Terms such as "free will," "freedom," and "coercion" are employed in legal language, and there is a simultaneous view that terms from behavioral language such as "behavior modification" and "control" may be viewed as a potential threat to civil liberties. The authors emphasized the importance of understanding and differentiating the terms "coercion" and "control" for both psychologists and attorneys.

To the lawyer, "coercion" is a type of influence reserved by the State and only to be used with adequate procedural protections. Coercion is verbally described in legal discourse primarily by the absence of other qualities, such as "freedom," "voluntarism," and "free will." Since behaviorism is popularly viewed as assuming the absence of "freedom," "voluntarism," and "free will," lawyers are likely to term the activities of behaviorists "coercive" by definition. Therefore behaviorism becomes something that lawyers should oppose, or, at least, very carefully monitor. To most behaviorists, the legal profession's concerns about behavioral control are seen to reflect profound ignorance. Behaviorists have a difficult time understanding the lawyer's preoccupation with coercion and control as the major issues in psychological intervention. After all, to the behaviorist, all behavior is under some form of control, and, since coercion is seemingly held by the law to be synonymous with control, concerns about doing away with or even reducing coercive practices are thought to be meaningless and pseudo-issues. (p. 88)

These authors asserted that "control" and "coercion" are not synonymous, but that coercion may be a type of control although control is not, per se, coercive. Their analysis of the legal perspective on "coercion" resulted in

the conclusion that three conditions must be present when the term is used: "saliency," the "nature" of control, and the "extent" of control. First, controlling contingencies must be salient in situations labeled coercive, and the more obvious the control, the more likely it will be seen as coercive. The nature of control is likely to be aversive; however, coercion may exist when positive reinforcement is employed in controller-designed deprivation situations or when the situation is relatively barren of positive reinforcers. The extent of control is defined by the strength of the contingencies and the narrowness of control. The authors pointed out that strong controls have a high probability of compliance and a narrowness of alternatives--two elements that define the nature of coercive control.

Hayes and Maley asserted that coercive control is generally undesirable for three broad reasons. It promotes societal inflexibility, creates the expense of additional resources, and contributes to increasingly maladaptive practices in a culture. They said that behaviorism may be a treatment for a coercive culture by, among other things, identifying and clarifying the contingencies operating in that culture and by "making cultural practices and decisions more understandable and subject to public review" (p. 94). One contribution to that goal is the alleviation of terminological confusion, according to the authors.

Lipinski and Lawrence (1973) have authored a presentation that brings into focus the issue of "control" within the context of behavior modification procedures. They pointed out that "contracting" is a typical procedure employed in the "natural" environments of home and school, and that these contracts are usually based on the Premack Principle. Often, the authors said, these contracts are conceptualized as a one-way process; that is, one part to the contract has targeted behavior change and the other party controls that change with reinforcement. The authors argued that negotiation, a "balance of trade," and reciprocity appear to be crucial factors and that these contracts may be more accurately seen as a "two-way process embodying an exchange of behaviors and reinforcers." The implication is that "control" may not be the one-sided linear process that it is generally thought to be, but rather the "controller" is subject to behavior change in a reciprocal manner.

Macdonald (1975) argued for critical processes that focus not only on the dialectic between material conditions and consciousness, but go to the deeper level of the dialectic between social determinism and the personal experience of freedom. He wrote that this approach would "move beyond the personalistic and individualistic emphasis of existentialism and third force psychology" (p. 7).

Two questions, according to this author, should be emphasized: "What potentialities are being dominated by unnecessary social constraints on human freedom?" and "How can we be more aware of being dominated?"

The answers, it seems to me, cannot be generated out of a simple intermediate social level, but must arise out of some "objective" phenomena, or out of our own "subjectivity." Thus, it appears that science (not scientism) as objective praxis, and religion (broadly interpreted, i.e., the search for personal meaning in existence) are avenues for developing consciousness of domination and potential when we engage in scientific and religious praxis and the "universe" speaks back. (p. 7)

An emerging new consciousness of science recognizes that that which appeared to be separable is actually inter-related in a larger universe of relationships. Although the focus of this paper is not primarily directed at the reconciliation of behaviorism and humanism, there appears to be implicit support for such a notion as a direction that may aid in reconceptualizing curriculum processes.

The collection of articles by Fitt (1976), Dumas (1973), Cohen and Hersh (1972), and Smith (1973) represents an educational perspective on the behavioral-humanist dilemma that parallels the perspective presented in the psychological literature. It shows that some educators are addressing the dilemma especially as it relates to educational practice.

Fitt (1976) wrote that there is a "raging dispute between behaviorists and humanists" in education and claimed that many have adopted a short-sighted "either-or

position" (p. 13).

Educators seem to think that these two approaches are mutually exclusive, that they cannot coexist in the same classroom. Educators who hold this belief may be right if either position is taken to extremes, but total adherence to behaviorism or humanism in today's schools is rare. (p. 14)

The author affirmed the validity of reinforcement theory which applies even to those who reject those concepts. She said that teachers shape the behavior of others whether they want to or not and that "to ignore reinforcement techniques is to use the tactics of the ostrich: burying one's head in the sand" (p. 16).

Fitt proposed a reconciliation of the two approaches because, as she sees it, humanism is a philosophy and behaviorism is a technology. She summed up her position by writing that

Behaviorism is a technology. It supplies the tools for behavior modification, such tools as objectives stated in behavioral terms and reinforcement theory. Humanism is a philosophy. It provides direction, ideals, and goals in the pursuit of the "good life." These two approaches need not be at odds with each other, for they occupy different domains. (p. 16)

She advocated the humanistic-behavioral position which uses behavioral techniques to reach humanistic goals.

Dumas (1973) stated that the use of behavioral objectives improves the educational process by decreasing aimlessness and disorientation in the classroom. However, a narrow approach to their use may lead to dehumanization

and trivialization, as some humanists have charged. His solution is to humanize the behavioral objectives process; he proposes five guidelines which are

a pattern of objectives which would provide better than traditional guidance to teachers in their planning and to students in their study, and at the same time serve as no deterrent to humanism or the creativity which should characterize a free system of society and education. (p. 304)

First, constructing objectives solely on the basis of their measurability is a mistake. Dumas is not opposed to measurability, but he is opposed to focusing only on educational outcomes that can be measured. He wrote that

There are a great many bases for deciding the shape of a curriculum--needs of youth, social problems which require resolution, the "structures" of the disciplines, perhaps--but "measurability," never. Rather, we should write the best objectives we can, according to legitimate bases for curricular development, then evaluate as best we can those things which we have specified in our objectives. (p. 305)

Secondly, the objectives should be stated as precisely as possible and should focus on the conceptual outcomes desired. Dumas rejected the use of unnecessarily vague objectives but added that "it is even more important that objectives not be stated so simply or so restrictively as to suggest that less learning or less complex learning is desired than is actually the case" (p. 305).

The third guideline involves communication. "Stated objectives should be interpreted to students as a minimal

statement of expectations, never as the outer limits of learning" (p. 305).

The fourth objective is that

Stated objectives cannot and need not attempt to be inclusive of all important tasks (facts or concepts) inherent in the materials to be read or the activities scheduled. Objectives for guiding study tend to be disregarded, or regarded with less care, in approximate proportion to their increasing number. (p. 306)

The final guideline involves evaluation. Dumas proposed that task mastery related to the stated objectives should be liberally sampled, but that it should not be limited to that. Other, unspecified learnings should also be evaluated if the objectives were communicated as minimal expectations.

Cohen and Hersh (1972) have proposed a synthesis of behaviorism and humanism for teacher education which they call "behavioral humanism." They stated that a synthesis of these two approaches to education will avoid perpetuating "the needless dichotomies that characterize the discourse emanating from both rigid behaviorism and naive humanism" (p. 172). They assert that the foundation of a synthesis rests on the following four questions which apply to every educator regardless of ideology:

1. What would I like each of my students to be able to do, know, and/or feel as a result of their experiences in my course? (goals)
2. What evidence do I have that any or all of these goals have merit for any student? (rationale)
3. What instructional procedures can I employ to help each student obtain his goals? (instruction)

4. What evidence do I use to decide if goals are being attained? (assessment) (p. 172)

The authors pointed out that the argument between behaviorists and humanists can be described around the four "critical questions" concerning goals, rationale, instruction, and assessment.

In respect to the goals question the authors said that behaviorists have accused humanists of either refusing to admit that they have goals or stating them so globally they become mere platitudes. Humanists, in turn, have accused behaviorists of trivializing education by relying on only the most easily observable and specifiable objectives. (p. 173)

Additionally, the humanists have claimed that the behaviorists consistently neglect the affective domain and its effect on the educational process. Behaviorists have countered that attitudes, feelings, and values are accounted for by inferring their existence from observable behavior.

Humanists argue that the behaviorists assume a value-free orientation and ignore the question of rationale. They say that this can lead to a technology that may be used to accomplish goals that have no value. On the other hand, the behaviorists say that the humanists' goals sound high-minded but that there is little to support the notion that they can actually accomplish these goals with their approach.

The authors wrote that disagreements between proponents of the two approaches also center on teaching processes.

Humanists tend to accuse behaviorists of promoting programmed instruction as a panacea and of advocating a lock-step conditioning that smothers individual differences. Some humanists fear that a behavioral technology will produce robot-like responses from people incapable of making independent decisions or going beyond the information given. Behaviorists, on the other hand, have depicted humanists as either not concerned with questioning their instructional procedures or incapable of doing so systematically. (p. 173)

Cohen and Hersh went on to describe the debate concerning assessment.

Humanists have accused behaviorists of trying to fit the world into a multiple-choice format. Behaviorists counter by saying that humanists evaluate their instructional effectiveness according to whether they feel good about it, or they don't evaluate it at all because they feel that the very evaluation process itself is dehumanizing. Humanists claim that behaviorists are content to measure only the trivial; behaviorists reply that all decisions are based on observed behavior and that rather than deny the measurement of human behavior one should strive to improve the range and skill of human assessment. (p. 174)

The authors stated that a synthesis of humanism and behaviorism for teacher education connects a humanistic approach to goals and rationale with the behavioral view of instruction and assessment. This maximizes the strong points of each approach and at the same time minimizes their weaknesses. They wrote that "Where the humanists have been strong (direction of goals and rationale), the behaviorists have been weak; where the humanists have been weak (stating measurable goals and assessment), the behaviorists have been strong" (p. 174). This, then, is the essence of the

synthesis of behaviorism and humanism for teacher education that the authors proposed.

Smith (1973) asserted that "behavior modification, if used humanistically, can be an effective tool for greater freedom, self-expression, and realization of potential" (p. 60). She went on to address misconceptions about behavior modification by discussing four fallacies believed by humanistically oriented educators.

First, "Control used in behavior modification procedures is harmful and inhumane" (p. 60). This is a fallacy, according to the author, because it is uncommon to find behavior modification techniques that employ aversive control, and the basic principles underlying the behavior approach hold that punishment is a relatively ineffective means of control. She addressed the issue of control in general and if its use is in itself antihumanistic.

If we fail to exercise control, it is possible that we are being antihumanistic. If we have a procedure that can teach an autistic child to talk and enjoy playing with other children, or a "slow learner" to enjoy reading, are we not being antihumanistic not to use control? It can be argued that countless children are being denied life and work opportunities by scruples that arise out of so-called humanism. Failure to use systematic control must, in some cases, be regarded as abdication of responsibility. (p. 61)

One often overlooked facet of control is that it is not a one-way process, either in the natural or behavior-managed environment. The reciprocal nature of control is such that

although the teacher may modify the students' behaviors, the students also modify the teacher's behavior.

The second fallacy is that "Control in behavior modification procedures always stems from some agent in the external environment" (p. 62). Smith pointed out that the ultimate aim of behavior modification is to encourage dependence on intrinsic rewards. She asserted that "almost without exception behavior modification programs evolve from a high dependence on external control, sometimes by primary reinforcers, toward the use of reinforcers like praise and approval, and ultimately toward self control" (p. 62). She also commented on whether rewards for appropriate behavior constitute "bribery" and stated the opinion that this argument "is usually based on a desire for power on the part of the teacher or parent without regard for the child's wishes" (p. 63).

The third fallacy presented is that "Behavior modification leads to the maintenance of the status quo and the present values, objectives, and methods of the school system" (p. 63). Most traditional classroom environments have a competitive atmosphere with winners and losers and thus deny to each individual the opportunity to realize his full potential. The behavioral approach, however, is individualized and resists the commonly held assumption that the pattern of group achievement must follow the

"normal curve." Smith sees behavior modification as likely to result in change in educational systems rather than maintenance of the status quo.

The fourth fallacy is that "Behavior modification is mechanistic in its insistence on precise measurement of behavior" (p. 65). The author stated that humanists perceive the measurement orientation of behaviorism as similar to monitoring the behavior of rats in Skinner boxes. She asserted that "the idea that measurement is inconsistent with a humanistic viewpoint is highly questionable" (p. 65) because behaviorists are more concerned with their own effectiveness in fostering meaningful change. "The prime concern of the behavior modifier is to do something that works. Good humanistic intentions of fostering love, freedom, and self-expression are not always enough to help children learn" (p. 65).

Smith concluded by asserting that "there is no foundation for the view that behavior modification and humanism are not compatible" (p. 66). She stated that humanists who reject the behavioral approach may, in fact, be denying individuals opportunities for self-actualization and may be camouflaging their own resistance to change.

The following is a definition of "models" and an explanation of an approach to dilemma reconciliation.

Brubaker (1978) offered definitions for the terms "settings" and "models" and presented the basic assumptions

of the settings model, comparing them with the assumptions of the linear-sequential curriculum approach. Additionally, this writer suggested operational guidelines for the creation-of-settings model.

A setting is defined as "any instance when two or more persons who share certain goals form a covenant(s) for a period of time" (p. 23), and model building is described as

The process whereby one attempts to convey the essential features of a particular reality through a construct whose elements and their relationship to each other and the whole are described. The model can then lead to theories, experimental studies, and other forms of research. (p. 23)

Brubaker discussed the basic assumptions of the creation-of-settings model, the goals of which include a psychological sense of community and a sense of personal worth. These assumptions center around the doing-being distinction, and the author asserts that "purely technical explanations and planning systems restrict one to the doing dimension of human interaction." This is restricting as "observable behavior" and the testable data that it generates become the focus and this, in turn, generates a "linear sequential problem-solving orientation." This orientation is closely tied to curriculum development and is characterized by the assumptions that "all issues are problems that can be solved with the proper use of resources; there is now or will be only one correct solution; and all

causes that led to the problem can be known." The problem-solving orientation carries with it two myths about resources: first, that they are unlimited; and, second, that the most important resource is money. In addition, this approach "tends not to address 'basic' problems but rather seeks and defines problems with enough clarity so that unambiguously correct solutions will result" (p. 25).

An alternative to the problem-solving approach is the "dilemma-reconciliation" concept which recognizes that "many issues are dilemmas to be reconciled rather than problems to be solved which is to say that resources are limited and progress is not inevitable" (p. 26). Brubaker pointed out that "significant problems are usually part of larger dilemmas" (p. 29) and that questions may be framed so that problems will not necessarily be "solved" but framed in the context of larger questions.

In Brubaker's model, "emerging goals and objectives and the hidden curriculum are as important as predetermined goals, objectives, and the observable curriculum" and "the realities of the Technocratic Age often work against rather than for the quality of personal and community life" (p. 26). The creation-of-settings model considers both the objective and subjective approaches as important; also, it has the potential of not being limited by time and space.

Praxis, or reflective action, is an overarching commitment that integrates the subjective and objective, the

scientific and non-scientific, acknowledges the doing-being distinction, and relates to the history of the setting.

Other appropriate elements are also integrated through this reflective action.

Praxis is the process whereby the cognitive, affective, and psychomotor dimensions of learning are recognized and integrated. Praxis connotes the marriage of the theoretical and the applied, research and development, the university and the school. Specifically, praxis emphasizes relating one's actions to reflections concerning such actions. It recognizes the limitations of thinking that falls short of doing and the limitations of doing without reflecting. (p. 28)

The author then listed seven operational guidelines that are designed to stimulate the development of other guidelines to aid the educator in planning, implementing, and evaluating. The guidelines are designed to aid in planning and spontaneity:

1. Be aware of the problem-solving and dilemma-reconciliation modes of thinking;
2. Recognize that it is impossible to predict and control all creation of settings processes at all times and that furthermore it is undesirable to act as if you can;
3. Acknowledge that much more will occur in creating a setting than you (and others) can observe;
- 3.1 Try to relax in relating to the mystery of settings for this mystery can be a stimulant for discovery of self, other persons and the environment. In this process shape goals, learning activities, and evaluation to this reality;
- 3.2. Give attention to intentionality as the source of vitality in personal relationships;
4. Relate to the history and culture of the setting by being aware of the language of the setting as well as symbols, rituals, and myths associated with the setting;
5. Be aware of the leadership process and in particular the formation of the core group by noting leaders' views as to who can and should participate in the leadership process and the rank order in which core group members are chosen;
6. Be sensitive to the

the many resources available through informal channels; and, 7. Recognize the inevitability of change, the relatedness of settings elements to each other and the whole setting and the symbiotic relationship between personal growth and the growth of the setting. (p. 30)

Curriculum Ideas

The related literature has represented two relatively broad issues which have concerns central to this paper. The first I termed "Curriculum Conflict," a dramatic characterization for a professional field that could benefit from the addition of drama if it is, as Huebner said, moribund. The literature appearing in that section demonstrated that curriculum is a diverse field that is extending in different directions, one of which is toward a more complete embodiment of either behavioral or humanistic psychological models for curriculum work. The dilemma arising from attempting to select one model at the cost of the other has been examined and seen to parallel a similar dilemma in the psychological literature.

The second issue has been literature relating to the reconciliation of the behavioral-humanist dilemma. These collected descriptions showed that a number of writers are optimistic about the possibilities of unifying, to some extent, these two approaches. This literature validated the assumption that behaviorism and humanism can be reconciled,

and that this reconciliation has important implications for curriculum processes.

The literature has reflected a variety of notions about curriculum, education, and psychology. Included were the ideas that education and psychology are multidimensional and that educators cannot afford to ignore psychological research. Curriculum and instruction were said to be inseparable and curriculum was presented within the context of learning. It was asserted that either behavioral or humanistic models have the potential for misuse and that they are vulnerable to criticism on this point. It was pointed out that the conflict between behaviorists and humanists is based to some degree on misunderstanding and terminological confusion. Additionally, it was asserted that significant problems, such as the behavioral-humanist controversy, are usually part of a larger dilemma.

During the writing of this paper I have experienced the dilemma posed by my own objectivity and subjectivity in the selection of appropriate literature, and then in the reporting of that selected literature. At times I have assumed a Staatsian perspective and experienced a subjective awareness of my work as an original combination of various behaviors in my collection acquired through classical and operant conditioning processes. At other times, Gelso's ideas about alternating subjective and objective states seem to describe my operation. Occasionally I am

metaphorical: taking in the nutrients of encounter and data, and growing as a result. Most of the time, however, I have a pervasive feeling that my behavior is influenced by simultaneous and interacting objective and subjective conditions. For example, there seems to be an inescapable convergence when I attempt to understand my own behavior and feelings. I question whether I am subjectively observing my own objectivity, or objectively viewing my own subjectivity. Additionally, I question what happens when I attempt to extend my own observations to other events and persons. Perhaps it is possible, for a brief period, to observe pure objective behavior or to experience pure subjective emotions, although I see it as more likely that a convergence is occurring somewhere on a continuum between the two. The dilemma posed by my own objectivity and subjectivity is somewhat resolved by my awareness of their simultaneity and interactivity. These processes have transformed the literature treated into something that is part of my personal curriculum that I see as worth extending as a possible contribution to a field that interests me.

As a way of tying together this collection of literature, ten ideas about curriculum are proposed. These represent the combinations which best summarize the essence of the literature that provides assumptions for developing a model.

First, behavioral and humanistic approaches are compatible and reconcilable. One cannot be reduced to the

other, but they can be viewed as multiple realities coexisting in a universe of other realities. The objective perspective is simultaneous and interactive with the subjective perspective and has convergent and transformative effects.

Second, the behavioral-humanist dilemmas in psychology and education are parallel and related. The extension of psychological thought in this area is beneficial for curriculum thinking.

Third, the polarization of behavioral and humanistic positions has resulted in an unproductive stalemate which adds little, if anything, to educational practice. This conflict is not constructively answering Huebner's questions about the relationship between educators and the not yet educated.

Fourth, change seems inevitable and both behavioral and humanistic approaches are potent processes for change. Resistance to either, or both, may camouflage authoritarianism. Related to this is the question of whether authoritarianism has a place in curriculum and educational processes. It is my opinion that authoritarianism is pervasive in contemporary schooling and is detrimental to educational processes.

Fifth, curriculum can be conceptualized psychologically; behavioral and humanistic approaches emphasize the

environment, relationships, and learning. Of course, there can be other psychological conceptions of curriculum also.

Sixth, curriculum cannot be separated from instruction; curriculum and instruction cannot be separated from education; and, education cannot be separated from the societal and cultural context in which it occurs.

Seventh, the most vital aspects of curriculum and education are content and process; however, neither is paramount.

Eighth, behaviorists and humanists agree that learning is an individual process, and is both overt and covert. That learning is an individual process is almost common knowledge, so why is this fact commonly ignored?

Ninth, values are central to curriculum and educational processes and must be explored situationally and contextually by all persons involved in the educational enterprise. That includes everybody--policy makers, curriculum workers, teachers, administrators, and students--and goes beyond trying to determine who is a "level one" and who is a "level six," or whatever. Rather, an effort to determine what values are reflected by educators' behavior may clarify covert values.

Tenth, the most prevalent type of behavioral-humanist reconciliation is a synthesis of humanistic goals and rationale with behavioral procedures and assessment. This shows that other workable reconciliations are also possible.

CHAPTER III
TOWARD A RECONCILIATION

The literature related to this essay, and reviewed in the preceding chapter, shows that the behavioral-humanistic dilemma in curriculum and instruction can be reconciled. This chapter consists of two main components related to that reconciliation.

First, three approaches to reconciliation will be explained and illustrated with figures. A synthesizing approach, a simultaneous approach, and a convergent approach will all be described. They will be presented as a broad set of alternatives for conceptualizing the reconciliation of the behavioral-humanistic dilemma in curriculum and instruction and can be considered exploratory and tentative. They will not be tied together in a model that is characterized as "comprehensive"; however, their complementarity should be apparent.

Second, it will be suggested that the frameworks presented will be transcended eventually, and several new directions for going beyond current frameworks will be listed. Additionally, seven recommendations for action and research centering around the reconciliation of the behavioral-humanistic dilemma in curriculum and instruction will be suggested, and a brief epilogue will be presented.

The Synthesizing Approach

Synthesizing is one approach to the reconciliation of the behavioral-humanistic dilemma in curriculum and instruction. Synthesizing is a process in which separate elements are combined to form a new, coherent whole. The separate elements are arbitrary, so this process has the potential for generating numerous and diverse approaches to curriculum and instruction.

It was indicated in the review of the literature that the most prevalent synthesis of these two models is a combination of humanistic goals and rationale with behavioral procedures and assessment. From this conception, the following elements can be specified as a starting point for synthesizing: (1) goals, that is, the changes in behavior, thoughts, and feelings as a result of the curriculum and instruction experience; (2) rationale, that is, the reasons that these changes have merit; (3) process or techniques, specified here as being from the teacher's or curriculum worker's perspective. In other words, what does the teacher or curriculum worker do to bring about these changes?, and (4) assessment or evaluation, that is, what is the relationship of processes and techniques to goals?

The second set of elements for this synthesis are behavioral and humanistic approaches. It could be argued that humanists would resist the incorporation of their

approach into the four-part curriculum conception; however, the elements are only being suggested, and there is nothing inherently behavioral about them. Both sets of elements can be combined so that any one of the first four (goals, rationale, process or techniques, and assessment or evaluation) can be either behavioral or humanistic. Sixteen possible permutations result, listed in Figure 1.

A brief explanation of the behavioral and humanistic approaches to each of the four elements is summarized below:

(1) From the behavioral perspective, goals are specified changes in observable behavior. These changes are not necessarily specified by the curriculum worker on an a priori basis; they may be the result of mutual agreement among teachers and students. The goal of curriculum and instruction, from the humanistic perspective, is self-initiated, significant learning.

(2) Rationale for the goals, stated behaviorally, is the acquisition of behavior that is useful to the learner and his or her culture. The humanistic rationale for goals can be described as adaptation and learning how to learn.

(3) Process or techniques from the behavioral perspective is the arrangement of contingencies of reinforcement, preferably nonaversive. This approach may be a rigorous and systematic employment of behavioral procedures or, as the review of the literature suggests, a conceptual and less overt awareness of behavioral processes. Humanistic

technique is the expression of attitudes that facilitate change and learning. These attitudes include genuineness, warmth, and empathy in the teacher-student interpersonal relationship. This element has been described from the curriculum worker's or teacher's point of view because these syntheses focus on what those persons do. From the learner's point of view, process will be experienced as effective, individualized, and participatory rather than behavioral or humanistic. Of course, a person may learn behavioral and humanistic approaches through process and technique.

(4) Assessment or evaluation from the behavioral perspective is a relatively objective measurement of observable behavior change. Objective criteria may include samples of behavior or the products of the learner's behavior. The humanistic approach to assessment and evaluation would employ subjective criteria defined by the individual student. It would be inaccurate to assert that either approach focuses more or less on behavior or emotions in assessment and evaluation.

	<u>GOALS</u>	<u>RATIONALE</u>	<u>PROCESS or TECHNIQUE</u>	<u>ASSESSMENT or EVALUATION</u>
1.	Humanistic	Humanistic	Humanistic	Humanistic
2.	Humanistic	Humanistic	Humanistic	Behavioral
3.	Humanistic	Humanistic	Behavioral	Humanistic
4.	Humanistic	Humanistic	Behavioral	Behavioral
5.	Humanistic	Behavioral	Humanistic	Humanistic
6.	Humanistic	Behavioral	Humanistic	Behavioral
7.	Humanistic	Behavioral	Behavioral	Humanistic
8.	Humanistic	Behavioral	Behavioral	Behavioral
9.	Behavioral	Humanistic	Humanistic	Humanistic
10.	Behavioral	Humanistic	Humanistic	Behavioral
11.	Behavioral	Humanistic	Behavioral	Humanistic
12.	Behavioral	Humanistic	Behavioral	Behavioral
13.	Behavioral	Behavioral	Humanistic	Humanistic
14.	Behavioral	Behavioral	Humanistic	Behavioral
15.	Behavioral	Behavioral	Behavioral	Humanistic
16.	Behavioral	Behavioral	Behavioral	Behavioral

FIGURE 1. The Synthesizing Approach

next, the sixteen possible permutations of this particular synthesizing approach to curriculum and instruction will be outlined. For convenience, each synthesis will first be identified by its corresponding number on Figure 1 and then a four-letter abbreviation identifying each element (goals, rationale, process or technique, and assessment or evaluation) as either behavioral (B) or humanistic (H). For example, the fourth synthesis combining humanistic goals and rationale with behavioral processes or techniques and behavioral assessment or evaluation will be identified as (4) H-H-B-B.

(1) H-H-H-H. Curriculum and instruction conceptualized as having the goal of self-initiated, significant learning; the rationale for the goal as adaptation and learning how to learn; with a process that emphasizes the teacher's expression of attitudes which facilitate change and learning; and evaluation with subjective criteria. This is a pure non-synthetic approach which humanists assert is a feasible model.

(2) H-H-H-B. Curriculum and instruction conceptualized as having the goal of self-initiated, significant learning; the rationale for the goal as adaptation and learning how to learn; with a process that emphasizes the teacher's expression of attitudes which facilitate change and learning; and assessment with objective criteria. This synthesis is

feasible with the focus on who is assessing the first three elements and why.

(3) H-H-B-H. Curriculum and instruction conceptualized as having the goal of self-initiated, significant learning; the rationale for the goal as adaptation and learning how to learn; with the teacher arranging non-aversive contingencies of reinforcement; and evaluation with subjective criteria. This synthesis appears feasible if approached from the conceptual level of behaviorism. In other words, the teacher and student may not target behavior changes in advance, but rather the teacher will be aware of the consequences of his or her actions, analyzed behaviorally, in the teaching process.

(4) H-H-B-B. Curriculum and instruction conceptualized as having the goal of self-initiated, significant learning; the rationale for the goal as adaptation and learning how to learn; with the teacher arranging non-aversive contingencies of reinforcement; and assessment with objective criteria. This is the synthesis identified in the review of the literature as the most popular and emergent reconciliation of the behavioral-humanistic dilemma. In fact, this is not incongruent with the early operant approach of dealing with emitted behavior.

(5) H-B-H-H. Curriculum and instruction conceptualized as having the goal of self-initiated, significant learning; with the rationale for the goal as the acquisition of

behavior that is useful to the learner and his or her culture; with a process that emphasizes the teacher's expression of attitudes that facilitate change and learning; and evaluation with subjective criteria. The interesting aspect of this possible synthesis is that the behavioral rationale for the humanistic goal does not appear incongruent.

(6) H-B-H-B. Curriculum and instruction conceptualized as having the goal of self-initiated, significant learning; with the rationale for the goal as the acquisition of behavior that is useful to the learner and his or her culture; with a process that emphasizes the teacher's expression of attitudes that facilitate change and learning; and assessment with objective criteria.

(7) H-B-B-H. Curriculum and instruction conceptualized as having the goal of self-initiated, significant learning; with the rationale for the goal as the acquisition of behavior that is useful to the learner and his or her culture; with the teacher arranging nonaversive contingencies of reinforcement; and evaluation with subjective criteria.

(8) H-B-B-B. Curriculum and instruction conceptualized as having the goal of self-initiated, significant learning; with the rationale for the goal as the acquisition of behavior that is useful to the learner and his or her culture; with the teacher arranging nonaversive contingencies of reinforcement; and assessment with objective criteria.

It could be said that this synthesis is similar to a

behavioral model that deals with emitted rather than elicited behavior, although some covert goals may exist from the teacher's perspective.

(9) B-H-H-H. Curriculum and instruction conceptualized as having the goal of mutually specified changes in observable behavior; with the rationale for the goal as adaptation and learning how to learn; with an emphasis on the teacher's expression of attitudes that facilitate change and learning; and evaluation with subjective criteria.

(10) B-H-H-B. Curriculum and instruction conceptualized as having the goal of mutually specified changes in observable behavior; with the rationale for the goal as adaptation and learning how to learn; with a process that emphasizes expression of attitudes that facilitate change and learning; and assessment with objective criteria.

(11) B-H-B-H. Curriculum and instruction conceptualized as having the goal of mutually specified changes in observable behavior; with the rationale for the goal as adaptation and learning how to learn; with the teacher arranging nonaversive contingencies of reinforcement; and evaluation with subjective criteria. This synthesis suggests that some form of subjective evaluative criteria such as self-report can be employed in conjunction with goals that specify observable behavior.

(12) B-H-B-B. Curriculum and instruction conceptualized as having the goal of mutually specified changes in

observable behavior; with the rationale for the goal as adaptation and learning how to learn; with the teacher arranging nonaversive contingencies of reinforcement; and assessment with objective criteria.

(13) B-B-H-H. Curriculum and instruction conceptualized as having the goal of mutually specified changes in observable behavior; with the rationale for the goal as the acquisition of behavior that is useful to the learner and his or her culture; with a process that emphasizes the teacher's expression of attitudes that facilitate change and learning; and evaluation with subjective criteria.

(14) B-B-H-B. Curriculum and instruction conceptualized as having the goal of mutually specified changes in observable behavior; with the rationale for the goal as the acquisition of behavior that is useful to the learner and his or her culture; with a process that emphasizes the teacher's expression of attitudes that facilitate change and learning; and assessment with objective criteria.

(15) B-B-B-H. Curriculum and instruction conceptualized as having the goal of mutually specified changes in observable behavior; with the rationale for the goal as the acquisition of behavior that is useful to the learner and his or her culture; with the teacher arranging nonaversive contingencies of reinforcement; and assessment with subjective criteria.

(16) B-B-B-B. Curriculum and instruction conceptualized as having the goal of mutually specified changes in observable behavior; with the rationale for the goal as the acquisition of behavior that is useful to the learner and his or her culture; with the teacher arranging nonaversive contingencies of reinforcement; and assessment with objective criteria. This is a nonsynthetic behavioral approach to curriculum and instruction.

All but the first and the last of these permutations represent possible synthetic reconciliations of the behavioral-humanistic dilemma in curriculum and instruction. Of the fourteen possible syntheses, only one, the fourth, has been described in the literature reviewed for this paper. The remaining thirteen are feasible approaches to curriculum and demonstrate that a reconciliation is possible through a synthesizing approach. These syntheses are presented to illustrate the synthesizing approaches; any number of other syntheses are possible depending on the number of curriculum elements employed.

The fourteen syntheses presented here differ primarily in focus and emphasis and offer a set of alternative synthetic approaches for educational practice and research. Many questions can be raised by the synthesizing approach. For example, what is the effect of behavioral assessment on an otherwise humanistic curriculum approach? Or, what is the

effect of humanistic evaluation on an otherwise behavioral curriculum approach?

The language used in this section to describe behavioral and humanistic conceptions of goals, rationale, process or techniques, and assessment or evaluation was selected from the writings of behaviorists and humanists in the review of the literature. It is noteworthy that the language can be interpreted as representing both multiple realities, by distinctions, and convergence through similarity.

Next, approaches to the reconciliation of the behavioral-humanistic dilemma by simultaneity and convergent approaches will be described.

The Simultaneous Approach

The behavioral-humanistic dilemma in curriculum and instruction can be reconciled by conceptualizing curriculum and instruction as a set of elements that have simultaneous behavioral and humanistic qualities. The simultaneous approach differs from the synthesizing approach which specifies that the curriculum and instruction elements are either behavioral or humanistic, in a discrete manner.

A simultaneous approach accommodates the possibility that any curriculum element can be described, or characterized as behavioral and humanistic at the same time. For example, self-initiated learning goals stated in terms of observable behavior are both behavioral and humanistic. Also, the

acquisition of behavior useful to the learner and his or her culture which includes adaptation and learning how to learn is, at the same time, behavioral and humanistic. Likewise, the teacher who expresses the attitudes of genuineness, warmth, and empathy while arranging nonaversive teaching contingencies demonstrates a simultaneity which denies a description of his or her process or techniques as behavioral or humanistic. Additionally, assessment and evaluation that is both subjective and objective, as in self-report, shows behavioral and humanistic qualities at the same time. From this perspective, the discreteness of synthetic models begins to dissolve.

A sketch of how an approach to simultaneity in curriculum and instruction might look appears in Figure 2. This figure incorporates the same curriculum elements specified in the synthesizing approach (goals, rationale, process or techniques, and assessment or evaluation); however, they are depicted as existing on a set of interconnected continua. Any one of the curriculum elements could be described as being located at some point on a continuum between either the behavioral pole on the left or the humanistic pole on the right. Each element has characteristics that reflect both behavioral and humanist perspectives simultaneously as coexisting multiple realities. Perhaps a scale could be developed to accurately identify the degree to which an element is behavioral and/or

humanistic in any particular curriculum and instruction situation. It is beyond the scope of this paper to construct such an instrument; however, a direction can be suggested.

Perhaps it would be possible to develop some type of inter-rater reliability index based on an instrument constructed to assess or evaluate the behavioral and/or humanistic characteristics of elements in curriculum schemes such as this. Some objective computation of a coefficient of correlation of the subjective evaluations of various observers and/or participants as to the characteristics of each curriculum element could be produced. This is a tentative suggestion, although attempts to evaluate a simultaneous approach to a behavioral-humanistic reconciliation in curriculum and instruction could be illuminating, if successful.

The Convergent Approach

A third approach to the reconciliation of the behavioral-humanistic dilemma in curriculum and instruction can be described as the convergent approach. Behavioral and humanistic concepts can be represented as converging on curriculum practice from two different directions.

For example, behavior and consciousness can be conceptualized as meeting and joining in curriculum and instruction practice. In the same way, objectivity and

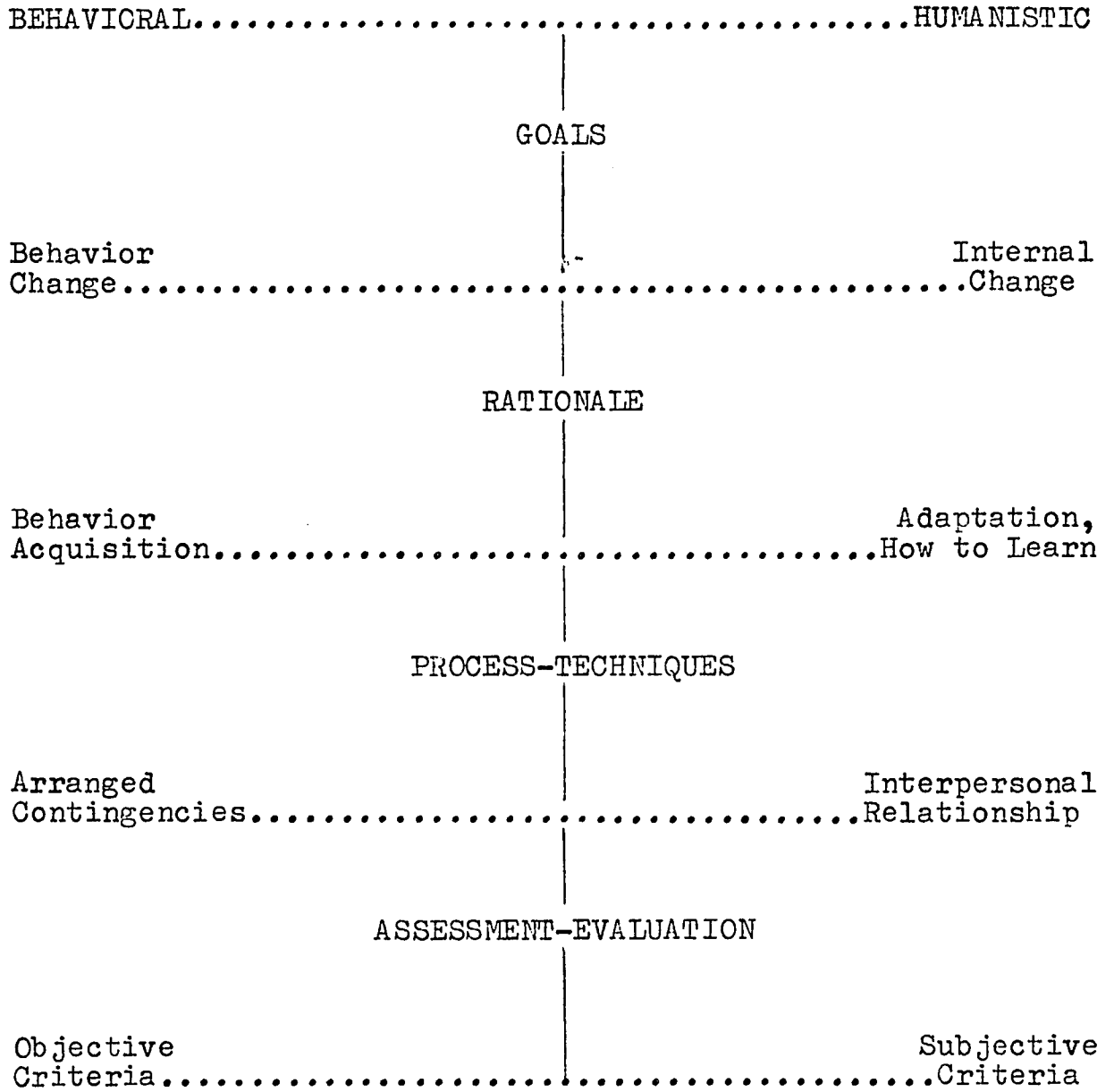


FIGURE 2. The Simultaneous Approach

subjectivity, predictability and unpredictability, rationality and arationality, sameness and uniqueness, absoluteness and relativity, particles and the whole, the scientific and the ascientific, realities and potentials, and participation and observation travel from behavioral and humanistic modular perspectives and converge in curriculum practice. Figure 3 illustrates this idea.

A convergent approach to the reconciliation of the behavioral-humanistic dilemma in curriculum and instruction differs from both synthesizing and simultaneous approaches in that it is a general insight rather than a practical application. However, it is suggested that the simultaneous approach is temporal and the convergent approach is spatial. Intentionally, no particular curriculum elements such as goals, and so forth, are identified and specified in the description of this approach. The other two approaches described imply a convergence of behavioral and humanistic concepts in curriculum practice, and the convergent approach is included here as a conceptual tool to illustrate that implication.

A convergent approach implies the possibility of a divergent analysis of any particular curriculum and instruction setting. Each setting could be examined; the characteristics of the setting could be broadly identified as behavioral and/or humanistic, and then divergently dispersed to their respective conceptual models. Of course

some elements would be dispersed to synthetic or simultaneous models suggested in this paper. The remaining phenomena in the setting could be closely examined and identified.

Authoritarianism and aversive processes and structures that hinder learning could be clearly identified and dealt with. Likewise, humanitarianism and other processes and structures that enhance the practice of curriculum and instruction could be recognized and preserved.

Beyond Frameworks

The approaches described were selected and presented with the presumption that they were relatively stable and understandable frameworks. These frameworks are congruent contemporary curriculum and educational practice and incorporate accepted psychological views of human functioning. However, it is reasonable to assume that both curriculum and psychology will eventually break out of current frameworks and that new constructs and approaches will appear. After all, frameworks are convenient conceptual tools arbitrarily created as aides to understanding and action; as a society evolves, so does its frameworks.

The new frameworks in curriculum may include such elements as an environmental emphasis, the distribution of educational capital, a spiritual approach to human beings, or an electronic approach to education. Psychology also is growing and evolving. New frameworks are appearing and

Behavior	C	.....	Consciousness
Objectivity	U	.....	Subjectivity
Predictability	R	.....	Unpredictability
Rationality	R	.....	Arationality
Sameness	I	.....	Uniqueness
	C		
BEHAVIORAL	U		HUMANISTIC
	R		
Absolutes	I	.....	Relativity
Particles	N	.....	The whole
Scientific	S	.....	Ascientific
Realities	T	.....	Potentials
Observation	R	.....	Participation
	U		
	C		
	T		
	I		
	O		
	N		
	E		

Figure 3. The Convergent Approach

isolated constructs are being examined within the context of other constructs. Neither behavioral nor humanistic approaches are finished in terms of their evolution, and it has been asserted in this essay that their isolation itself is a problem. Perhaps a unification of the two approaches will never occur, but they may be subsumed under new frameworks that incorporate both approaches, and others, into new views of human beings and curriculum perspectives.

The reconciliation of the behavioral-humanistic dilemma in curriculum is a start in a new direction, and the approach has been to deal with old problems. Action and research are needed in this area and may yield fruitful results.

Recommendations

The following seven recommendations for research and action are suggested as starting points for the further exploration of the behavioral-humanistic dilemma in curriculum and instruction and its resolution.

(1) The reconciliation of the behavioral-humanistic dilemma in curriculum and instruction should receive greater attention in the literature.

Methodologies that can be employed in further research have been suggested by Brubaker (1981). First, autobiographical and biographical statements of persons exploring the reconciliation of behavioral and humanistic approaches in education may be collected and published. Second,

linguistic analyses may reveal how language as a symbol system affects attitudes and behavior centering around a reconciliation of behavioral and humanistic approaches to curriculum. Third, research may focus on the personalities of organizations. It has been suggested that a divergent analysis of behavioral and humanistic organizational elements may be fruitful. Fourth, the continuing development of curriculum frameworks and models within a reconciliation approach can be a useful avenue for further research.

(2) Practical applications arising from the reconciliation of the behavioral-humanistic dilemma should be operationalized in educational settings.

A number of educators familiar with the topic of this essay have made comments to the effect that they have reconciled behavioral and humanistic approaches in the classroom in a naturalistic manner. This suggests one "theory to practice" pathway for implementation of the approaches suggested in this paper. Educators interested in trying out or testing the approaches explicated in this essay could collect empirical and nonempirical data arising from the implementation of the suggested syntheses. These data could be analyzed to help determine workable reconciliations.

(3) A more complete embodiment of behavioral and humanistic models of education should be applied to educational practice, both singly and together.

A major difficulty with the application of both models to educational practice has been the employment of "behavioral" or "humanistic" approaches that conveniently discard troublesome elements such as the idea that learning is an individual process.

(4) Each educator should learn as much as he or she can about behavioral and humanistic approaches, and then attempt to resolve the dilemma in his own educational settings.

(5) Psychological concepts, especially behavioral and humanistic, should be emphasized more in educational research and practice.

(6) Preservice teacher education and staff development should focus on behavioral and humanistic models and their reconciliation.

Application clinics can be designed and offered as alternative activities in teacher education and staff development.

(7) Going beyond current frameworks can be seen as an exciting, challenging set of tasks for educational practitioners and researchers.

Epilogue

Many unanswered questions remain in my mind, so it is difficult for me to end this essay. For example, are behavioral and humanistic approaches ever fully reconcilable within some framework? If so, what is that framework? Or, are behavioral and humanistic approaches essentially the same, that is, constructs that attempt to explain some larger reality? If so, what is that reality?

Although I am ending this project with feelings of uncertainty and tentativeness, I feel as though a contribution has been made by exploring an area that has received little attention in the literature. It has been demonstrated that behavioral and humanistic approaches to curriculum can be reconciled, at least to the extent that such a reconciliation can be a fruitful new perspective for curriculum theory and practice.

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