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A HEURISTIC MODEL OF ACCOUNTABILITY BASED ON  
MEASUREMENT OF THE HUMAN POTENTIAL

By

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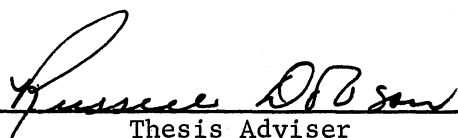
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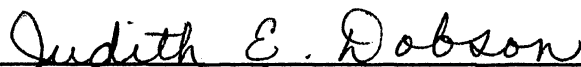
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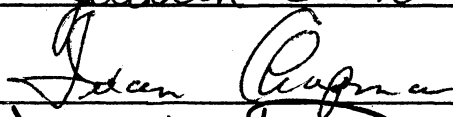
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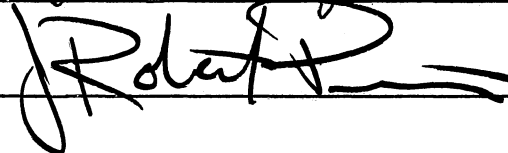
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MEASUREMENT OF THE HUMAN POTENTIAL

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## ACKNOWLEDGEMENTS

The early morning sun,  
Hardly time to kiss away the dew  
Lingering on the blossoms in the meadow.  
The butterfly touches and is touched -  
So softly, so gently, so meaningfully  
By a multitude of color arising from the verdent field.  
Selected caresses, gentle breezes, a feeling of fulfillment  
As the graceful monarch becomes.

I, too, have been touched -  
So meaningfully  
In a segment of my being -  
This study.

The field so big, the colors so many;  
The hues, they vary -  
Each in their own way gives to the passerby.  
A short passage in the field,  
Caresses by a committee of four.  
Dr. Judith Dobson, the epitomy of caring;  
Dr. Ivan Chapman, questioning, encouraging, explaining -  
Faith in every dimension;  
Dr. John R. Purvis, a wealth of sharing;  
Dr. Russell Dobson, advisor,  
Comments, wisdom, guidance toward a sense of contentment,  
Knowing - the impossibility of knowledge satisfaction.

Intermittent pauses,  
More than refreshing - a saving.  
Dr. John Hampton, sensitive,  
The right words at the right moment.

Mrs. Mildred Lee, thorough,  
A typist who is so much more.  
Dr. Monroe Kriegel, understanding,  
More than employer - a friend.

The gentle breeze,  
Giving added lift to tired wings,  
Cooling the warmth of the sun.  
My wife Dixie -  
A sharing of strength, patience and courage,  
A constant companion in each moment of being  
As I become.

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## CHAPTER I

### INTRODUCTION

This study had three purposes. The primary purpose was to design a strategy for including a philosophic frame of reference in practices of educational accountability. Secondary purposes were the development of a technique for assessing progress in the realization of human potential and the illustration of the concept of alienation in the process of accountability. The three purposes have a distinct relationship in the process of educational accountability. The notions of alienation, mystification and reification are outcomes of socialization processes. The strategy developed and the assessment technique are socialization processes. Thus, an awareness of the three notions is an adjunct but necessary part of this study. The assessment technique is an alternative to the regularly practiced methods of assessment.

#### The Need For Philosophy

It is assumed by some educators, that the critique of current educational practices will result in schools becoming more accountable to their clientele, and that ultimately this activity will serve as a catalyst for improving the quality of education. The term "critique" is used in relation to criticism meaning "the art of making informed and discriminating judgements". In order to provide a systematic critique, it is necessary to have a frame of reference from which to

make the informed and discriminating judgements. An example of such a frame of reference are these six components suggested by Wrightstone, Hogan and Abbott (87) in their pamphlet on accountability:

1. measureable objectives in terms of output or pupil behavior,
2. a program, usually a learning program, designed to lead to the achievement of the stated measureable objectives,
3. an evaluation of the achievement of these objectives,
4. a systematic method of feedback to the ultimate decision makers for appropriate revisions for improved future pupil performance,
5. an innovative element called a 'system approach' for cost-effectiveness purposes,
6. an optional component of specified conditions for obtaining the objectives (87, pp. 1-2).

The pamphlet incorporates a discussion of the who and what of accountability, performance contracting, measurement problems associated with accountability in education, and finally concludes that appropriate measurement procedures are essential to evaluation.

Another frame of reference which is more general is that offered by DeNovellis and Lewis (21) who describe one way accountability can be used as a tool for the improvement of education. They first define accountability as "reporting the congruence between agreed upon goals and their realization" (21, p. x). They advocate the establishment "of an accountability plan in individual schools through the formation of a Planning Accountability Team" (21, p. xi). The set of guidelines to give political and philosophical direction to resolving complex problems in educational decisions making are:

1. The purpose of maintaining an educational accountability program is to improve the quality of education.

2. Any person or group sharing responsibility for the quality or nature of educational experiences should be accountable to the affected children, community, and to the larger society.
3. Although accountability is related to the products of education, accountability should be measured in terms of the input and the process, as well as the products of education.
4. Schools, teachers, and others should be held accountable for objectives in the affective and psychomotor realms as well as in the cognitive realm.

In discussing the first guidelines, the authors note that the effect on the quality of the educational experiences provided by the schools is the only criterion which can be used to judge an accountability program. The second guideline specifically points to the importance of the quality or nature of the educational experiences by holding those accountable who are responsible for the quality or nature of the educational experience. The input, process, and product in the third guideline are measured by observing the quality of the present experience through the students' choice of behavior, involvement, self-direction and production. The importance of the educational experience is emphasized when the authors discuss the process of evaluation.

"Since the quality of a child's experience is vital, regardless of teacher's goals, it becomes important to measure the process independent of educational goals or objectives" (21, p. 60). They further suggest "one way to evaluate the quality of a child's experience in schooling is to study his attitudes toward the curriculum, toward learning, toward school, and toward himself" and "another way . . . is

to examine the interactions of students and teachers in the classroom" (21, p. 61).

The general components presented by the Test Division, Harcourt, Brace, Jovanovich, Inc. and the guidelines offered by DeNovellis and Lewis represent a range of views on educational accountability. The general components adhere to a narrow concept of product oriented accountability which expects the learning program to mold the raw material (the student) into a predetermined shape as stated by measurable objectives. The broader frame of reference, identified by DeNovellis and Lewis, suggests a combination of product and process with the output taking shape in the form of becoming. Both frames of reference are philosophically oriented, yet neither use philosophy as a frame of reference. Dewey (23) stated that philosophy is a generalized theory of criticism whose ultimate value is that it continuously provides instruments for criticism. Based on this assumption it follows that any accountability system must necessarily include the use of a philosophic frame of reference.

#### The Need For an Alternative in Measurement

If values are stated in terms called goals of education and if the purpose of educational accountability is the criticizing of the attainment of these goals, then by examining the separation of nature and experience it is theorized that a "measurement" of educational outcomes is possible. The notion of separation of nature and experience was expressed by Dewey (22) in his contrasting of traditional and progressive education. The separation he speaks of is the divorcing of the school experiences from the essence of man. The schooling experiences

are rationalized on values in such a way that they appear to be congruous with the aims. The arguments presented are well founded in the idealization of the value. When experiences are criticized in terms of philosophic postulates, rationalization of the values becomes apparent and the lack of continuity between the essence of man and experiences is evident. The rationalizing process is referred to as mystification and is treated in more detail later.

Defining human potential, nature of man, and experiences necessary for growth are philosophic endeavors that include the formation of a theory describing the interrelationships of the three definitions. Considering there is more than one educational philosophy, a model of an accountability process that is cognizant of the inclusion of a philosophic frame of reference must be heuristic. That is, the model must be a guide to be used by others in finding a method of assessment of the realization of goals that are compatible with a given set of educational aims which are established in a philosophical frame of reference.

The Report of the President's Commission on National Goals, 1960, stated that the first national goal to be pursued is the development of the individual to his fullest potential. To inhibit the development of the individual's potential is a denial of one of his alienable rights (64). Brauner and Burns (10) state that education

is a social enterprise because all societies, however primitive or advanced, deliberately attempt to transmit some collection of facts and information, skills and abilities, attitudes and values, to succeeding generations in the hope of achieving cultural endurance (10, p. 5).

If education is viewed as a socializing process and one of the cultural goals is that of developing each individual's potential, then one of

the goals of education is to develop the human potential through a socialization process. Thus, that which inhibits the socialization process, inhibits the development of the human potential.

One strategy for focusing on the development of the individual's human potential is the establishment of behavioral norms and the assessment of each student in terms of their relationship to these norms. This is acceptable if the definition of the nature of man does not include "uniqueness". However, if man is defined as sui generis, then to measure him against a norm is to separate nature and experience and concomitantly raise an obstacle to effective criticism. Then, to be effective in a critique of educational experiences, the individual must be assessed in terms of his uniqueness. Each person's uniqueness can be expressed in the form of the development of human potential. Therefore, the degree of growth in human potential provides a measuring stick for accountability.

#### The Need For an Awareness of Alienation

Schooling is the formal structuring of the educational process for attaining specific purposes, the responsibility for which is assumed by a given social institution, the school. Fundamental to purposes for which schools have been established are the aims of society. The diversity of purposes for which schools have been established is an adequate indicator of cultural pluralism which constitutes American social order. The American social order, however diverse, has commonality based upon the tenets of democracy. Democracy, as a valued concept, is basic to those value statements which serve as aims for guiding the process of education. Schooling, being a part of the

educational process, has purpose based on the same tenets of democracy. Therefore, that which affects the socialization process, affects the educational process, and affects schooling. Democracy is an expressed philosophical orientation to living. Dewey (24) expressed this when he defined democracy as the idea of community life. As a form of political government, the concept of democracy as an idea of human association must be fundamental to the common ways of feeling, thinking, and acting in all human interactions or it will not survive.

✓ When the way one feels, thinks, or acts is inconsistent with that which is valued or expected, alienation develops and becomes an expression of the inhibition of the socialization process. As such, the concept of alienation can be utilized to evaluate the socialization process.

Since schooling is the formal structuring of the educational process and the educational process is a socialization process, alienation can be used to evaluate schooling. Also, if alienation is counter to the socialization process, it is counter to the development of the human potential.

In the final analysis, this study is the development of a heuristic model of educational accountability. The development is based on identifying ideological problems in the process of educational accountability, presenting a solution to the ideological problems through the use of an educational theory of and model for congruence between nature and experience, and the translation of the theory/model into a heuristic model for educational accountability.

## CHAPTER II

### CONCEPTS OF EDUCATIONAL ACCOUNTABILITY

The various concepts of educational accountability reflect different attitudes toward its effect according to DeNovellis and Lewis (21). It is viewed as a panacea for educational ills, a process to erode the humanist aspects of education, and as a tool which can be used toward the benefit or the harm of the education system. All three views imply an ideal construct which reflects one's values. Those who hope for a panacea are expressing a feeling of need for the process of education and imply that that which is happening is not healthy for society. There is an inconsistency between activities and goals or purposes. The importance placed on quantification in many statements concerning educational accountability has created an impersonal concept causing some who value the humane aspects of schooling to fear a decline in that emphasis. The concept of educational accountability as a tool used for the benefit or harm to the educational system also implies ideological problems. Clarity in the dilemma as to the effect of the tool can come about by an understanding of the philosophical orientation of the tool. The same solution applies to relieving the other fears. Yet, within the solution is the possibility for misunderstanding of the philosophical frame of reference. An illustration of this is found in the parable, The Pearl, by Kahlil Gibran:

Said one oyster to a neighboring oyster, 'I have a very great pain within me. It is heavy and round and I am in distress.'

And the other oyster replied with haughty complacence, 'Praise be to the heavens and to the sea, I have no pain within me. I am well and whole both within and without.'

At that moment a crab was passing by and heard the two oysters, and he said to the one who was well and whole within and without, 'Yes, you are well and whole; but the pain that your neighbor bears is a pearl of exceeding beauty' (32, p. 20).

Leon Lessinger, often considered as the high priest of accountability in education, assumed the role of the crab in the parable when he contended that schools are in a serious condition as evidenced by increasing costs, declining student achievement, and an erosion of public confidence. As the oyster with the pain, the education system has but to recognize the real beauty in the pearl of accountability that is growing within the system. The accountability concept, according to Lessinger, provides the potential for

revitalizing the school's commitment to student learning; fosters innovation, experimentation, and technological development; and introduces management policies based on cost effectiveness, demonstrated modes of proof, and systems design techniques (45, p. 11).

Combs (18) would contend that the crab does not have to bear the pain of the pearl and thus speaks without a real feeling for the situation. This is not saying that Lessinger is not aware of the pain caused by accountability. He is very careful to note that the first consideration in the accountability process relates to the "care and nurture of our children" (18, p. 1). Nor is Combs' concern related to Lessinger's revitalization of the school's commitment to student learning. It is, however, aimed at the introduction of management policies based on cost effectiveness and systems design techniques. Combs' caution is found in his statement, "We cannot afford to let a

preoccupation with one or another system distort our overall goals (18, p. 1).

Several authors approach educational accountability from a responsive frame of reference. In doing so they consider accountability as directly related to responsibility. One such author is Dyer (28) who considers accountability as a concept which delineates responsibility and accounts for the product by examining the process. He offers three general principles which delineate responsibility:

1. The professional staff of a school is collectively responsible for knowledge about the intellectual and personal-social development of the pupils in its care and whether the environment (conditions and educational services) is facilitating or impeding the pupil's development.
2. The professional staff of a school is to be held collectively responsible for using this knowledge as best it can to maximise the development of its pupils toward certain clearly defined and agreed upon pupil performance objectives.
3. The board of education has a corresponding responsibility to provide the means and technical assistance whereby the staff of each school can acquire, interpret, and use information necessary for carrying out the two foregoing functions (28, p. 206).

Accounting of the process is through the development of school effectiveness indices which are called by the acronym SEIs. The SEIs are derived from four groups of variables which form the pupil-change model of the school. The four groups of variables are input, educational process, surrounding conditions, and output.

Dyer's system is rather complex and according to Allen (1) it should be. Allen reflects on the viewing of accountability in the narrow sense of assessment and measurement and infers the more appropriate meaning is one that is broad and more definitive. The meaning

includes being responsible and liable. He further contends the primary issue in the accountability movement is a matter of responsiveness rather than one of methods and means. The school cannot be thought of as accountable to a singular group but instead must be accountable to a complexity of groups.

According to Schwartz (67) educational accountability in its broadest sense is holding administrators, teachers and schools responsible for the improvement, or lack of improvement, in the performance of their students.

Supporting Schwartz's statement is Lopez (47) who distinguishes accountability from responsibility in that the "latter is an essential component of authority which cannot be delegated" (47, p. 231). However, Lopez refers to accountability as "the process of expecting each member of an organization to answer to someone for doing specific things according to specific plans and against certain timetables to accomplish tangible performance results" (47, p. 231). He bases the definition on the assumption that the reason people join organizations is to help in the organization's achievement of its purpose, and on the theory that individual behavior which contributes to the purpose of the organization is functional and any behavior which doesn't contribute is dysfunctional. Therefore, the intention of accountability is to insure that the behaviors of all members of an organization are functional.

Westcott (84) echoes Lopez when he claims that accountability is "the process of expecting each member of an organization to answer to someone" (84, p. 2). Westcott views the goal of public education as being greater productivity and agrees with Lessinger in making "all of the adults who have to do with children's learning and the children

themselves" responsible in varying degrees and ways with that goal (84, p. 9).

Bernabei (8) defines accountability and implies that by definition educators who manage schools are responsible for what children learn or do not learn. The learning or not learning is determined from data on educational growth collected in a logical and systematic method and it is the responsibility of the educators to use this data to retain, redo, or eliminate educational programs accordingly.

Former Office of Education Commissioner Sidney P. Marlin (49) presents the theory of accountability as verbalization in measureable terms of the goals society wishes to establish. His theory leads to the definition that accountability is a "process of establishing objectives and assessing the degree to which those objectives have been fulfilled" (48, p. 342). Marlin cautions that the process must be considerate of the fulfillment of human beings rather than the fulfillment of managerial concepts thereby reiterating the parable of Beauty and Ugliness.

In discussing the possible effects of accountability on instructional programs, Shanker (69) views accountability from three perspectives:

1. A system of punishment and rewards.
2. The control of expenditures.
3. The right of the lay public to pick and choose, to retain or get rid of those whom it wants to - whether on the basis of adequate or inadequate information, knowledge, or judgement.

A different perspective is offered by Thomson (76) who sees "generalized accountability" as based on median scores or standardized

achievement tests. He argues this concept must be changed to an individualized student orientation that will reflect the goals of parents, students, and society as mirrored by the teachers.

According to Ornstein and Talmage (60) accountability is holding someone (or some group or some agency) accountable for certain behaviors or actions according to agreed upon terms. Wynne (88) adds the theory that accountability is essentially description and that description is most accurately done by numbers. He contends accountability may be viewed as a communication system which answers the questions, "communicating what, to whom, and for what purpose?" Wynne cites an experienced based definition of accountability which unites Ornstein's and Talmage's definition with Wynne's:

Accountability is the willingness to provide information and develop the capacity thereof, by an agency about whether the commitments of the agency are being met, and the responsiveness of that agency to the concerns of the educational community in selecting, pursuing, and reviewing its goals and objectives (88, p. 250).

Supporting Wynne's theory of using numbers as the best descriptors, Bell (5) uses the definition of education and the rationale that

to the extent that we can quantify our ends, education will become more objective and efficient because the manipulation of varying means will then be verifiable from viewpoints of both educational adequacy and cost benefit. This, it seems to me, is the beginning of educational equation making that will lead us away from so much of the guesswork and witchcrafting that still plagues school people (5, p. C-6).

He points out that the problem of accountability is quantifying inputs and outputs. Thus, the goal of accountability is mastery of measuring student performances as a product (5).

Estes and Waldrip (30) submit that a statement of policy is the essence of accountability, the policy being that educators will accept

responsibility for their performance or lack of performance. There is an implied contractual agreement between school personnel and the public and that agreement includes accepting the responsibility for learning regardless of culturally different backgrounds. Inferred is that educators need to produce results or get out of education. However, reiterating Lessinger's "turnkey" concept for an accountability system, the situation is not as drastic as it sounds. While accounting for student achievement, the results of the accounting effort can be used as a tool for improving the effectiveness of teachers.

Krystal and Henri (42) treat accountability as a philosophy and a means of introducing system into an educational enterprise. The philosophy is one of focusing on responsibility; the schools are accountable for their product. The system refers to closing the feedback loop by honestly evaluating learning and making corrective changes on the basis of evaluation findings. These authors provide thirteen causes for the interest in accountability in education and state these inherent dangers:

1. Misapplication of the accountability process can subordinate student needs to political issues.
2. Imposition of standards by the funding agencies.
3. Varied and contradictory interpretations of the idea of accountability.

They further contend that the accountability movement will be considered successful if it helps complete the current revolution in educational philosophy which says that every child can learn and that all who influence that learning, accept responsibility to each individual student; to evaluate programs objectively; and, to make necessary

changes indicated by the evaluation results. It then becomes necessary for the system of accountability to be studied to determine who has impact on what process, or output, so that the appropriate persons or groups can be held accountable for their portion. The concept of being held responsible for one's efforts must be accompanied by a guarantee for protection from retribution.

Krystal and Henri (42) offer an industrial model of accountability. The input element is more than the student. The input element includes the home conditions, ethnic origin, peer group pressures, socioeconomic environment, prior educational experience, resources available at the school, quality of management and financial support.

A process of transcending one-party accountability and limited goals is the view of accountability held by Louise Berman (6). She notes the efforts by some states who are trying methods which transcend. Michigan has included the measurement of three types of student attitudes and Nebraska's first stage of their assessment program will be concerned only with non-academic objectives such as socioeconomic levels and other nonschool influences. These efforts indicate the concern for values as well as behaviors. According to Berman, the task appears to be to make more explicit our value systems, to develop means of describing more precisely what is happening within the complexities of the classroom, and then develop the means for getting at what ought to be. Berman views most systems of accountability as ordinarily being based on the assumption that persons have more control over the behavior of another than indeed they do. To emphasize this point she noted Dunham's assumption that every person is worth doing something for. If we accept this assumption, states Berman,

then systems of accountability need to consider the person and his setting. . . . Such systems would allow for the dynamic interplay of man and his world. . . . We must move forward to systems which are futuristic, reciprocal in nature, and accommodating to the complexity of human nature (6, p. 16).

Havighurst (34) believes that

accountability is defined as responsibility for what the student learns . . . is a pernicious definition because it places the whole weight of the responsibility on only one of several agents who cause pupil success or failure (34, p. 46).

He, too, holds accountability as a system and concludes that the development of the system need be accomplished by local administrators and teachers. These educators need to define accountability, develop a community wide understanding of the "inputs", evaluate their own performance, and promote a community expectation level of schooling.

Stufflebeam (74) describes accountability as

the ability to account for past actions in terms of the decisions which precipitated the actions, the wisdom of those decisions, the extent to which they were accurately and efficiently implemented, and the value of their effects (74, p. 13).

Thus, he believes there are four kinds of decisions, each requiring a separate type of evaluation to obtain data to use in decision making processes. Educational accountability becomes process oriented with the products generated becoming a part of the decision making process.

Shedd's (71) perspective of accountability is an elaboration based on Stufflebeam's concept. He approaches the concept from a practical application and states "accountability should be a process by which we can show ourselves how to teach better and how to turn out a better educated child . . . ." (71, p. C-3). Included in Shedd's concept is dualistic responsibility - that of each element being responsible to

another element in the accountability process and a reciprocated responsibility. Thus, Shedd implies a system approach and finally quotes Bell (5) to punctuate his implications: "When the students fail to learn, the entire system must be introspective" (71, p. C-3).

An effort to categorize the various meanings of accountability was done by H. Thomas James (39). His categories are attributable, predictable, intelligible, liable, and auditable. Each of the categories is defined and James feels accountability is the summation of all the categories.

Wilson Riles (65) holds accountability as a process - a functioning process for improving the quality in our schools. The process includes setting goals, making available adequate resources to meet those goals, and conducting regular evaluations to determine if the goals are being met.

Thomas and McKinney (75) wrote a research memorandum for Stanford Research Institute outlining progress on educational accountability. The authors believe the renewed emphasis is a result of the perceptions that "schools are failing to educate and failing to make responsible use of public funds" (75, p. 1). It is their premise that the potential products of accountability are the enhancement of performance incentives through feedback and competition, increasing of quality control locally and raising the quality of education to national standards; the addition of knowledge about how people learn; revision of the incentive structure to promote innovation; equalization of educational opportunity; and finally, a redistribution of power and locus of decision making.

The dependency of accountability upon the societal framework, say Thomas and McKinney (75), raises the following issues:

1. testing and evaluation of areas other than basic skills;
2. determining incentives which are effective, successful in motivating participants in the system in the desired ways, and consonant with societal conceptions of human nature;
3. the useage of collective bargaining in the accountability system and its effect on change and innovation;
4. institutional competitiveness as opposed to maintaining the virtual monopoly which the current public system now has;
5. the quest for freedom of action which precludes innovation and change and the demand for assurance of results;
6. the responsibility for results and the accompanying authority and resources;
7. local control of resources and decision making in conflict to national standardization and financing.

Their research memorandum refers to the issue of accountability as one of rhetoric unless change occurs in the collection and use of information, the decision makers, or in the distribution of power.

The NEA resolution (73-25) on accountability, as reported by House (37) expresses that educators can be accountable only to the degree that they share responsibility in educational decision making and to the degree that other parties who share this responsibility . . . are also accountable. House presents a dualistic concept of the accountability movement. There is the "productivity movement" and the "responsiveness movement". In essence, accountability schemes promote the concept that individuals are accountable to the institutions, but those

institutions are not accountable to the individual. Some criticisms of the productivity models, such as PPBS, are exemplified by House in his discussion of the C-5A program of the Pentagon. He further points to historical failure of accountability in education and warns of dangers in the distortion of reality at the state and local levels caused by teachers and administrators trying to produce the kinds of results demanded.

Early in the chapter it was pointed out that the definitions of accountability in education have a plurality of convergent commonness. The numerous meanings presented do seem to converge on a given theme - that of process. The process may be in the form of delineating responsibility as advocated by Dyer (28) which requires a decision making mode. If the process is one of evaluation of accomplishment of objectives as cited by Marlin (49), there is implied a decision making process. Stufflebeam (74) focuses on the commonness with his four kinds of decisions.

Another thread of commonness is the frequent reference to a system. Systems are usually referred to as a whole or unity having parts which are organized to perform functions. Systems have boundaries or constraints which provide the wholeness of the system. Inherent in the system is orderliness brought about by internal and external controls which are manipulative. There appears to be two kinds of systems: mechanical and social. If educational accountability is to be considered a mechanical system, it then fits well with Shedd's, Bell's and Wynne's concepts. If a social system frame of reference is considered, it becomes imperative to know what a social system is.

Larson (43) refers to Parsons' description of a social system as two or more actors occupying differentiated statuses or positions and performing differentiated roles, some organized pattern governing the relationships of the members and describing their rights and obligations to one another, and some set of common norms, or values, together with various types of shared cultural objects and symbols (43, pp. 133-134).

Parsons adds definitive meaning, according to Larson, to his concept of a social system by giving recognition to two characteristics of social systems:

1. A tendency toward parameter rigidity, and
2. A tendency toward equilibrium (43, p. 134).

These characteristics mean that a social system once established has a built-in tendency toward the status quo regardless of the need for change. Another way of viewing this is to refer to the parable of The Pearl. If the oyster refused to acknowledge the pain caused by the pearl, then the pearl would only be a lump in the body of the oyster. If there is not any pain, only a lump, there is no need for diagnosis and prescription, if you are an oyster.

There appear to be four basic problems inherent in any social system, according to Parsons. These problems must be solved in order for the system to continue its existence. The four problems are goal attainment, adaption, integration, and pattern maintenance and tension management (43). The question arises then whether these problems apply to an accountability system for a social institution. If they do, then it follows that recognition of these problems must be built into the definition of educational accountability.

If we consider Shedd's and Bell's concepts of accountability, we can see the dimension of evaluation as being one of introspection of

the system which is the accounting part of the system which encompasses the process. Therefore, a concept of educational accountability must include a social system orientation and recognition of decision-making modes.

### CHAPTER III

#### IDEOLOGY AND EDUCATIONAL ACCOUNTABILITY

Alienation, mystification and reification can be applied to various situations in life and among these situations is the concept of accountability in education. Many of today's critics of the educational process have turned to the concept of accountability as a basis for the improvement of instruction. There appears to be confusion as to the concept of accountability as illustrated by the activities of state legislatures. Phyllis Hawthorne (35) reports that all states and territories except Hawaii, Guam, Samoa, and the Virgin Islands had, as of October, 1972 attempted or passed legislation on accountability. She groups the legislation in terms of management methods, state testing, professional employee evaluation and performance contracting. The legislative acts view accountability as a means of introducing management methods with cost-effectiveness into the schooling process; as a means of measuring learning for judgement of success, failure or something in between; as a means of deciding whether teachers are meeting expectations; and, as a means of guaranteed results.

The efforts of the legislators have not gone unnoticed by professional teachers' associations. The NEA passed a resolution (73-25) which expresses the concern of educators about hasty decisions involving the accountability process. The resolution recognized the lack of a single definition of educational accountability; the possible change

of emphasis of the educational system away from a singular objective of educational excellence for each child; and, that responsibility in education is a shared dimension including all aspects of the educational process (37).

Echoing the professional organization's concerns was the NEA President's proposal that the united teaching profession needed to pursue two strategies with regard to accountability:

1. Stop destructive practices that occur in the name of accountability.
2. Encourage good practices growing out of the accountability phenomenon (36, p. 68).

Patricia Garini's (13) caution to educators that they must provide the responsibility for articulation of program objectives or outside agencies will, is an example of mystification and an extension of Whitehead's belief that the evaluation of the school as a learning environment based on the performance of scholars is inadequate (85). Her caution is based on the premise that should outside agencies assume the responsibility for program objective articulation, evaluation will be in terms of pupil achievement and economic efficiency due to the agency's assumptions about school's function and objectives. She further contends that by the school assuming responsibility it is establishing itself as an agency which is responsible to the community and which can appropriately assert its professionalism in determining the learning environment appropriate for the children entrusted to it.

The foregoing could imply that the role of the formal education system is to be a creator of the culture in place of the reflector of the society. However, this is for society to decide as Garini (13) points out in suggesting that society establish the goals but reco:

the professional status of the educator and let the educator be responsible for the methodology which must be compatible with the goals set forth. The professional educator is trained to do this and through accumulation of wisdom the profession possesses the credentials for the task. However, the goals established by society must be analyzed carefully, else they become a part of the process of mystification. The analysis, as far as education is concerned, focuses on the stated aims of education and the expressed values of the social environment.

### Alienation

A process for defining the relationships between man and his environment is through the analysis of alienation as expressed by man. Bernard Murchland (56) considers the concept of alienation as foremost in any endeavor to critique man and his relationship to his environment. The concept has been used in creative literature such as Cervantes' Don Quixote, Kafka's The Castle, Rousseau's Emile, and John Osborne's Inadmissible Evidence. The arena of social criticism has been a home for the concept since Plato, particularly since Karl Marx's Alienated Labour. Ernest Becker (4) confronts alienation in education while James, Dewey, and Whitehead approach the concept with theories of experience. Thus, the concept is not new or unusual to ideological discourse.

The broad use of the concept of alienation has generated a host of meanings. In relating educational accountability and alienation, it becomes necessary to focus on a generalized meaning as the educational institution is a cultural and societal entity while the learning

process is more individualized. Both the institution and the learning process relate to philosophical frames of reference and the offspring, ideology. Searching for a generalized definition, one finds a plethora of dualisms. Seeman (68) organized a host of meanings for alienation as expressed in the literature into five sense classifications: powerlessness, meaninglessness, normlessness, isolation, and self-estrangement. Levi (46) implies axiological dualisms in presenting the dimensions of alienation as fragmentation, mechanization, and distantiation. Both authors rely on expectancy and values to develop their categories.

Parsons (61) proposes the analysis of society by four major distinct but related organizational levels. These are technical, managerial, institutional, and societal. Myers (58) analyzes these levels in relation to the decision making process in curriculum and instruction and concludes they do not relate directly enough to the issues relevant to the curriculum specialist. He accepts Goodlad's three level model which is derived from Parsons' four levels as related to Tyler's (79) four fundamental questions about curriculum development and instructional planning: The instructional level, with decisions primarily the responsibility of a teacher or team of teachers guiding specific groups of learners; the institutional level, with decisions primarily the responsibility of total faculty groups under the leadership of administrators; and, the societal level, with decisions primarily the responsibility of lay boards and legislators at local, state, and federal levels of government make up Goodlad's three level model. The three level model is applicable in analysis of the educational accountability process for grouping the human interactions which take

place in the process of education.

To apply the concept of congruence to a definition of alienation with reference to dualisms and the triadic educational institution may assist in understanding the utility of the concept of alienation and educational accountability. Using Seeman's five senses provides continua with dichotomies of powerlessness and powerfulness, meaninglessness and meaningfulness, normlessness and moral discipline, isolation and cultural commitment, and self-estrangement and productive living. Seeman does not subscribe this dualism, but if one is judged as being powerless there is implied an opposing value of power. The same logic is applicable to his other categorizations.

The purpose in presenting dualisms is to provide clarity to the concepts discussed and to give a sense of direction for the expectancies which arise from human interaction. For example, powerlessness is a feeling and as such is a quality, not a quantity. Interaction of man with his environment may produce a feeling of powerlessness, or the feeling that one cannot expect any recognition of success, accomplishment, or satisfaction as a result of his efforts. One is not powerless or powerful at a given point on a scale. Man is neither powerless nor powerful but directs his actions toward becoming one or the other.

#### Alienation as Powerlessness

Seeman identifies the concept of powerlessness with the concept of alienation used by Marx in describing the worker's condition in capitalist society. He states: "This variant of alienation can be conceived as the expectancy or probability held by the individual that his own behavior cannot determine the occurrence of the outcomes, or

reinforcements, he seeks" (68, p. 46). Seeman is quick to note a difference from Marxian alienation in the absence of ethical or adjustment features. This notion of expectancy or powerlessness encompasses a sense of control over the occurrence of reinforcements. The reinforcements are not in the intimate realm nor the global sphere. They are confined to the social-cultural milieu. The limitations imposed by Seeman are "(1) the generality of powerlessness needs to be a fact and not a fiat, and (2) it not be construed as merely an index of personality adjustment" (68, p. 48).

The opposite of powerlessness is the feeling of success. Success to be no more or no less than its opposite, must mean the sense that a person, through his behaviors, which include the act of decision making, can anticipate a degree of control over the occurrences of reinforcements. The same restrictions apply to success as did to powerlessness; the generality of success needs to be fact, not fiat, and it be other than an index of personality adjustment.

#### Alienation as Meaninglessness

Meaninglessness refers to a lack of understanding the events in which man is engaged. Seeman relates this variant to "functional rationality" and "substantial rationality" as described by Mannheim (48).

Mannheim argues that as society increasingly organizes its members with reference to the most efficient realization of ends (that is as functional rationality increases), there is a parallel decline in the capacity to act intelligently in a given situation on the basis of one's own insight into the interrelatedness of events (68, p. 48).

Meaninglessness occurs when an individual does not have a full grasp of the situation; the person has ambivalent feelings and his "minimal

standards for clarity in decision making are not met" as Seeman described it. He further contrasts meaninglessness to powerlessness by noting ". . . where the first meaning of alienation refers to the sensed ability to control outcomes, the second meaning refers essentially to the sensed ability to predict behavioral outcomes" (68, p. 49).

The dichotomy of meaninglessness is meaningfulness. Man is able to understand the events in which he is engaged. In place of functional rationality there is substantial rationality. Man acts with confidence as a decision maker because he has a clear perspective of the interrelatedness of events and is able to anticipate outcomes.

#### Alienation and Normlessness

The concept of normlessness is recognizable in Durkhiem's work according to Seeman (68). Durkhiem describes anomie as a situation in which the social norms controlling individual conduct are no longer effective as rules for behavior. This assumes there is a teleological control over human behavior which is beyond human choice. Merton (54) refers to normlessness when he predicts that when the culturally prescribed goals are not congruent with the available means of attainment, anomie will become such that "the technically most effective procedure, whether culturally legitimate or not, becomes typically preferred to institutionally prescribed conduct" (54, p. 128). Seeman summarizes the concept of normlessness as "the expectancy for socially unapproved behavior" (68, p. 52).

Moral discipline is herein defined as the opposite of normlessness. There is the expectancy for socially approved behavior. The culturally

prescribed goals are congruent with the available means of attainment. Rights accompany duties, a sense of community with others, and the experience of fulfilling a useful function and serving a purpose higher than one's own self interest are a part of moral discipline.

### Alienation and Isolation

Isolation refers to the individual who is a rebel as compared to an innovator. Seeman suggests the innovator prescribes within social constraints whereas the rebel advocates solutions which greatly change the basic social structure. The isolationist assigns "low reward value to the goals or beliefs that are typically highly valued in the given society" (68, p. 52).

The dichotomy of isolation is cultural commitment. This person is highly devoted to the perpetuation of the goals or beliefs of the given society. The innovator would be somewhere between a neutral point and isolation on a dichotomous scale. The "redneck" might be classed as a culturally committed person.

### Alienation and Self-Estrangement

Eric Fromm defines alienation, according to Seeman, as meaning "a mode of experience in which the person experiences himself as an alien. He has become . . . estranged from himself" (68, p. 53). C. Wright Mills is quoted by Seeman: "In the normal course of her work, because her personality becomes the instrument of an alien purpose, the sales-girl becomes self-alienated" (68, p. 53). Mills is further quoted by Seeman: "Men are estranged from one another as each secretly tries to make an instrument of the other, and in time a full circle is made."

One makes an instrument of himself and is estranged from it also" (68, p. 53). Seeman determines from Fromm, Mills, Hoffer and others that that which the estrangement is from is a self which has been idealized. He states: ". . . self-estrangement refers essentially to the inability of the individual to find self-rewarding - or in Dewey's phrase, self-consummatory - activities to engage in" (68, p. 53). There is a loss of intrinsic meaning or pride in work or the loss of intrinsically meaningful satisfactions. Seeman tries to add clarity to this concept by stating: "One way to state such a meaning is to see alienation as the degree of dependence of the given behavior upon anticipated future rewards, that is, upon rewards that lie outside the activity itself" (68, p. 73). Examples given are the worker who works for the paycheck only, the housewife who cooks simply to get it over with or the other-directeds who perform only for its effect on others.

Productive living is the opposing view of self-estrangement. There are found intrinsic rewards by the individual. This person is a "self-actualizer." Shostrom (72) recognizes the self-actualizer as the person who appreciates himself and his fellow man as persons or subjects with unique potential - an expresser of his actual self. He portrays the actualizer as having four fundamental characteristics: honesty, awareness, freedom and trust.

May (52) contends that the culture of the western world is the heir of four centuries of technical achievement intended to provide man with control over nature and now over man himself. In place of repressing the technical we repress the sense of being which results in disintegration of modern man's images of himself, his experience and concept of himself as a responsible individual. With the loss of

identity with responsibility is the acquisition of normlessness or anomie as Durkhiem called it; the sense of powerlessness as described by Marx; the sense of meaninglessness described by Mannheim; and, a sense of self-estrangement noted by Fromm.

### Mystification and Reification

Norman Birnbaum (9) uses the three notions of alienation, mystification and reification in criticizing Marxist social theory. He defines the concept of mystification as that which occurs when abstractions obscure the real relationships of human activity. A prerequisite for reification is mystification. "The idea of reification is a generalization which finds concrete application in the more familiar notion of fetichism of commodities" (9, p. 7). These notions become inseparable in ideology as it relates to human activities.

An example of these two notions is provided by Birnbaum in his criticism of E. A. Shils' and M. Young's analysis of the Coronation of the Queen of England. Birnbaum contends the understanding of the "meaning of the Coronation" is subject to personal bias and Shils and Young have "reconstructed reality to suit their own biases" (9, p. 59). These biases are identified as tradition, conformity, and authority. The concepts of tradition, conformity, and authority are reified in the Coronation act. The act, which is a process, becomes thinglike and connotes each of the three concepts. Once reified, the Coronation becomes the interpretation of tradition, conformity, and authority in the people ignoring all other historical factors which may have contributed. Thus, an abstraction, the defining of the meaning of the Coronation, obscures the real relationships of human activity: those

expressed in tradition, conformity, and authority.

A view of mystification can be found in the approach to a study of ideology formation by characteristics exhibited by members of a practicing ideology. When the characteristics, which are subjective, become objective, fact, and are limited, a narrow focus develops. A generalization becomes a fact and other contributing factors are ignored. Thus, the focus on the narrow factors prevents, or obscures, the contribution of other factors.

T. Adorno's The Authoritarian Personality presents a third example of mystification. Birnbaum summarizes the study by saying:

The burden of the work is that the formal conditions of democracy are ineffective by contrast with the social constraints which encourage the development of personality types incompatible with democratic institutions (9, p. 22).

The essence of this is that goals and ideals of democracy are abstractions which justify societal activities. One product of these activities is the authoritarian personality which is incongruous with the goals and ideals of democracy. The significance of the product is obscured by the pursuit of the goals and ideals, thus, mystification has occurred.

A more definitive feeling for the concept of mystification and reification may be found in the parable, Garments, by Gibran.

Upon a day Beauty and Ugliness met on the shore of a sea. And they said to one another, 'Let us bathe in the sea.'

Then they disrobed and swam in the waters. And after a while Ugliness came back to shore and garmented himself with the garments of Beauty and walked his way.

And Beauty too came out of the sea, and found not her raiment, and she was too shy to be naked, therefore she dressed herself with the raiment of Ugliness, and Beauty walked her way.

And to this very day men and women mistake the one for the other.

Yet some there are who have beheld the face of Beauty, and they know her not withstanding her garments. And some there be who know the face of Ugliness, and the cloth conceals him not from their eyes (32, p. 5).

Regardless of the clothing, Beauty and Ugliness have not changed, only in appearance has there been a transformation. Unless a method for criticizing each is available, the appearance may deceive the beholder. Man acts on such appearances assuming validity in his behavior, but the validity comes from a false ideation which makes his behavior invalid. This is mystification.

A contemporary example of mystification is noted by May (52). He reports that William Whyte, in his book The Organization Man, cautions that modern man's enemies may turn out to be psychotherapists. Those who would be doing what they did to help you, in "the process of helping people may actually make them conform and tend toward the destruction of individuality" (52, p. 21).

Not only do men "mistake the one for the other", they actually pursue the mistaken identity. Is it not so that behavior is performed for the purpose of satisfaction? Are not the "aesthetics" often found in art forms? Is it not possible then for an idea to be turned into something concrete? To reify an idea is to make it concrete. To take an abstraction and give it physical form when the abstraction is invalid, then so will the physical form be invalid. Thus, the relationship between mystification and reification.

## CHAPTER IV

### MEASUREMENT AND THE HUMAN POTENTIAL

Within contemporary thought, the process of accountability includes analysis of evaluative data for the purpose of feedback to the system for qualitative improvement. Current analytical activities are the comparing of test results to stated objectives whether these be criterion referenced measurements or standardized normed measurements. Either method of evaluation is related to a narrow view of the situation. The concept of man as unique and purposive means the expansion of evaluative data gathering to encompass a broader concept of measurement. Carroll Quigley (62) points out a basis for this broader view in discussing thinking and learning. He points to the need to examine an experience by its relationship to a larger system. Each experience is unique to an individual and would be lost in time if it were not for man's cognitive process of classifying or categorizing each experience. The classifying is both conscious and unconscious and based on previous experiences. To provide more order to the classifications, man applies labels and values to experiences. In the process of labeling, man is structuring reality. The problem arises in that cognitive systems are subjective. The subjectivity is compounded by social interaction wherein values are externally determined which ignore "the qualities which make events unique and considers only those qualities which events are believed to share or to have in common" (62, p. 42).

To provide a broader view, or a gestalt approach, Quigley suggests the use of cognitive techniques which differ from those practiced today. The techniques may be contrasted as "what is" and "what ought."

<u>What Is</u>	<u>What Ought</u>
1. Analysis	1. Synthesis
2. Isolation	2. Ecological
3. Quantification	3. Qualification
4. Single factor causation	4. Pluralistic, ecological causation
5. Decisions and actions based on individual needs	5. Decisions and actions based on group needs

The "what ought" techniques use "an ecological and qualitative approach, seeking to grasp the whole contextual situation of innumerable factors, all of which are changing at once . . . ." (62, p. 45).

The broader view is not one comprised of a larger number of isolated bits of information but one which is applicable to any situation at any time. It is the recognition that man is the center of his own universe and that there are as many universes as there are men. These universes are made up of man and his knowledge of reality which he has gained through his experiences. The part of each universe which is common to all universes is the sharing of an experience. The meaningfulness of that sharing is unique to each participant and is determined by the previous experiences each person brings into a particular experience and the resulting interactions found within that particular experience. Randhawa and Fu (63) describe the concept of meaningfulness in this way:

An element of reciprocal stimulation is present in the relationship a pupil experiences with his environment.

Pupils are responsive to social and school stimuli, while at the same time they initiate social behavior to which parents and school personnel respond. And the social behavior of the pupil is modifiable by the responses to his behavior of those about him. Depending upon whether such responses are positive (reinforcing) or negative (inhibiting), the pupil's future responses, goals, and values will be influenced and determined. The extent and character of such determination will vary between pupils, and will depend upon the sum of natural and acquired characteristics which the pupil brings to the learning situation, whether that situation be social, emotional, intellectual, or educational (63, p. 312).

Therefore, the broader view required for educational accountability is found in the examination of experiences and not in a singular product of an experience.

Behaviors do not reveal the extent of knowledgeableness of an individual. Blythe Clinchy (16) speaks to this issue in discussing the role of intuition in learning. The implication that an individual only knows something or has an understanding of something if the individual can verbalize it is false. The assertion of falsity is based on Piaget's work as reported on by Case (14) that suggests there is a time when children are not capable of reflecting upon their own ideas. This is supported by Bruner and his associates, according to Clinchy, when they suggest that there is a stage in thinking when people represent ideas or concepts to themselves in images that do not easily translate into words. For these reasons, behaviors when used as an evaluative measure are very narrow products.

Examination of the components of an experience provide the key to evaluative data gathering. John Dewey knew this and spoke to great length on it in his book, Experience and Education. He stated: ". . . education in order to accomplish its ends both for the individual learner and society must be based on experience - which is always the actual life-experience of some individual" (22, p. 113). He also

noted that "individual freedom, decency, and kindness of human relations contribute to a higher quality of experience than do force, repression, or coercion" (22, p. 36). He added that the quality of an experience is enhanced by "mutual consultation and convictions." The quality of an experience was important in that it influenced future experiences. It can be said, then, that the quality of an experience is dependent on the human interactions included in the experience. Thus, whatever one defines as the components of an experience are significant only as they relate to the realm of human interaction.

Dewey argued for two major criteria for any educational experience. These are continuity and interaction between the learner and what is learned. He defined the principle of continuity of experience as meaning "that every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after" (22, p. 22) and it is the quality of the present experience which influences the way in which the principle applies. The spiral curriculum is an example of the concept of continuity. Thus, any set of criteria for an educational experience must include the principles of continuity and interaction.

Ira J. Gordon (33) complements the principles of continuity and interaction with a set of criteria for choosing experiences for students. These are listed as:

1. Adequate previous readiness.
2. Relation to fundamental ideas.
3. The student must have an active role.
4. Concepts must be learned in context.
5. Interesting patterns must lurk under the surface of the task.
6. The sequence of informal exploratory experiences must seem to 'add up' to something worthwhile (33, p. 36).

These criteria may be used in not only choosing an experience but also to determine if the experience a student is having is worthy of the time, effort, and money being spent in providing the experience - or - if the experience is accountable. However, these criteria are not considerate of the human interactions spoken of earlier which provide for a higher degree of quality. Thus, an experience has two components, a set of criteria for establishing an educational experience and a set of human interactions which give an educational experience the dimension of quality.

If the purpose for determining the components of an experience are to provide evaluative data for the educational accountability process, then the search for a set of human interactions to be used can be focused on the writings by and about John Dewey. Alfred L. Hall-Quest in prefacing Experience and Education stated:

It is the business of an intelligent theory of education to ascertain the causes for the conflicts that exist and then, instead of taking one side or the other, to indicate a plan of operations proceeding from a level deeper and more inclusive that is represented by the practices and ideas of the contending parties (22, p. 4).

Hall-Quest was referring to the "traditional vs. progressive" education controversy which John Dewey was attempting to remedy in the book Hall-Quest prefaced. The purpose of the quote is to bring attention to the phrases "theory of education" and "a level deeper and more inclusive." John Dewey expressed the need for a theory of education derived from a philosophical base. Dobson and Dobson (26) have stated a theory/model of education. Their educational theory, constructed from a philosophical point of view, is an example of a way to extract a set of human interactions to be used in the educational accountability

process. The educational theory provides what can be called a "global perspective" which is holistic and inclusive of the concept of a pluralistic society or a plurality of societies.

#### The Dobson and Dobson Theory/Model

Accountability in education is viewed as philosophically based according to Krystal and Henri (42). An expressed philosophy is found in these tenets:

1. Every child can learn.
2. Learning is influenced by the social environment.
3. Values influence decisions.
4. The learning experience is dynamic.
5. Man is socially interdependent.

The philosophic questions unanswered are those relating to epistemology, axiology, and metaphysics. The answers to these questions vary between and within societies. The global perspective encompasses a commonality which offers philosophic pluralism a meeting ground for cooperation in the process of schooling.

Dobson and Dobson (26) advance a theory of education that is applicable to a global concept. They propose that in human potential lies the key to absolution of the alienation of man. The focus of being is within the development of the human potential. The process of growth or realization of potential is dependent upon conditions - essence harmony as they relate to the existence of man. Thus, by describing the nature of man and defining his potential for becoming, it is possible to regulate experiences necessary for growth in the categories of the human potential.

Based on the premise that the potential of man should necessarily be the purpose of school, Dobson and Dobson (26) translate this concept into educational specifications. If specific conditions are necessary for man in order to develop his potential, then the same holds true for educational activities. The educational conditions are experiences, in this case, within the "school house" setting. Dobson's and Dobson's educational theory concludes that an educational experience have identifiable purposes and evaluation. Accepting that normal development is never ending, they use a formative evaluation concept for determining progress. The formative evaluation is defined in terms of the expressions of the human potential.

The educational theory is portrayed in a bimodular form. There is congruence between the two models not only in structure and material, but also in function and utilization. The uses and functions of the explanation of man model, referred to as the EM model, and the education expression of man model, referred to as the EEM model, are exercises used in defining a philosophic base as discussed in Chapter VI.

Dobson and Dobson define the meaning of "essence" as answers to the questions of the nature of man. It is key words which describe the basic beliefs about man. Dobson and Dobson use four postulates on which to build the categories for the explanation of Man Model. They are:

1. Man has the potential for becoming whomever he chooses.
2. Man creates his own unique being and existence through choices made from the alternatives presented by his environment, thus the uniqueness of individuals.
3. Knowledge exists only within the individual and thus apart from information. Knowledge is a model created by the individual that makes sense out of encounters with the external conditions in the environment.

4. Through the process of selection and/or valuing man creates his own values. Associated with his values are certain consequences which can be either positive or negative in nature. Thus, associated with the freedom to choose is the responsibility to one's self to live with the consequences. Without the freedom-responsibility association there is no self order or no vehicle for assimilating beliefs and actions into a positive force. This is the human condition for becoming (26, p. 4).

If life is to have structure, then the condition categories are an ordered expression of man's existence resulting in structure. These are the shapers of the essence of man which determine the degree of growth in the human potential. When rhythm between the essence of man and the human condition does not occur, dysfunction is the result ending in alienation which is expressed as ignorant behavior. The human condition does not exist apart from man's essence nor his potential.

The human potential is that which man can predict or expect. Louis Berman (6) implies man is mystifying reality when he believes he can have a sense of control over others. It is postulated that the only real control over human activity is that which resides within the control each individual has over his own actions. It is in the arena of the struggle for survival of the self that man comes to grip with alienation. One's self-concept is an ideological reflection of his interactions with his environment. When these reflections describe a self in terms of feelings of powerlessness, normlessness, meaninglessness, isolation and/or self-estrangement a state of alienation has been entered. Whereas Ernest Becker (4) proposes "accommodation" as the key to dealienation, Dobson and Dobson propose a focusing on, or growth in, the human potential. The elements of the human potential are those ingredients necessary to man for efficacious coping with his environment.

The contribution of the Dobson and Dosbon theory/model with reference to educational accountability is in the equation:

$$\text{potential} = \text{essence} + \text{conditions}$$

The equation is the method for expressing the harmony and associated rhythm previously discussed as well as a manner for introducing philosophy into the educational accountability process. If schools are a socializing institution in a society and their purpose relates to the perpetuation or restructuring of the culture, then the understanding of man's interactions with his environment is necessary. By defining what man is, what he may become, and the conditions necessary for his becoming, establishment of a philosophical frame of reference is accomplished.

Educational programs and activities, regardless of where in the process of educating they occur, have a guiding light for the decision making process. The transference of the EM concept to an educational situation is the other half of the Dobson and Dobson theory/model which provides utility for the theory. Basing education on the premise that it is a social function, then that which gives direction to man's activities should be used in the educative process also.

Figure 1 is the EM model of the Dobson and Dobson theory. The forward surface of the cube represents the identifiers for the essence of man. The human potential categories are noted on the top plane of the cube while the conditions necessary for man to exist for successful achieving in his potential are shown on the right lateral surface. To use the model, Dobson and Dobson state:

As can be seen by viewing Figure 1, the starting point for all potential is the recognition of individual essence in interaction with the human condition. An example of how

the EM model can be used to interpret man can be demonstrated by viewing Cell A in all three blocks. If inherent within the individual's essence is freedom, and if the condition of choice exists, then possibly the potential of responsibility can be realized. . . . In the final analysis, the EM model is an attempt to explain man in his constant struggle to realize his potential (26, pp. 7-8).

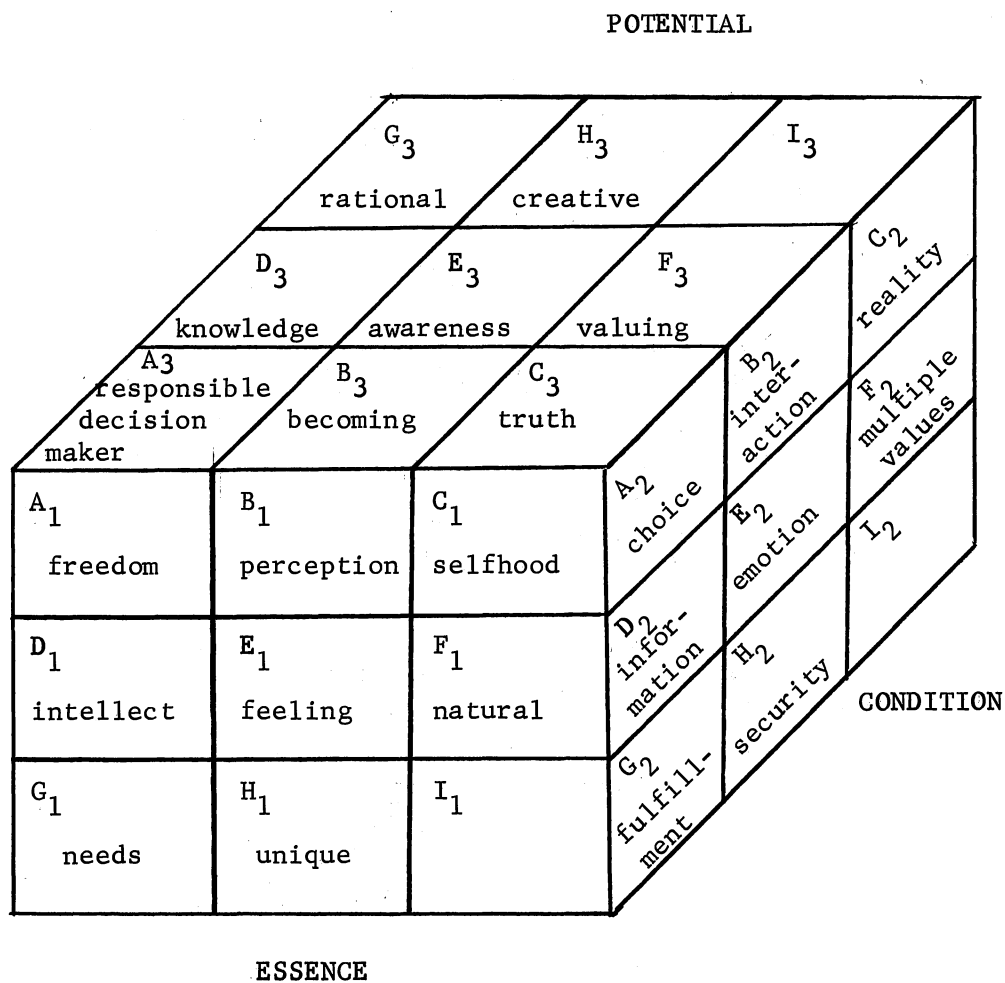


Figure 1. The EM Model or The Explanation of Man

The same directions for use apply to the EEM model shown in Figure 2. The use of formative evaluation in the place of summative

is in keeping with the notion of the human potential. It becomes the sum of the products of the experiences as they effect the potentialities of man. The products are the expressions of man's activities. Thus, man has the opportunity for control over his activities, thereby dealienating himself. The demands for educational accountability should be in experiences in place of the material, i.e., dollars and cents, bits of information, teacher-pupil ratios. Experiences are forever and cannot be devalued or changed except through perception.

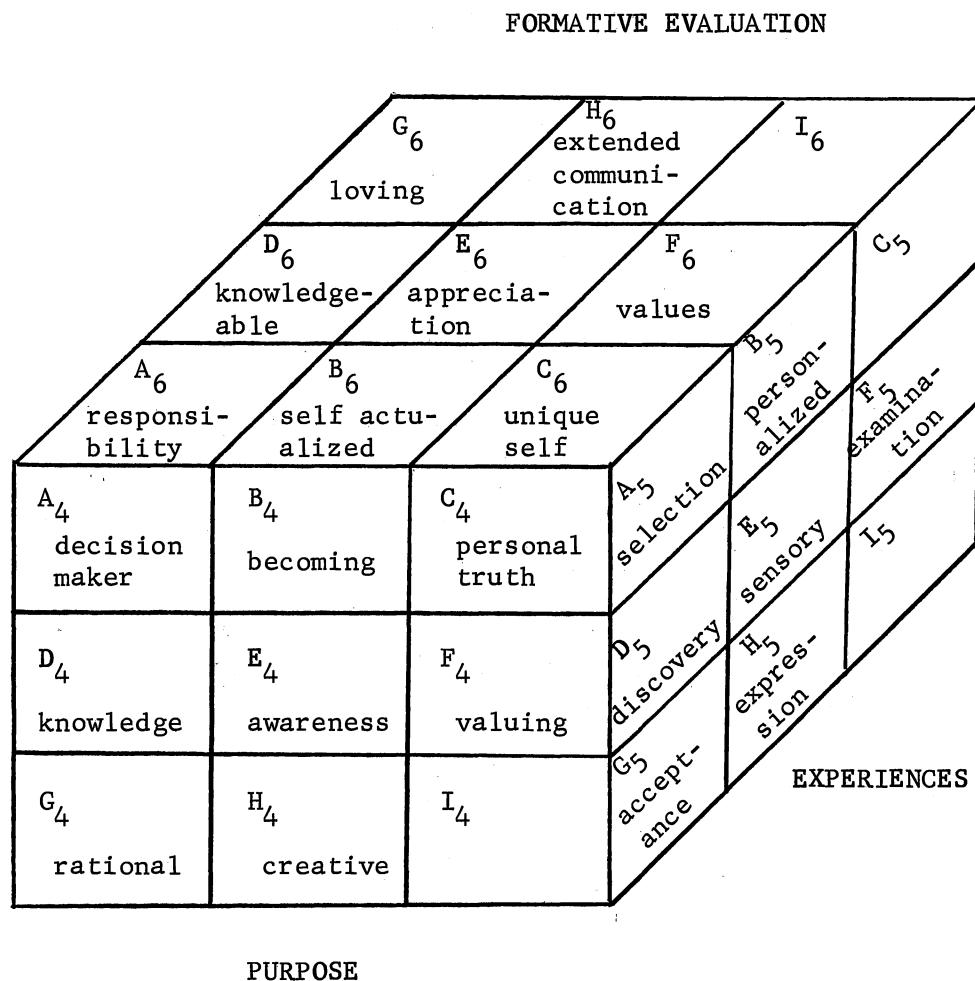


Figure 2. The EEM Model or The Educational Expression of Man

## CHAPTER V

### THE FORMULAS

A way of utilizing the two models in relation to educational accountability is to construct formulas which can be used as criteria with which to judge human activity. The importance of the formulas is threefold. The formulas (1) give direction for planning educational experiences and can be used to reflect back upon the experience after it has occurred to determine if the purposes for which the experience were planned were achieved. The criteria for realization of the purpose become the criteria for evaluation. Of equal importance is (2) the development of the formulas. The development is a test of knowledge and competence by those who develop them. The formulas do not just happen. Their derivation is the establishment of congruence between nature and experience. The formulas are derived from complex statements and are therefore important in that (3) they are concise shorthand expressions easily referred to once the abbreviations are committed to memory. Thus, the formulas become the cornerstones for the structure of the accountability process.

A caution must be exercised when concepts are stated in manipulative fashion such as the formulas which appear to be mathematical terms. It would be easy to reify the concepts and manipulate them according to the laws of mathematics. This form of reductionism can lead to mystification of the purposes of the formulas. The formulas

may be perceived not to represent concepts but become the focus for decision making. Instead of the formulas representing statements of experiences as they relate to essence-condition interactions and decisions being made respective of the relationship, the satisfaction of the formulas become the determiner of the decision made. A second concern in the use of the formulas centers on the mathematical implications the formulas present. It would be easy to reify the concepts in the mathematical terms and then proceed to manipulate them according to the laws of mathematics. However, a few of the operations of mathematics, when utilized with caution, may provide clues to techniques of assessment for measuring human potential.

#### The Development of Statements

The following is a statement of Dobson's and Dobson's explanation of human potential:

$$\text{POTENTIAL} = \text{ESSENCE} + \text{CONDITIONS}$$

This statement would read: The realization of human potential is dependent on the interaction of essence and human condition. The statement for the potential of responsible decision-maker is derived by using the mathematical principle of substitution. In the statement substituting responsible decision-maker for potential, freedom for essence, and choice for condition in the statement, it will then appear as:

$$\text{Responsible decision-maker} = \text{freedom} + \text{choice}$$

This would be read: The realization of the potential of responsible decision-maker is dependent on the interaction of freedom and choice.

The statements may include only one interaction as in the Dobson and Dobson theory/model or may be expanded to include other interactions. How one defines a category of potential will determine the interactions. Throughout this study the Dobson and Dobson interaction is joined by other interactions and recognition of a singular condition or essence as is appropriate. The derivation of such statements is as follows:

$$\text{POTENTIAL} = \text{ESSENCE} + \text{CONDITIONS}$$

$$\text{Responsible decision-maker} = \text{freedom} + \text{choice}$$

$$\text{Responsible decision-maker} = \text{intellect} + \text{information}$$

$$\text{Responsible decision-maker} = \text{needs} + \text{fulfillment}$$

Using the mathematical logic in:

$$a = b + c$$

$$a = d + e$$

$$a = f + g$$

∴  $a = (b + c) + (d + e) + (f + g)$ , we can arrive at:

$$\text{Responsible decision maker} = (\text{freedom} + \text{choice}) + (\text{intellect} + \text{information}) + (\text{needs} + \text{fulfillment})$$

Using the Dobson and Dobson constructs, statements in addition to the "Responsible decision-maker" statement can be established.

$$\begin{aligned} \text{Becoming} = & (\text{perception} + \text{choice}) + (\text{perception} + \text{interaction}) + \\ & \text{feeling} + \text{information}) + (\text{uniqueness} + \text{fulfillment}) \end{aligned}$$

$$\begin{aligned} \text{Truth} = & (\text{selfhood} + \text{reality}) + (\text{selfhood} + \text{choice}) + \\ & (\text{natural} + \text{information}) \end{aligned}$$

$$\begin{aligned} \text{Knowledge} = & (\text{freedom} + \text{interaction}) + (\text{intellect} + \text{emotion}) + \\ & (\text{needs} + \text{security}) + (\text{intellect} + \text{information}) \end{aligned}$$

Awareness = (perception + interaction) + (feeling + emotion) +  
(uniqueness + security)

Valuing = (selfhood + interaction) + (natural + multiple values)  
+ (natural + emotions) + (security)

Rational = (needs + fulfillment) + (intellect + multiple values)  
+ (freedom + reality)

Creative = (perception + reality) + (feeling + multiple values) +  
(uniqueness + security)

Assuming Dobson and Dobson have been complete in their theory, then similar statements may be developed from the EEM model which will be the "actuality of the potentiality" as discussed by May (52).

Dobson and Dobson refine the concept of "being" as identified by May. May used the concept as an individual's unique pattern of potentialities. He states:

. . . every mechanism or dynamism, every force or drive, presupposes an underlying structure from which they derive their meaning. This structure is . . . the pattern of potentiality of the living individual man of whom the mechanism is one of a multitude of ways in which he actualizes his potentiality. Surely, you can abstract a given mechanism like 'repression' or 'regression' for study and arrive at formulations of forces and drives which seem to be operative; but your study will have meaning only if you say at every point, 'I am abstracting such and such a form of behavior', and if you also make clear at every point what you are abstracting from, namely the living man who has the experiences, the man to whom these things happen (52, p. 25).

It is theorized that "the pattern of potentiality of the living man" is the Dobson and Dobson Explanation of Man model. They contend the structure is the interaction of the essence of man and human condition resulting in realization of the human potential. However, the potential stated in the EM model are states of being, not expressions of being. To arrive at expressions of human potential there need to be

experiences of which the human conditions are not. The expressions of the potential are results of experiences and are stated as forms of behavior according to May. These expressions are learned which implies an educational process. Thus, Dobson's and Dobson's EEM model can be used to determine the forms of behavior and the "what" that May refers to. Using the same process as was used in determining the statements for the potential with the EEM model, the statement of the formative evaluation is:

FORMATIVE EVALUATION = EXPERIENCES (PURPOSE)

This statement is read: The expression of formative evaluation is dependent on the experiences as they are related to the purposes of education. The purpose of education is the realization of the human potential.

Substituting in the above statement as was done previously with the statement for potential, the statements showing the relationships between the purposes and experiences which constitute the expressions of the potential are:

Responsibility	= selection(decision-maker) + discovery (knowledge) + acceptance(rational)
Self-actualization	= selection(becoming) + discovery(awareness) + acceptance(creative)
Unique Self	= selection(personal truth) + discovery valuing) + acceptance
Knowledgeable	= personalized(decision-maker) + sensory (knowledge) + expression(rational) + discovery(knowledge)

Appreciation = personalized(becoming) + sensory(awareness) + expression(creative)

Values = examination(valuing) + personalized(personal truth) + sensory(valuing) + expression

Extended Communication = expression(creative) + (becoming) + examination(awareness)

Therefore, for any given expression of human potential found in the formulative evaluation categories, it is possible to determine a set of criteria for the experience from the definitions of essence as they interact with the human condition necessary for the realization of man's potential.

#### From Statements to Formulas

At this point a need for a shorter method of stating the various statements is necessary or the possibility for confusion is increased due to the length of the statements as they become more inclusive. Figure 3 is a listing of the key words and their abbreviated forms.

The purpose in presenting the eight succeeding formulas is to help understand how they may be derived, analyzed, and used in planning and evaluating. The R formula is presented to illustrate the steps used in taking a partial formula (one that states the experiences and purpose) and deriving a complete formula (one that states the experiences and interactions). Each experience is then discussed for clarity of meaning. The S formula begins with a statement of research and then a formula based on the research. The experiences are explained in relation to other studies. The L formula began with the Dobson and Dobson

theory/model statement and was arbitrarily expanded. Other authors are noted which substantiate the interactions. The rest of the formulas have similar patterns, yet each varies in some aspect. They are this writer's attempt at illustrating the concept of the formulas, not as an entity to be lifted out of context and used. To present them as useable would not be in keeping with the heuristic approach to the study.

R: responsibility	dm: decision-maker	
S: self actualization	b: becoming	
U: unique self	pt: personal truth	
K: knowledgeable	k: knowledge	
A: appreciation	aw: awareness	
V: values	v: valuing	
L: loving	r: rational	
E: extended communication	cr: creative	
s: selection	ch: choice	f: freedom
pr: personalized	ia: interaction	p: perception
d: discovery	re: reality	sh: selfhood
se: sensory	if: information	it: intellect
ex: examination	em: emotion	fe: feeling
ac: acceptance	mv: multiple values	na: natural
ep: expression	fu: fulfillment	ne: needs
	sc: security	u: uniqueness

Figure 3. Abbreviations for Key Words

### The R Formula

The formula for responsibility is more than the partial formula which is used in evaluating the selection, discovery, and acceptance experiences in the educational process. To define the criteria for the expression of responsibility, consideration must be given to the criteria for selection, discovery, and acceptance. Thus, the complete formula is derived as follows:

$$R = s(dm) + d(k) + ac(r)$$

whereas:

$$dm = (f + ch) + (it + if) + (ne + fu)$$

$$k = (f + ia) + (it + em) + (it + if) + (ne + sc)$$

$$r = (f + re) + (it + mv) + (ne + fu)$$

$$\therefore R = s[(f + ch) + (it + if) + (ne + fu)] + \\ d[(f + ia) + (it + em) + (it + if) + (ne + sc)] + \\ ac[(f + re) + (it + mv) + (ne + fu)]$$

The formulas provide an avenue for the assessment of the educational process. The R formula provides for the direction to be given to assessing the potential of growth toward responsible decision making. The three educational experiences which contribute to that growth are stated in such a way that is feasible for assessment of the experience as it relates to the philosophic frame of reference previously established. Therefore, it can be stated that the criteria for assessing growth as a responsible decision-maker are found in the experiences of selection, discovery, and acceptance. The criteria for determining the existence of the experience are derived from the components stated in the formula.

s[(f + ch) + (it + if) + (ne + fu)]. Responsibility, as an expression of the potential of decision making, is dependent upon the experience of selection to the degree that there is the interaction of freedom and choice, intellect and information, and needs and fulfillment. The implication here with respect to educational accountability is that the education process must include the experience of selection. The experience of selection can be judged by the degree of interaction between the variables of the essence of man and the human condition.

d[(f + ia) + (it + if) + (it + em) + (ne + sc)]. The second experience necessary for realization of the human potential of responsible decision making is that of discovery as it influences knowledge. The interactions necessary for growth in the potential of knowledge are intellect and information, freedom and interaction, intellect and emotions, and needs and security. This formula states that the acquisition of knowledge is more than the intellect interacting with information. The interaction of freedom and interaction is the freedom to interact with information. The degree of interaction with the information along with the kind of interaction affect the acquisition of knowledge. The emotional condition of the learner interacts with the intellect and affects the activity of the cognitive processes. The emotional condition is dependent on the needs of the learner as they interact with the condition of security. All these interactions are in the act of discovery. They do not constitute the act of discovery, but do influence the discovery experience.

ac[(f + re) + (it + mv) + (ne + fu)]. The third experience is that of acceptance. To determine the congruence of the experience of acceptance with nature, the interactions of needs and the condition of

fulfillment, intellect and the condition of multiple values, and freedom with the condition of reality are the criteria used for evaluation.

### The S Formula

Abraham Maslow (51) derived the concept of the self-actualizer. This type of person was described by Shostrom as "one who is functioning more fully than the average individual and is thereby living a more enriched life" (72, p. 22). Shostrom contrasts the actualizer with the manipulator who

is a person who exploits, uses, or controls himself and others as 'things' in self defeating ways . . . [he] has developed from our scientific emphasis as well as from our marketplace orientation, which sees man as a thing to know about, to influence, and to manipulate (72, p. 11).

In pointing out the difference between a manipulator and an actualizer, Shostrom implies a polarity in life style philosophy. Thus, the dichotomies of deception - honesty, unawareness - awareness, control - freedom, and cynicism - trust are contrasting characteristics of the manipulator - actualizer, respectively.

Shostrom discusses the use of actualization therapy as a systematic approach for changing manipulators into actualizers or for helping actualizing people to become more so. He states: "The process of actualization therapy can be thought of as a progression in awareness" (72, p. 160). The process has three fundamental steps: description of primary manipulation, restoring the inner balance, and integration.

The purpose of describing primary manipulations is to create an awareness of the manipulative game or games a client is utilizing "for control of others, exploitation of others, for avoiding situations, for

structuring situations, for structuring time, seducing others to work for one, etc." (72, p. 160). The awareness is enhanced when the client becomes aware that the manipulative games are self-defeating "since they alienate the individual from others and keep him immature and dependent rather than mature and self-supporting" (72, p. 160).

The restoration of the inner balance uses the technique of extreme exaggeration of the manipulative game or games and creating an awareness of the extreme opposite of the manipulative pattern being demonstrated. Shostrom uses the hypothesis "that the exaggerated expression of any manipulative principle is indicative of the repression of the opposite potential" as a rationale for this stage (72, p. 161).

The final step is integration of the active and passive polarities into a unified working whole. This stage emphasizes the awareness of the possibility of transforming manipulative behavior utilizing faith in one's self.

These three steps are a part of the S formula. The entire self-actualizing formula is arrived at as follows:

$$S = s(b) + d(aw) + ac(cr)$$

whereas,

$$b = (p + ch) + (fe + if) + (u + fu)$$

$$aw = (p + ia) + (fe + em) + (u + sc)$$

$$cr = (p + re) + (fe + mv) + (u + sc)$$

$$\therefore S = s[(p + ch) + (fe + if) + (u + fu)] +$$

$$d[(p + ia) + (fe + em) + (u + sc)] +$$

$$ac[(p + re) + (fe + mv) + (u + sc)]$$

$s[(p + ch) + (fe + if) + (u + fu)]$ . The interactions are found in the concepts of actualization. The experience of selection as it

influences the potential of becoming is self-evident. The potential of becoming is fundamental to the actualization technique with the interactions of perception and choice, feeling and information, and uniqueness and fulfillment.

Of importance is the fact that this experience of selection varies from the previous discussion on selection. In becoming a responsible decision-maker the existence interactions involved freedom on choice whereas the selection experience in becoming self-actualized utilizes perception with choice. The harmony between intellect and information required for realization of the potential of responsible decision-maker is replaced with the harmonious interaction of feeling and information. In the self-actualizing formula, harmony is generated in the fulfillment of the uniqueness of man as compared to needs fulfillment in the R formula. The difference is important in that one selection experience focuses on responsibility whereas the other emphasizes the concept of self.

$d[(p + ia) + (fe + em) + (u + sc)]$ . The influence of the experience of discovery upon the potential of awareness speaks for itself. Throughout actualizing therapy is the emphasis on awareness and the discovery of that awareness as it is utilized in achieving actualization.

$ac[(p + re) + (fe + mv) + (u + sc)]$ . The third experience is that of acceptance as it influences the potential of creativity. Using Chapman's (15) rational - nonrational thresholds as explained in the L formula as a basis of acceptance, the relationship of feeling and multiple values takes on a significant meaning in the self-actualizing concept as do the interactions of perception and reality and uniqueness

and security. The "I-Me" relationship is dependent on individual values. Since the values of each individual in the interaction may be unique to that individual, the concept of multiple values becomes a factor influencing the interaction. The security one has can be expressed as a strength of their values. These factors all influence the individual's perception of the reality of the situation. If there is not a positive balance of the "I-Me" interaction, acceptance may be of a negative kind.

Bruner (12) writes of the conditions of creativity which he derives from the analysis of the concept of creativity as being an act which produces effective surprise. The creative act must take "one beyond common ways of experiencing the world." The conditions for creativity are stated in forms of paradox: ". . . the creative ones, are disengaged from that which exists conventionally and are engaged deeply in what they construct to replace it" (12, p. 24). In this manner Bruner describes the paradox of detachment and commitment. Passion and decorum are his paradox of impulse and restraint while "freedom to be dominated by the object" is the paradox of externalizing on object - separating it from ourselves and reifying it - and then letting the object become a compelling force which controls the creator's behavior - it demands to be completed in its own terms (12). Another antinomy is that of immediacy - the creation is there, closure is present but not eminent - and deferral in which there is a time lag between starting and completing. These paradoxes join with the internal drama - the potential revealing of the creator's inner self in an external object - and the dilemma of abilities - alertness, perseverance, energy - into Bruner's conditions of the creative process.

These conditions lead to the formula for the human potential of creativity as being the interactions of the Dobson and Dobson theory/ model essence cells and the human condition cells of feeling - multiple values, perception - reality, and uniqueness - security. These interactions, when influenced by the experience of acceptance, become one of the factors which produce the expression of self-actualization.

### The L Formula

The meaning of the loving formula is found in the concepts of decision making, the examination of knowledge, and rationality. If loving is the expression of the potential of rationality as the Dobson and Dobson theory states, and the necessary experience is acceptance, then the measure of lovingness is the determinant for accountability purposes. The expanded formula is:

$$L = [(f + ch) + (it + if) + (ne + fu)] + \\ ex[(f + ia) + (it + if) + (ne + sc) + (it + em)] + \\ ac[(f + re) + (it + mv) + (ne + fu)]$$

Berman (7) discusses love as a part of the curriculum to be taught and defines love as co-response in a wholistic sense. She further suggests students should have contact with a diversity of personalities with emphasis on co-response, and utilize space so that co-response can happen.

Frymier (31) describes loving and unloving behavior. He refers to loving behavior as accepting behavior. Exemplifications of this are unsolicited favorable comments about others; deliberate positive interactions with others, altruism, and physical ways that tell others they are good and worthwhile. Unloving behaviors are speaking negatively

about others, avoiding social interaction, discrimination, physically harming others, and extermination.

ac[(f + re) + (it + mv) + (ne + fu)]. Acceptance as an experience is theorized to be founded on the concept of rationality and nonrationality. Chapman (15) discusses these concepts in relation to societal thresholds.

The rational and nonrational thresholds of society at the generic social level are formed through the interaction of persons as they integrate 'I' and 'Me' aspects in that delicate proportion that is required in each reciprocal interaction. In this manner the integrity of each person's 'I' and 'Me' is fully retained and utilized in a social mix deemed appropriate by the persons themselves in their particular existential conditions. Thus, the lower ranges of the innovative 'I' as well as the upper ranges of the rational 'Me' inimical to the social unit, are restrained in favor of the social unit formed, with the full integrity of each person's 'I' and 'Me' components retained. This prevents the innovative 'I' aspect from totally dominating the 'Me' aspect and in like manner prevents the 'Me' aspect from toally dominating the 'I' aspect (15, pp. 21-22).

The dimension of acceptance, then, lies within the two thresholds. The rational threshold in a given situation is dependent on the reciprocity of interaction of the members of the situation, each contributing and receiving in the form of "I" and "Me". Mead (53) considers the "I" of a person to be the quality of uniqueness and innovativeness which is extended out from the person to another. It is the initiating of acts toward another. Acts toward another are only meaningful to the situation as they are accepted by the receiver. The point at which discord is felt by the receiver is the threshold of nonrationality or lower threshold of acceptance. The upper threshold of acceptance is the rational threshold of the "Me" which can only receive. In a given situation, the point at which the "Me" refuses to be the receiver and desires a change in the relationship to the "I", or the stance of

nonparticipation, is the upper threshold of acceptance.

The practical application of this concept was stated previously by Randhawa and Fu (63) as cited on page 35. In place of "I" and "Me", they discuss acceptance in terms of positive (reinforcing) and negative (inhibiting) responses from external stimuli. Should the student, in acting out the "I", be responded to negatively - the student being coerced to repress his "I" and become a "Me" - he feels rejection and anxiety arises. This is not to say there are not times when in the course of human interactions there arises a forced change of roles, from "I" to "Me". This change can be accomplished through rational behavior and is as noted in the experience of examination.

$dm + ex[(f + ia) + (it + em) + (ne + sc)]$ . The expression of lovingness as an indicator of growth in the human potentials of responsible decision making, rationality, and knowledgeableness can be hypothesized as dependent on the experiences of acceptance and examination. Examination of the knowledge one has about a given situation determines the degree of entry into the spheres of interactions of the situation. R. Dobson of Dobson and Dobson (26) defines the spheres of interaction in his discussion of concentric rings of intimacy which man uses in social interaction. These rings of intimacy are similar to Dahm's (19) hierarchy of intimacy and reflect Chapman's "I-Me" reciprocity. When social interaction is only intellectual, there is a distance between parties in the situation which might be defined as superficial interaction. As more meaningfulness is established or needed, a quality of physicalness enters into the interaction. The becoming as one of the concentric circles is the point of emotional interaction.

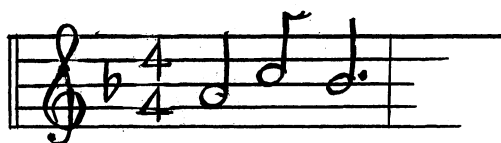
Therefore, the determination of an experience which results in an expression of lovingness must possess the qualities of freedom of choice; intellectualization of available information about the situation; the fulfillment of needs; the freedom to interact; intellectualization of the emotions; security in needs; freedom to seek reality; intellectualization of multiple values; situational needs; acceptance; and, examination. Analogous to this is the following simple song.

Talk with me,	
talk with me,	(intellectual interaction)
talk with me;	

Take my hand,	
take my hand,	(physical interaction)
take my hand;	

Share with me,	
share with me,	(emotional interaction)
share with me.	

The words express the kind of interactions while the score is the expression of the individual. The score is written as only three notes which are the theme. The individual in singing the words expresses a change in feeling by the creative variations on the theme.



The uniqueness of the interaction is the contribution of each individual to the variations on the theme, acceptance by others as they repeat the variations and then offer their own variation for acceptance.

### The K Formula

The knowledgeableness of man is the formative evaluation of the knowledge he has obtained through the experiences of personalization,

sensory, and expression. The basis of these experiences is found in the philosophical human conditions necessary for growth in the human potential categories of responsible decision-maker, knowledge, and rationalness. An expanded statement of the K formula is determined by:

$$K = pr(dm + se(k) + ep(r) + d(k))$$

whereas,

$$dm = (f + ch) + (it + if) + (ne + fu)$$

$$k = (f + ia) + (it + if) + (it + if) + (ne + sc)$$

$$r = (f + re) + (it + mv) + ne$$

$$\therefore K = pr[(f + ch) + (it + if) + (ne + fu)] + \\ se[(f + ia) + (it + if) + (ne + sc) + (it + em)] + \\ ep[(f + re) + (it + mv) + ne] + \\ d[(f + ia) + (it + if) + (ne + sc) + (it + em)]$$

The combined experiences of personalization, discovery and expression have some common criteria which should be expected as responsible decision making utilizes the condition of information as does knowledge. The intellect is common to all four experiences as are freedom and needs. Common interactions are in the experiences of personalization, sensory, and discovery. However, though there appear to be commonalities in experiences which produce a type of relatedness, each experience is unique which is consistent with the previous discussion of experiences.

$pr[(f + ch) + (it + if) + (ne + fu)]$ . For an experience to be personalized, the participants must have freedom of choice, the opportunity to intellectualize information, and the experience must fulfill the needs of the participant.

se[(f + ia) + (it + if) + (ne + sc) + (it + em)]. The sensory experience requires the intellectualization of information and emotions within a base of security from an awareness of the participant's needs. The awareness may be arrived at through the freedom to interact.

ep[(f + re) + (it + mv) + ne]. The experience of expression is contingent upon the reality of freedom. When expression is constrained by mythological forces, the experience becomes a myth. That is to say, when freedom is mysticized into a concept of behavior, instead of thought, then an experience of expression has not occurred. It is an experience of something other than expression. The other criteria of needs and the intellectualization of multiple values may act as constraints on expression. These interactions may be the cause of order to knowledge.

The foregoing analysis of the K formula appears to be speculation. The introduction of supporting research at this point would be appropriate. However, turning to Bruner (12) it is possible to substantiate the speculation on the basis of intuitive knowledge. This element of "intuitiveness" is a necessary ingredient for the formulas to be totally useful in the accountability process. The reason for the totalness is that the leadership in the elementary-secondary school setting may not have the facts from research in learning theory, personality theory, or epistemology to draw on in developing a given formula. Still, from the wisdom gained through time in the world of day-to-day experiences in the schooling process, the participants have developed an intuitive knowledge which can be utilized. However, whatever is developed must be tested either by submission to the academic scholars in higher education or by submission to trial in the field.

### The V Formula

The experiences necessary for realization of the potential of valuing are expressed in the formative evaluation of values. Expressed values are realized from personalized experiences, examination experiences, and experiences of expression. The concept of values realization does not define the values. This is keeping with the belief in the uniqueness of the individual. The formula is only a tool for conscious awareness of value development:

$$V = ex(v) + pr(pt) + s(v) + ep(r)$$

To determine the validity of the value experiences, the criteria are found in defining values and the process of valuing. Miller and Woock (55) identify seven major dimensions which underlie the structure of social class in American society. One dimension is value orientation. They report that social position is related to how one values certain goals and objectives or what attitudes are held toward certain events. Shaver (70) considers values as a frame of reference for parents and school people to utilize in resolving the issue of "what ought to be done" and "what can reasonably be done." He provides clarity to the meaning of values by distinguishing values from attitudes, biases, and prejudice. Values are standards or principles of human worth; they are criteria by which man judges things; and they are ideas which embody and convey feeling. Attitudes denote a number of interrelated beliefs and feelings focused on some object and are founded on values. Biases are learnings, inclinations or partialities whereas prejudice is the making of decisions or prejudgements and judgements without adequate advice. The importance in noting these differences is in the establishment of criteria for which to measure the experience. Without

an awareness of the distinctions, experiences students engage in may have as an end the development of biases, prejudice, and/or attitudes rather than a process for understanding self values.

Values range from personal preference values to those which are of critical importance to human existence. Shaver (70) identifies three broad categories of values. Esthetic values are those standards by which man judges personal experiences related to pleasure. Instrumental values are those used to judge performance. Shaver refers to these as "means" values - meeting them is a means to an end. They are also referred to as procedural values and become important in and of themselves. This is a subtle transition from instrumental to moral values and is an example of mystification. The third category is that of moral values. In relation to human dignity, Shaver believes these standards used to justify decisions of ethics, are probably the most important. He suggests the strategy for a sounder value position is the examination of society's conflicting commitments as well as the student's. This process of valuing assists the student in developing a commitment in regard to conflicting values.

The values an individual uses in defining beauty, truth, and love, in guidance of personal behaviors, and in judging personal performance are a partial result of guidance from adults. According to Simon, Howe, and Kirschenbaum (73) adult guidance assumes four modes of interaction. Moralizing is the transference of one set of values to another person. Laissez-faire is hoping for the best when one does his own thing. Matching words and deeds is known as modeling while value clarification is the examination of multiple values and the selection of a set of values from the alternatives.

Kohlberg (41) identifies three levels of moral value development. At the preconventional level the individual utilizes values which originate externally to the self. Physical consequences are the satisfaction of needs rather than satisfactions found in persons or standards. The moral value resides in maintaining the expectations of others and adhering to conventional values. The attempt at defining moral values and principles in relation to individual rights and the rights of others and as a matter of conscience is characteristic of the development of moral values at the postconventional level.

The valuing of certain goals and objectives implies an experience of selection of values. If the selection process is guided by one of four modes of interaction as advocated by Simon, et al., the experiences a teacher provides, in keeping with the global perspective, need to be agreeable with each of the modes. The strategy suggested by Shaver as cited on page 65 is the same interactive mode of value clarification. This mode is in agreement with the other three modes in that it does not deny, negate, or discredit previous modes of establishing values. Value clarification processes include recognizing that which one prizes in relation to beliefs and behaviors; examining that which is prized and alternatives, then choosing beliefs and behaviors from that examined; and, having chosen freely on one's beliefs, acting in a consistent, repetitious pattern of behavior.

The V formula seeks examination of values much the same as value clarification does. In addition there is the personalized experience in relation to personal truth which is the interaction of selfhood and reality. This interaction is expressed by Shaver (70) in his valuing strategy when he requests the student recognize society's conflicting

commitments and his own conflicting commitments. The third experience is selecting values followed by rational expression of them.

The criteria for measurement of legitimacy of the experiences for potential in valuing include these interactions of the essence of man with the human condition; natural and multiple values, selfhood and interaction, natural and emotions, selfhood and choice, natural and information, selfhood and reality, and the condition of security.

### The U Formula

The self, as an ideological construct, is affected by several categories in the essence of man according to Dinkmeyer (25). The self is a person's inner world and is composed of one's feelings, thoughts, needs and general view of self. The self is a result of evaluations, assumptions, attitudes and convictions made daily by the individual.

The importance of the self in schooling can be understood when discussed in light of the fully functioning individual. This individual trusts himself and others. He recognizes the importance of values and sees himself as becoming. He accepts mistakes as knowing he is not perfect but still able to function and thus, his experiences become an asset instead of a hindrance. He lives with courage and integrity. He is loved and loves. This person is also known as self-actualized which is discussed as the S formula. The difference between the potential of unique self and self actualization is in the realization of self actualization man fits general characteristics. There are others who are growing in the sense of becoming, all are forming similar characteristics. The process for becoming is unique to each individual and though the patterning of behavior is characteristically similar, the individual

is still unique. The values and valuing processes will vary from individual to individual. Thus, that which one is and will become is different than anyone else. That which provides the uniqueness is the selection of personal truth, the discovery of values, and acceptance.

Defining personal truth in terms of existence, it is theorized to be the interaction of selfhood and choice, natural and information, and selfhood and reality. The importance of selfhood with regards to personal truth is obvious as it appears twice, once as an interaction with choice and again with reality. There is established a harmonious triangle of interaction that is influenced by the associated interaction of natural and information. The information is used in relation to the naturalness of man. Man is not a tree, a bear; he is a human being. As a tree, or bear is part of nature, so is man. Information which supposes otherwise is discordant. An example is the receiving of information about an act of genocide. This is an unnatural act, so to speak, and causes an "out-of-stepishness" which disrupts the harmony of the triangular interaction of selfhood, reality and choice. Personal truth, without proper additional information, can become mystified. Man, when interacting with his environment using a false truth, becomes alienated.

Values were discussed previously in the V formula. It was noted then that they are often a determiner of behavior. The unique self is unique because the individual is a composite of previous experiences and heredity. Neither can be duplicated, thus each individual is unique. The realization of the potential of unique self is the discovering of a value system which balances the rhythms of the interactions of essence and condition. This discovery may be termed "peace of mind".

The development of the self has been studied from four points of view reports Dinkmeyer (25). Freud used the construct of the ego as self concept. He identified three systems which when acting in harmony produce a mentally healthy individual. The id is the outgrowth of heredity; the ego comes from interaction with objective reality in the higher mental processes; and, the superego is the product of socialization. Adler used the term life style which is born out of coping with the individual's environment. "The unity in the individual's thinking, feeling, and expressions of personality is the life style" (25, p. 187). Adlerians focus on the individual's perceptions of the situation rather than the Freudian reality of the situation. A third point of view is that of the phenomenological psychologists. The reality of the situation or the perception of the situation is only meaningful as it is viewed from the eyes of the individual in relation to his perceptual field. The difference between Adlerian and phenomenological concepts is that one uses "objective" appraisal of the situation and the latter uses subjective appraisal. Objective appraisal is formulating how the individual perceives the situation and is appraised by someone else whereas subjective appraisal is formulating how the individual perceives the situation as appraised by the perceiver. The fourth point of view is subjective also. The development of the self is through reflected appraisals of significant others. All four views emphasize the influence of experiences of selection, discovery and acceptance. The U formula notes these experiences and emphasizes their need to be influenced by personal truth and values.

$$U = s(pt) + d(v) + ac$$

or

$$U = s[(sh + ch) + (na + if) + (sh + re)] + \\ d[(sh + ia) + (na + mv) + (na + em) + sc] + \\ ac$$

### The A Formula

Beatty and Clarke (3) discuss the concept of aware·ing and point to the inaccuracy of saying man is aware. To be aware is to be "conscious of" which is an inadequate definition of man's relation to his environment. The individual is constantly interacting with his environment and thereby reshaping, extending, and utilizing his knowledge through the process of aware·ing. The appreciation formula is a statement of the process of aware·ing in terms of experiences necessary for the realization of the potential of awareness.

$$A = pr(b) + se(aw) + ep(cr)$$

The Reader's Digest Great Encyclopedic Dictionary defines appreciation as " . . . judgement . . . perception or awareness . . . sympathetic recognition . . . formerly, expressed criticism." Judgement is a personal act of forming an opinion. It involves selection of criteria and the expression of the formed opinion to the self or others. Thus, the three experiences noted in the A formula could be sufficient and measurement could be the frequency with which these experiences occur. However, the original purpose was to add quality to measurement. The quality is provided when recognizing that the personalized experience is only meaningful when it contributes to the process of becoming. In a similar manner, the quality of the sensory experience is determined by focusing on essence-condition interactions necessary for realization of potential awareness. The third experience, that of

expression, is influenced by creativity.

$$A = pr[(p + ch) + (p + ia) + (fe + em) + (u + fu)] + \\ se[(p + ia) + (fe + em) + (u + sc)] + \\ ep[(p + re) + (fe + mv) + (u + sc)]$$

The above formula is a restatement of the A formula depicting the educational experience and the essence-human condition interactions. It may be noted that there are some elements common to each set of interactions. The importance of perception in the A formula or in the realization of the potential of awareness can be seen by noting that each set of interactions involves that of perception. A second category of the essence of man which is quite prevalent is that of feelings. Joining with perception and feeling to round out the interactive set is uniqueness. The human conditions to be noted are those of choice, interaction, reality, emotion, multiple values, fulfillment and security. One might question why the condition of information is omitted in the A formula when all the other conditions are present. The reason is that information is not always necessary to appreciate. One can appreciate a flower without knowing the kingdom, phylum, and class; or that it is used for medicinal purposes; or that it blossoms once every one hundred years. The individual only needs to perceive the blossom and have a feeling for it to appreciate it. No one else needs to comment on the blossom or even see it--only the perceiver needs to be aware of it for it to be appreciated.

Unique self, extended communication and self actualization have similar interactions which give the categories of the human potential overlap. This overlap may be the cause for misinterpretation in evaluating an experience. For example, the experience influences the

interactions the same as the interactions influence the experience. When any one of the participants of an experience exhibit behaviors negative to the purpose of the experience, rather than seeing the student or the experience as the source of the incongruence, look for a possible misinterpretation of the experience by the individual expressing the incongruence.

#### The E Formula

$$E = ep(cr) + (b) + ex(aw)$$

or

$$E = ep[(u + sc) + (fe + mv) + (p + re)] + \\ [(u + fu) + (fe + if) + (p + ch) + (p + ia)] + \\ ex[(u + sc) + (fe + em) + (p + ia)]$$

The Dobson and Dobson theory/model uses extended communication (E) as the formative evaluation of realization of one's creative potential. To be creative one must be aware of "what is" and "what is desired." The "what is" is dependent on perception of reality. This perception is influenced by the uniqueness and the security in that uniqueness of which the individual is consciously or unconsciously cognizant. The "what is desired" is a sensed or felt need for that which isn't or for that which the individual is not aware. The joining of the "what is" and the "what is desired" is the act of creation and is an expression of the unity. The willingness to question or become aware of "what is desired" in one's own terms is dependent on examination. The willingness to seek something else, an unknown, is strongly influenced by the security one feels in a situation where uniqueness is important to the act of creating.

The E formula emphasizes the essence of man categories such as feeling, unique, and perception. Why not categories such as intellect and freedom? Is not creativity often associated with intelligence or the cognitive processes? It would be possible to include the interaction of intellect and information. This was done deliberately so as to keep the concept of creativity free from the encroachment of methodologies in teaching creativity. The focus could easily become on that interaction to the exclusion of the others and if it can be done without consideration. This is not to say the intellect is not involved. Rather the stress here is on feeling and perception, both of which are functions of the mind.

The conditions in the interactions include all the categories. Creativity is a complex process and the assumption is made herein that all the categories of the human condition must be interactive for the creative process to function.

## CHAPTER VI

### THE HEURISTIC

Throughout the writings contained herein has been the implication that learning is more meaningful when the learner becomes a discoverer of knowledge. A model of the accountability process which is explicit in steps to follow, words to say, and actions to take would be incongruous with a theme of discovery. Yet, there needs to be some kind of guidelines. These guidelines give direction to the activities initiated and decisions made. A heuristic is defined by the Reader's Digest Great Encyclopedic Dictionary as "helping to discover or to learn; something used to designate a method of education in which the pupil is trained to find out things for himself." The heuristic concept of the accountability process is the beginning of a socialization process which can dealienate man. The educational accountability process is a socialization process because human interactions, concepts of self, and human values are involved. It was pointed out earlier that a social problem is man's engagement in alienating activities. Logically then, the activities of the educational accountability process must be non-alienating.

Dealienation within the global concept is a socialization process of working from the conscious or unconscious expectancy of powerlessness to the belief based on fact, not fiat, that a person can anticipate a degree of control over the occurrences of reinforcements; from

the meaninglessness of events to responsible decision making; from a "pawn to an origin" (20); from rebel to innovator; and, from dependence to intradependence. This is a broad spectrum of activities and some guidelines may assist man in his becoming. These guidelines are divided into the topics of the characteristics of an educational accountability, the helix, and the evaluation process and form the heuristic model of educational accountability.

### Characteristics

Knowles (40) stated four qualities for any theoretical construct of the teaching-learning process. Dobson and Dobson used these qualities as the criterion of congruency for the goodness of fit test for their two models. These qualities are herein used as characteristics necessary for a model of the educational accountability process. They are used in this study with these meanings:

1. Comprehensiveness - having the potential for inclusiveness.  
The model must be applicable to the greatest number of people at the greatest number of times and include the maximum number of factors needed for the greatest number of occasions.
2. Systematization - in the sense of orderliness but not mechanization. Orderliness in allowing for guidance but not dictation, creativity but not chaos, and imagination but not aimlessness.
3. Rationale - the foundation for action. The statements of theories which provide for the systematic characteristic.
4. Flexibility - the capacity for modification and expansion as a result of new knowledge.

### Comprehensiveness

Torney and Hess (78) researched the socialization process in relation to the formation of political concepts. Their theory of the political socialization process is one of development through experiences. The child through schooling develops beliefs and knowledge of the ideal. As the child experiences more of life, he/she relate the ideal to the real as they perceive the real. The emotionality of political issues broadens and deepens beliefs and gives direction to social action in political activities. From these activities develop a desire for consistency between political ideas and other beliefs. The authors include four models of political socialization.

The accumulation model involves the learning of many facts by the passive recipient which are inconsistent. The identification model develops from a variety of influences such as parents, teachers, and peers. It is more situational and temporary and is often a testing ground for the child's knowledge and values. The role transfer model is the basis for the socialization as the child seeks to be in control of unfamiliar situations. The child assumes a familiar role in a given situation assuming a "rightness for the role in the situation" and thereby provides security for the self without conscious awareness beforehand of other alternatives. The fourth model is the cognitive model. Here the student contrasts the ideal with a given and constructs political concepts which direct social interactions.

The Torney and Hess study is cited to illustrate the variety of socialization models which typify human development. It therefore remains that a model of the socialization process must be comprehensive enough to be considerate of a variety of models.

### Systematization

The concept of a system may imply a mechanistic structured flow of entities which form a whole or unity. Chapter I discussed Parsons' concepts regarding a social system which emphasized a controlled process with tendencies toward parameter rigidity and equilibrium. Without control of the social system the inherent problems of goal attainment, adaption, integration, and pattern maintenance and tension management will not be solved. The question arises then as to the definition of the control; who controls what or what controls who? Do goals of the system control the system and if so, who establishes the goals and what is the basis for them? Is the control that of a teleological kind and if so, what is the grand design or final cause? These questions when answered for a pluralism of societies produce a diversity of answers. The solution lies in an orderliness of a dynamic system which incorporates the wisdom of the moment.

### Rationale

The rationale for an educational accountability process is an outgrowth of the attempt to bring about the dealienation of man. It is the creative effort by man to find harmony with his environment. John Dewey attempted this when he theorized the purpose of education to be to provide for a better life. He then presented his theory, postulates and conditions for attaining that purpose. His rationale was the explanation and justification of that which he proposed. The same holds true today for educational accountability. The rationale must be an explanation and justification for the proposals incorporated into the practice of accountability in education.

### Flexibility

Research constantly produces new theories, concepts, and explanations of human interactions. Alvin Tofler (77) tells of a knowledge implosion which results in tremendous speed for changes. The evaluation of the educational process will reveal incongruities which means adjustments within the process must be made and/or adjustments within the evaluation procedures may need attention.

### The Helix

A helix is something spiral in form as a coil formed by winding wire around a uniform tube. The helix can be infinite in length. The helix can be used to describe the educational accountability model. The length is infinite as time is infinite. The uniform tube around which the wire spirals is symbolic of man around which the educational accountability process revolves. This is also fitting of the socialization process of man. They are both developmental, on-going, and infinite.

The spiral is more descriptive than the loop, the circle, or a cycle in that the loop, circle and cycle have closure. Time erases the possibility of closure yet allows for the possibility of reflecting on the past. When man returns to the past in thought or action, he brings with him the future and thus, never knows the past exactly as it was. Also, the spiral is an inadequate descriptor by itself. The spiral is conceived of as an outward or inward movement away from or toward, respectively, a given point. The point does not move and implies a static man.

A single spiral consists of seven segments, each representing a part of the accountability process. The first segment is that of defining man followed by defining the segments of human potential, stating the human condition, translating the human potential into goal statements which become the purpose for schooling, stating the expressions of the human potential for formative evaluation, defining the experiences necessary for growth in the human potential, and the assessment process for accountability purposes. At the end of the seventh segment, the spiral is back where it started, almost. Man has moved through time creating a spatial gap between the starting point and the ending of one spiral which results in the helix. The helix is symbolic of man constantly becoming.

Each spiral has three sets of responsibility: community, professional and shared. The set of community responsibilities has the elements of the definition of man, definition of the human potential, and stating the human condition. The community is the cultural representative responsible for the societal level in the decision making process according to Myers (58). He points out that the decisions made at the societal level affect all decisions made within the organization for education. If the decision makers at the societal level are alienated, their decisions will tend to cultivate alienation. Myers points to this in stating: "While values determine all decisions, it is unusual to find a board of education with a statement of values. Those few boards which do have such a statement are not guided by it in any meaningful way" (58, p. 14). A statement of values is not enough and Myers recommends a logician be employed to police the activities of the school board for congruence with the value statements.

Myers also questions the validity of value statements being representative of the community. The solution to such dilemmas may be outside of conventional practice.

Referring again to Dewey's quest for "a level deeper and more inclusive," the board of education has the responsibility for formulating a definition of man compatible at the societal level. The local board has many restrictions placed on them by state and federal agencies who have assumed authority for imposition of the restrictions. Authority is delegated by the same people who determine the composition of the local school board. Therefore, authority actually rests in the people. Their exercise of it through delegation to elected bodies has led to an ideological state which produces a sense of alienation of the "meaninglessness" variety. The decision making process is meaningless in the sense referred to by Mannheim's functional rationality and substantial rationality as cited on page 27. The equalizing of functional rationality and substantial rationality can be accomplished through participation in the activities that accompany the set of community responsibilities. Reinforcement for these activities and the resulting dealienation occur from the sensed ability to predict outcomes in growth in the human potential. The involvement in the community responsibilities provide for increased knowledge by members of the community which in turn provide a more solidified concept of social norms. Thus, Merton's normlessness does not occur because the culturally prescribed goals are congruent with the means of attainment with regard to the educational institution. Moral discipline becomes a meaningful concept.

The responsibilities labeled as "professional" are those of formulating the expressions of the human potential and determining the experiences congruent with the human condition. This is the educator's field of expertise. The sociology, psychology, philosophy and anthropology courses taken and enhanced by experience in the field have prepared the educator for assumption of the stated responsibilities.

The feeling of alienation exists within the education institution at the institutional level as well as at the instructional level. Myers expresses this feeling of alienation at the institutional level when he states: "Societal aims are often formulated in such abstract and ideal terms that teachers (educators) are unable to determine whether their activities accomplish or obstruct attainment of these aims" (58, p. 22). Educators who must translate the societal aims often, from a lack of understanding them, advance their own educational aims which may or may not be translated from societal aims. Thus, anomie results.

The community feels alienated because the education institution often has not translated the societal aims into congruent educational aims. Emerging in society appear spokesmen such as Holt, Illich, Flesh, and Wasserman who express the feelings of alienation through criticism of the educational process. The problem is not in society nor in the education institution. The problem is ambiguous societal aims statements.

The third set of responsibilities contains the elements of shared responsibility. To provide the community with skills in clarity of societal aims statements, the professionals must educate the community such that the global concept is understandable to all. Through this

understanding the feelings of powerlessness become anticipations of reinforcements in the form of a greater degree of control over their occurrences. This is not an indoctrination process but one of developing the concepts of the human potential and the nature of man so that the members of the community can recognize alternatives and make decisions regarding societal aims based on values which originate in philosophy. Clearly defined societal aims statements have meaning for the education institution and provide a vehicle for developing experiences and expressions of the human potential.

### The Formulas

The formulas stated in Chapter V act as criteria for societal aims. Aims which can be reduced to the basic statement  $\text{Potential} = \text{Essence} + \text{Conditions}$  can more readily be expressed at the institutional level in the statement  $\text{Formative Evaluation} = \text{Experience (Purpose)}$ . The formulas have an even more utilitarian function than just the criteria for translation. Other uses are in curriculum instruction decision making, teacher selection, counseling activities, student evaluations, job evaluation for noncertificated personnel, and institutional decision making. However, the formulas must be adapted to the situation. The adaption is in the meaning given to the experiences. The same experience is meaningful to each participant in similar ways with the difference being in previous experiences and the development of each participant. The developmental theories of intelligence, cognitive abilities, personality, perception, and values aid in the adaption of the formulas to the situation. The importance of the adaption of the formulas again returns to the five sensed feelings of

alienation. Using the experience of selection as an example, the type of selection experiences for a preschool student would be different from those offered a high school student. In the field of art at the preschool level selections would be in the colors and designs used in finger painting. The high school student would have experiences in color, design, medium, size, texture, and expression. The professional as well as others within the institution must be aware of development continuums and relate the interaction situation to the student's place on the continuum as evidenced by expressions of the human potential.

#### The Evaluation

Two questions constantly arise whenever educational accountability is the subject discussed. These questions are:

1. Accountable for what?
2. Accountable to whom?

The "what" question usually relates to success with success having a different meaning for different social classes. The upper-middle socioeconomic class and the middle socioeconomic class seek entrance of the young into achievement meritocracy through a college preparatory curriculum. The lower socioeconomic class seek well paid employment for their children so they can enjoy the material comforts of society while the counterculture do not wish to be coerced into achievement meritocracy or the need for the material comforts (55).

For the educational system to accommodate a global perspective in terms of "accountability for what" there needs to be commonality found between all social groups. A curriculum based on the human potential offers such a commonality. The human potential was defined earlier as

having categories of responsible decision making, becoming, truth, valuing, knowledge, awareness, rationale and creative. Within all of the definitions of success are one or more of these categories. A curriculum founded on these categories would not be one oriented to content alone. It would be directed toward, as Dobson and Dobson said, "man becoming whomever he chooses" (26, p. 7).

Man is accountable to himself and to be so includes the social aspect of man for without others it would be most difficult to ascertain a concept of self which is necessary if one is to grow in the human potential of the unique self. The whole of alienation is based on a social self and the reflections from the environmental interactions.

To be accountable to man, the education system must offer experiences congruent with the human condition. In doing so, an example is set for the rest of society. Educational accountability is defined by De Novellis and Lewis (21) as "reporting the congruence between agreed upon goals and their realization." The congruence is determined by an evaluation. The evaluation method, to be more effective, needs four characteristics: consistency, comprehension, validity and parsimony.

An evaluation method is consistent if it logically relates to the objective . . . is comprehensive if it provides information about the total range of objectives . . . is valid if it measures what it is supposed to measure . . . is parsimonious if it does not become a burden on the user by providing an overload of information (21, pp. 64-65).

Many of the articles written on accountability in education have pointed to the impossibility of the task from various frames of reference. One of these is noted in Dyer's SEI method of evaluation which incorporates a wealth of information on a given student with a

longitudinal approach to the gathering of some of the data. However, as we currently pace students through grades, departmentalized curriculum, and specialize the teaching, a teacher can hardly be expected to utilize the data gathered because of the enormity of information.

Evaluation of the human potential through expressions resulting from the interactions of experiences is a possible source for solutions. The purpose of the evaluation is to determine congruence between goals and their realization.

### Reflexivity and Evaluation

Lessinger's (45) turn key effect is utilized in the helix. The helix is self-evaluative in that it is a system based on reflexivity. The Webster's New Collegiate Dictionary (1974) defines reflexivity as "directed or turned back upon itself. Of, relating to, or constituting an action . . . directed back upon the agent or the grammatical subject." A word found in many accountability systems is that of feedback. The difference between the two words is in degree of specificity. Feedback means to return a part of the output to a specific phase in the process. In educationese, feedback is usually used in the sense of returning information gathered through evaluation to specific phases in the process for improvement of the quality of the product. The concept of reflexivity is less specific and data gathered through evaluation of the product is reflected back upon the total process. Reflexivity is more meaningful for educational accountability purposes when considering the unit of measurement is the presence-absence of given experiences. Those experiences are in the schooling process. However, the meaningfulness of the schooling experience is dependent upon

experiences outside of schooling as pointed out by Coleman (17) and Bane and Jencks (2). Therefore, feedback is too narrow of a descriptor. The data gathered from evaluation, to be "turnkey" in nature, must affect more than a specified point in the process, it must overshadow the entire process.

The reflexivity is apparent in the Dobson and Dobson theory/model. The basic concept of the existence of man emphasizes the concept of being. Being is expressed through the purpose to develop the human potential which improves man's existence. An example of reflexivity is the transcendence of the Explanation of Man to the Educational Expression of Man.

This is illustrated in Figure 4 which is another way of illustrating the helix.

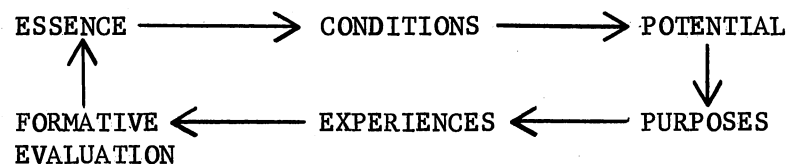


Figure 4. Reflexivity of the Dobson & Dobson Theory/Model

The essence of man is complemented by the human conditions which initiates growth in the human potential. The human potential becomes the purposes of education which are complemented by experiences. The experiences will produce expressions of the human potential used in the

formative evaluation. These expressions are congruent with the essence of man. The importance of the reflexivity is implied in the continuity or fluidness of the transcondance from the EM model to the EEM model and back again. The output becomes the input into the accountability process.

To describe the phenomena of an experience using the first of Van Newmann's three descriptive methods as reported by Wynne (88) is possible. The formulas provide the keys to the description. If an experience meets the conditions of a formula, then it is similar to all other events with the same conditions. Thus, nominal measurement is possible in terms of frequency of a set of experiences. The second of Van Newmann's methods of describing an experience is also applicable. Using the second method provides a more definitive description of an experience. The frequency of an experience now becomes the frequency of a specific experience. The third of Van Newmann's methods of description provides for the uniqueness of man--use of graded values.

## CHAPTER VII

### SUMMARY

Educational accountability is more than a cost effectiveness scheme, an act of delineating responsibility, an evaluation of student learning, assuring functional behaviors of all members of an organization, the establishment of objectives, or the bringing about of tighter control on schooling practices by the public. Many authors of journal articles and books, the speech writers and speech makers, the educational accountability model makers, and workshop, conference and course leaders have alluded to a very broad concept of accountability while others have held an extremely narrow application of the concept. What is educational accountability? It is a process which considers the past, the future and the now. It is the establishment and continuation of a process which guides the socialization process in schooling.

The aims of education have been and are today an expression of the needs of society which is believed to be unfulfilled by other institutions of the social order. These expressions are value statements and as such relate to philosophic concepts of man and his environment. The process of societal accountability is the establishing of congruency between social man and natural man. Natural man is in harmony with his environment. Social man, to be congruent with natural man, must also be in harmony with his environment. Natural man's environment is the social, the physical, and the metaphysical. Social man's environment

consists of the experiences in which he is a participant. The purpose for natural man is to find and maintain harmony with the social, the physical, and the metaphysical environment. The purpose of social man is to find harmony within himself and his social environment. Education is a socializing process. Schooling is a microcosm of the larger order, education. Schooling, as a socializing process, is beset by all the characteristics of education. The aims of schooling are derived from the aims of education. That which affects society, affects education, and in turn affects schooling. Social man, when out of harmony with his environment, is alienated. Therefore, alienation becomes the theme with which to evaluate the socialization process. The method for evaluation is the examination of the experiences in which man participates.

The experiences in the socialization process must be in accord with the essence of man and his purpose. For schooling to be congruent with the socialization process, the experiences in schooling are derived from the human condition. The human condition is that which provides rhythm between the essence of man and the realization of the human potential. The essence of man, the human condition and the human potential are derived from a philosophic frame of reference. Thus, the process of educational accountability is founded in philosophy and a compatible educational theory.

Dobson and Dobson theorize that a set of given expressions can be used to evaluate schooling experiences. These school experiences have identifiable purposes. The purposes are found in the realization of the human potential. The realization is contingent on the human condition being in harmony with the essence of man and his potential. The

essence of man is a philosophic frame of reference. Thus, using the Dobson and Dobson theory/model, it is possible to align the process of educational accountability with a socialization process based on a philosophic frame of reference.

The educational accountability process can be analyzed by seeking congruence between stated educational aims and practices within a given community. Congruence is determined by comparing the experiences students participate in with those determined by the Dobson and Dobson theory/model. Criteria for determining the existence of the ideal experiences are the formative evaluation expressions of the human potential stated in a given set of formulas. The formulas are a shorthand statement of the interactions which influence a set of experiences such that the experience becomes meaningful to the realization of the human potential. Sociologists have theorized that when man's relationship with his environment is experienced in given ways, he becomes alienated. The state of alienation is prohibitive to the development of harmony between man and his environment. Discord prevents realization of the potential. Thus, an examination of the Dobson and Dobson theory/model for reliability and validity is possible through showing incongruence between formulas and practices which cause alienation.

The organization of the schooling accountability process is represented in the form of a helix. The process of schooling accountability revolves around man as man moves through time the same as the coil circles a central tube to form the helix. The process has no beginning because it is not being born and has no ending because it is regenerative. Change occurs by inserting into the helix new thought or direction at any given point. Also, at any given point in time

there exist concepts of the nature of man and conditions necessary for man's existence. The aims of education are expressions of these concepts. Therefore, the most advantageous point of entry for change is when consideration is given to the aims of schooling. Using this entry point as a beginning the following sequence of events should occur:

1. Redefining of the nature of man.
2. Redefining the human potential.
3. Restating the human condition.
4. Restating the potential as aims for education.
5. Reselecting experiences congruent with the human condition.
6. Redetermining the expressions of the aims of education for evaluation purposes.
7. Evaluating the experiences for congruency with the realization of the human potential.
8. Redefining the nature of man with consideration given to the findings of the evaluation.
9. Repeating the above steps ad infinitum.

The events constitute one revolution of the accountability process. The responsibility for each of the nine events is divided between the public and the educators. The primary responsibility for the process does not lie with any one group, it lies with each member of a given community. The responsibility for redefining the nature of man, the human potential and the human condition is primarily that of the local school board which represents the community. The professional educator's role is that of organizing and administering the tasks necessary to accomplish the redefining. It is also the professional educator's

role to orient the community to alternatives and solution strategies for problems which might arise in the undertaking. The task of restating aims which are congruent with the arrived at definitions is a shared responsibility of both the community and the professional educator. The translation of the aims into expressions of the human potential and determining the experiences necessary for realization of those aims is the responsibility of the professional educator as is the evaluation process. The information gleaned from the evaluation must be communicated to the community to begin a new revolution. For all parties to fulfill respective responsibilities, an adequate communications system is necessary. Qualities for an adequate communication system include the characteristics of reciprocity, intimacy, and thoroughness.

### Conclusions

The experimentation with ideas that are related to the process of education, the notions of alienation, mystification and reification, philosophic frames of reference, global perspective, and theories in the practice of schooling are certain to develop in the meditator feelings of confusion and frustration. It is truly an experiment in "future shock". There are conclusions that can be drawn from this study.

1. Very little research has been done in analyzing the concept of accountability as that concept relates to a socialization process.

Broudy, Leese, Berman, and Combs write of the need for new concepts of practice in educational accountability. Holt, Illich,

Goodman, Kozol, and A. S. Neil write about the need for a new look at schooling. Sorokin, Blau, Fromm, and Goldner analyze our social order and imply all is not well. Research is needed which joins the expressions of each of these groups into a meaningful dialogue from which further studies will emanate. Dobson and Dobson have made a start.

Robert Emans (29) wrote about a conceptual framework for curriculum development that would be "universally applicable regardless of level, subject area, philosophy or specific type of curriculum" (29, p. 327). He chose to ignore the philosophic frame of reference for the values that would be used. This is an important omission if that which Inlow (38) writes is valid. Clough, according to Inlow, identifies two types of values, ideal and modal. Ideal values are elusive and actually not attainable while modal values are compromises with the ideal values. Both are ideas constructed by man, both deal with philosophic frames of reference. Inlow cites four stances for formulating or changing values and value systems. They are:

- postulate that truth is known a priori and there needs only to be uncovered, understood, and applied,
- postulate that tradition, constantly tested, should guide human affairs,
- postulate that individual man works out his own values,
- postulate that built into history is a dynamic force that guides human affairs (38, p. 4).

Is not the focusing on values and ignoring from whence they come a bit of mystification? One purpose of a conceptual framework for curriculum development is to produce a valid curriculum and those who implement that curriculum should be held accountable. If the foundation of the framework is invalid in relation to the philosophic existence of man or the cultural commitments, then the practices in schooling are doomed before they are begun. The second conclusion:

2. Very few concepts of educational accountability discuss its association to a philosophic frame of reference.

The global perspective requires a common language for effective communication. The translation of ideas, feelings, and purposes into words is a structuring of reality. Reality is a philosophic construct and in giving it meaning to be communicated to others, the real can become the unreal. A focus on human potential is understood in all languages. Evidence of this is the Universal Declaration of Human Rights which Drews and Lipson (27) call the culmination and synthesis of all previous formulations of higher values. It is a statement of principles applying to all human beings, adopted by the General Assembly of the United Nations. The thirty articles abound with inferences to the potential for responsible decision making, becoming, awareness, valuing, knowledge, rationalness, and creativity. These basic statements imply a socialization process from a global perspective. The final conclusion:

3. The process of educational accountability should focus on measurement in realization of human potential and the Dobson and Dobson theory/model provide avenues for investigation of techniques for that measurement.

#### And For Tomorrow

Today's efforts in educational accountability are only the first light of dawn in tomorrow's schooling practices. Joseph Leese (44) discusses accountability and the path it has followed in America. In his opinion the harshness of engineering education as though it were a nonhuman entity would be a case of putting music in here and hoping it

comes out there. Specificity in accountability may endanger the creativeness of the teacher and add another name to the alienation casualty list. Myers (57) in speaking before the Senate Chambers of the Oklahoma legislature stated:

. . . I see no reason why they [teachers] should cooperate enthusiastically in the implementation of accountability legislation. They should, in fact, seek to undermine it. Little effort was made to consult teachers when the resolution was being considered. No funds were set aside for released time for teachers so they were forced once again to implement a scheme on their time with no compensation (57, p. 5).

Is this not exactly the alarm Carini sounded as cited on page 23?

Broudy's (11) weather forecast for the new day that is dawning in educational accountability includes four alternatives for the schooling process. Spend time and resources getting the students ready for standard instruction is the first alternative. To do so means added dollars for noninstructional purposes. This means doing something about the causes and effects of poverty, the ghetto, migrant labor, Indian Reservations, and the capitalistic economy. For this alternative Broudy predicts 90 percent chance of rain, little hope for even a ray of sunshine. Another alternative is to turn to other social agencies. The obvious one is the federal government. Higher taxes reduce a greater indebtedness but the redistribution of expenditures with larger amounts going to the solution of these problems seems quite unlikely - rain for sure, no chance for a brighter day. Implement a standard program whether pupils are ready or not is the third alternative he suggests. The meeting of the cold front (the standard program) and the warm front (the students and teachers) is certain to produce tornadoes which will cause disaster to the community of schooling.

The fourth possibility is to provide instruction other than standard. The movement of the cold front out of the weather picture calls for fair and moderate weather with an occasional small cloud drifting through the area - the sun will shine!

Broudy's suggestion that society "hail the deviations from the standard middle class culture as cultures valuable in their own right" (11, p. 11) is akin to the global perspective and the heuristic model as well as the basic tenets of democracy. The dawning of a brighter tomorrow means the utilization of the formulas needs to be tested and attempts made by educational leaders to follow the helix. Common sense tells us that professional educators as a whole have not communicated well with the public. The distrust and ineffective programs of accountability would not be of the magnitude they are if educators had not lost touch.

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