

THE DEVELOPMENT OF A BELIEF
IDENTIFICATION INSTRUMENT

Thesis for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY
JOSEPH S. YANICK, JR.
1970



This is to certify that the

thesis entitled

THE DEVELOPMENT OF A BELIEF IDENTIFICATION INSTRUMENT

presented by

JOSEPH S. YANICK, JR.

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Education

Date

James S. ...
5/7

A-159

Z-213

ABSTRACT

THE DEVELOPMENT OF A BELIEF IDENTIFICATION INSTRUMENT

By

Joseph S. Yanick, Jr.

The main body of research concerning teacher educational beliefs centers around observation and measurement of teacher classroom behavior. This study was undertaken to afford the classroom teacher the opportunity to identify his personal beliefs concerning various educational perspectives.

The purpose of the study was to design and develop a useful instrument in identifying and examining the teacher's beliefs by comparing his actions with those of another person and making inferences as to that person's beliefs as manifested by those actions. Similarity of beliefs could then be considered in conjunction with the comparison of behavioral traits.

The observer views a video tape of a simulated classroom situation in which a teacher-performer role-plays stereotypes of selected teacher behavior. Inferences are made as to the beliefs held by the role-playing teacher on the basis of his displayed behavior. The observer then

identifies with one of the educational perspectives by rating the roles as to effective classroom practices.

The criterion measure was selected from the faculty of the College of Education and the video tape roles were filled from the Department of Theater Arts at Michigan State University. The experimental group was composed of teachers attending graduate classes in education.

The Belief Identification Instrument was designed and developed by synthesis of the material in the Review of the Literature into two divergent educational perspectives or approaches. These approaches were then used to both develop the Belief Identification Statements and design the Behavioral and Organismic teacher-performance roles.

The experimental group viewed the video tape and made agree-disagree response choices in terms of whether or not they perceived the belief statements to be reflecting the behaviors displayed. They then responded to questions designed to elicit role identification and were asked to choose the role they felt was generally more effective.

Since it was evident that the item responses were made as a result of personal preferences for and identification with one educational perspective or the other it is concluded that the experimental group members were able to perceive parts of and gain insights into their own professional educational roles.

The criterion group, selected on the basis of

sensitivity to other people, agreed closely with each other and easily suggested adjustments to the few items on which they originally disagreed. The content of the performance roles and the Belief Identification Statements are therefore taken to possess a measure of face validity.

A high positive correlation exists between the criterion group and the experimental group's ability to perceive others' beliefs as manifested by their behavior. This same correlation is also present between the criterion measure and the experimental group's level of subjective influence upon these perceptive or inferential abilities.

The validity of content of the Belief Identification Instrument has been demonstrated and a high positive correlation exists between the criterion group and the experimental group as shown by comparison of their respective item responses. It is submitted that the Belief Identification Instrument is in fact useful for identification and examination of educational beliefs. The teacher's personal classroom behavior can be brought to conscious awareness thereby permitting inferences to beliefs to which he himself may subscribe.

THE DEVELOPMENT OF A BELIEF
IDENTIFICATION INSTRUMENT

By

Joseph S. Yanick, Jr.

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

College of Education

1970

ACKNOWLEDGEMENTS

I would like to thank Dr. James L. Page, my chairman, Dr. Dale V. Alam, Dr. Louis Romano and Dr. John T. Gullahorn for their helpful suggestions and guidance during the course of writing this dissertation.

I would also like to express my appreciation to the faculty of the College of Education who served as the criterion measure. Special thanks are extended to the staff of the Department of Closed-Circuit, particularly Paul Witkowski, for its professional assistance in the development of the video tape.

To my graduate fellows in the Instructional Media Institute, simply for being there to grow with me for the past two-and-a-half years, I wish to express my warmest feelings. I will keep them among my fondest memories.

This dissertation is dedicated, first, to my wife June and children Jill, Jane and Jay without whose encouragement and cheerfulness under all circumstances none of this would have been possible...and finally to my parents, without whom I would not have been possible.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	ii
LIST OF TABLES	v
LIST OF APPENDICES	vi

Chapter

I. INTRODUCTION	1
Need for the Study	1
Purpose of the Study	3
Hypotheses	7
Methods and Procedures to be Used	8
Limitations of the Study	9
Rationale for the Study	11
Importance of the Study	11
Overview	13
II. REVIEW OF THE LITERATURE	15
Introduction	15
Attitudes, Beliefs and Behavior	15
Perception	19
Related Attitudinal Studies	25
Summary	28
III. PROCEDURES	30
Introduction	30
Selection and Function of the Criterion	
Group	30
Description of the Teacher-Performer	32
Description of the Teacher-Performer	
Roles	32
Development of the Belief Identification	
Instrument	33
Development of the Belief Comparison	
Chart	35

TABLE OF CONTENTS CONT'D

Chapter	Page
III. PROCEDURES CONT'D	
Development of the Belief Concept List . . .	36
Development of the Video Tape	38
Description of Technical Equipment and Specifications	40
Rationale for the Use of the Video Tape Technique	41
Description of the Experiment	42
Description of the Experimental Group . . .	43
Experimental Procedures	43
Description of the Response Technique . . .	44
Rationale for the Response Instrument Design	45
Rank Ordering of Roles	46
Role Identification	46
Statistical Analysis Rationale	47
Statistical Analysis	49
Glossary of Terms Used in the Study . . .	52
Summary	53
IV. FINDINGS OF THE STUDY	54
Introduction	54
Presentation and Analysis of Data	55
Summary	66
V. SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS	68
Summary	68
Conclusions	70
Implications for Further Study	72
Recommendations	72
BIBLIOGRAPHY	75
APPENDICES	82

LIST OF TABLES

Table		Page
1	DISTRIBUTION OF AGREE-DISAGREE CHOICE DETERMINATIONS OF THE CRITERION GROUP	57
2	ITEM ANALYSIS-INTERCOMPARISON PERCENTAGE OF AGREEMENT BETWEEN THE CRITERION GROUP AND EACH EXPERIMEN- TAL GROUP MEMBER ACROSS ALL ITEMS . . .	58
3	ITEM ANALYSIS-INTERCOMPARISON PERCENTAGE OF AGREEMENT BETWEEN THE CRITERION GROUP AND EACH RESPECTIVE AGGREGATE ITEM ACROSS THE TOTAL EX- PERIMENTAL GROUP	60
4	ITEM ANALYSIS-INTRACOMPARISON MEAN AND STANDARD DEVIATION FOR EACH RESPECTIVE ITEM RESPONSE SHOWN AS A DICHOTOMOUS VARIABLE FOR THE ENTIRE EXPERIMENTAL GROUP	62
5	PERCENTAGES OF IDENTIFICATION OF THE EXPERIMENTAL GROUP TO THE BEHAVIORAL OR ORGANISMIC ROLES	65

LIST OF APPENDICES

Appendix		Page
A	CORRESPONDENCE	82
B	BELIEF COMPARISON CHART	85
C	BELIEF CONCEPT LIST	88
D	BELIEF IDENTIFICATION INSTRUMENT	96
	Belief Statements...Behavioral Role . . .	96
	Belief Statements...Organismic Role . . .	98
E	ROLE DESCRIPTIONS	100
	Behavioral	100
	Organismic	103
F	VIDEO TAPE SCRIPT	106
	Role #1 Behavioral	107
	Role #2 Organismic	114

CHAPTER I

INTRODUCTION

Need for the Study

The main body of research concerning the evaluation of teachers deals with the observation and measurement of teacher classroom behavior and centers around teacher personality and characteristics.

When the teacher's behavior is considered to be a reflection of his personality, research attention centers on individual differences of teachers in ability, knowledge, attitude, temperament and the like. Personality traits are inferences from relatively large samples of behavior. "Intelligence", "knowledge of subject", and "authoritarianism" are examples of dimensions of the personalities of teachers.¹

The most accessible suggestions of teacher personality and characteristics come through the observable behavior exhibited in the classroom. This behavior delineates the social and professional role the teacher wants to and/or is expected to play.

The teacher's behavior may be that which is characteristic of a certain definition of

¹Gage, N. L., Handbook of Research on Teaching, (Chicago: Rand McNally & Co., 1963), preface, p. 3

the teacher's role or method; in methods considered as roles individual differences among teachers are for the moment disregarded. Examples of such roles are "lecturing" and the "project" method.²

With respect to the above statement two roles will be developed in Chapter III and will be called the "behavioral" and "organismic" teaching and learning approaches.

A teacher must be sensitive to how he interacts with the learner and, in turn, how the consequent behavior of the learner is changed (assuming that learning can be observed through a change in behavior) as a result of the interaction taking place in the environment provided by the teacher. This kind of self-analysis of the teacher is difficult for two reasons: first, personal educational beliefs do not lend themselves to verbalization and systematic examination and, secondly, the teacher is more conscious of what he is expected to believe by the society supporting the educational system.

To account for the characteristic ways people behave in specific situations, altogether new concepts are introduced, personality psychologists typically preferring trait concepts, and social psychologists preferring role concepts and such additional concepts as group norms, social pressure, legal constraints, definition-of-the-situation, and social structures.³

² *ibid.*, p. 5

³ Rokeach, Milton, Beliefs, Attitudes and Values: A Theory of Organization and Change, (San Francisco: Jossey-Bass, Inc., 1968), p. 119

This study will be an attempt to give the teacher a point of departure; a place to begin introspection by providing a means to classify and organize what he sees in other teachers and through them, finally in himself.

In general, each teacher would do well to identify his educational beliefs. That in which he presently believes should point the way to further study and inquiry if one of his beliefs is continual self-improvement. This will lead to reinforcement of positions now held or change and modification to new positions.

An example of a question concerning a specific educational belief might be: Are teachers more effective who "run a tight ship", i.e., tend toward classroom situations which are highly structured and authoritarian, or those who tend toward a learning situation which permits more freedom and which is significantly less structured.

What is needed is a teaching philosophy which the teacher is able to delineate and subsequently examine and continually re-examine in a systematic manner. His philosophy could be based upon his beliefs which could then be used to develop his teaching methods, approaches and, finally, to understand his attitudes toward his classroom practices.

Purpose of the Study

The purpose of the study is to develop an instrument which would be useful in identifying and examining

teacher educational beliefs. These beliefs for the present may be subconscious, nebulous, un verbalized and unsynthesized⁴.

The instrument would provide the teacher with a means to compare his classroom practices with his educational beliefs by identifying particular displayed behavior patterns and by inferring underlying educational beliefs which foster them. He would bring his personal classroom behavior to conscious awareness by observing a controlled situation displaying some stereotypes of teaching methods (composed of observable actions) which inherently infer underlying beliefs. He would then identify with or against these behavior patterns and traits displayed by someone other than himself and subsequently infer beliefs to which he himself may subscribe. Finally, he would synthesize his own educational beliefs as a guide to his future classroom behavior.

The teacher will be asked to view video taped teaching situations and to interpret the television teacher's

⁴ Synthesis is the putting together of elements and parts so as to form a whole. This is a process of working with elements, parts, etc., and combining them in such a way as to constitute a pattern of structure not clearly there before. Generally this would involve a recombination of parts of previous experience with new material, reconstructed into a new and more or less well-integrated whole. This is the category in the cognitive domain which most clearly provides for creative behavior on the part of the learner. See Bloom, Benjamin S., et al., Taxonomy of Educational Objectives: The Classification of Educational Goals, (New York: David McKay Co., Inc., 1956), p. 162

behavioral acts. Using a prepared list of educational belief statements, he would be asked to choose the underlying beliefs of the television teacher by inference. The propriety of the inferential technique is explained by Brodbeck:

A physicist seeing a flash of light on a screen infers the presence of a charged particle. Seeing a husband accidentally spill hot soup on his wife, a psychologist infers unconscious hostility. Hearing someone make certain statements, a social psychologist infers anti-Semitism. Science, like common sense, frequently makes inferences from observations to something not observed. In order to help explain certain manifest behavior, the researcher formulates certain concepts that name unobserved states of the organism or object exhibiting the observed behavior. He postulates certain lawful connections between these "underlying states" and the observed behavior.⁵

After making these inferences and upon introspection of his own behaviors compared with those he has viewed, the teacher can begin to recognize and identify personal educational beliefs he himself possesses.

It is important for the study that the desired responses be a personal, subjective interpretation of a set of displayed behavioral acts and not an objective observation and recording of what is actually taking place on the television screen. This subjective interpretation represents that particular teacher's unique view of reality and

⁵ Brodbeck, May, "Logic and Scientific Method in Research on Teaching", Handbook of Research on Teaching, p. 61

the chaining of behavioral acts observed will lead to equally unique inferences about the underlying beliefs which shape them. Further, there will be no attempt made in the study to moralize or justify which beliefs lead to more or less correct, efficient or expediant behaviors; the sole purpose will be to detect and to identify them for further examination.

Three secondary purposes of the study are:

1. to gain practice in inferring others' beliefs from observing others' actions,
2. to gain practice in seeing why people have the beliefs they have from viewing their observable behaviors,
3. to become more sensitive to others' behaviors by "seeing oneself" in the behaviors of others.

The final purpose of the study is to provide an efficient means to accomplish the above by designing and developing an easy-to administer, easy-to-score-and-analyze, valid instrument. Measures to achieve validity of content will be described in Chapter III.

In summary, the proposed study would afford the teacher an opportunity to expose his educational beliefs and examine them by interacting with a systematic procedure, and to identify with or against the educational beliefs of other teachers.

Hypotheses

- H_{a1} The role portrayals on video tape will allow the intended underlying beliefs to be inferred from the observed behaviors
- H_{a2} The members of the criterion group will agree that each observed behavior infers its intended underlying belief.
- H_{a3} The criterion group and the experimenter will agree that each observed behavior infers its intended underlying belief.
- H_{a4} The video tape and the belief statement list will prove to be valid with the experimental group and will prove to be reliable within the experimental group.

Definitions:

A measure is valid to the extent that differences in scores yielded by it reflect actual differences in behavior and not differences in impressions made on different observers. For an observable scale to be valid for measuring behavior, it must provide an accurate record of behaviors which actually occurred in such a way that the scores are reliable. To be valid for predicting some outside variable, such as teacher effectiveness, the behavior scores would have to correlate with some outside criterion.

A measure is reliable to the extent that the average difference between two measurements independently obtained in the same classroom is smaller than the average differences between two measurements obtained in different classrooms. Unreliability can come about most commonly when two measures of the same class tend to differ too much; this may

happen because the behaviors are unstable, because the observers are unable to agree on what occurs, because the different items which enter into the measurement lack consistency, or for some other reason.⁶

Methods and Procedures to be Used

Two professors currently involved in teacher training in the Michigan State University College of Education will be selected and asked to serve as the criterion measure for the study. Their task will involve the assessment of the content validity of both the video tape and the accompanying belief statement list by viewing the tape and responding to the list.

The video taped roles will display stereotypes of teaching approaches and behavior traits frequently exhibited by teachers in classroom situations. They will reflect characteristics of two extreme stereotype approaches developed from the readings in the Review of the Literature. The roles will be played by performers from the College of Theater Arts at Michigan State University.

The literature suggests two divergent teaching and learning approaches. These approaches will be given the designations "behavioral" and "organismic" and the material gleaned from these readings will be synthesized into the Belief Comparison Chart. The Belief Comparison Chart is

⁶ Medley, Donald M., and Mitzel, Harold E., "Measuring Classroom Behavior By Systematic Observation", Handbook of Research on Teaching, p. 250

a list of educational concerns which will be compiled, each item being defined from both the "behavioral" and "organismic" perspectives. The Belief Comparison Chart will be further refined into a list of declarative statements reflecting one or the other of the divergent approaches. This will be named the Belief Concept List.

The criterion group will view the taped video segments and respond to the belief statements. Any modification of the statements will be made at this time on the basis of their recommendations.

The experimental group members will then respond to the list of belief statements during the viewing of each separate segment. Each group member will make an agree-disagree choice response for each statement in terms of whether or not he perceives the statement to be reflecting the behavior being displayed. These responses will indicate the beliefs to which the observer is making inference while viewing the role-played segments. The degree of variance in comparison to the criterion group, as detected by the statistical analysis, will be the amount of subjective interpretation perceived by the experimental group. The group members will then be asked to rank order the roles in terms of the more to the less effective teaching situation.

Limitations of the Study

It is the primary purpose of the study to allow teachers to make inferences from empirical data. It is

important to point out that generalizations and predictive statements may be made only to teacher populations which closely resemble the teachers working with the Belief Identification Instrument. Charters cautions,

Decades of empirical research have failed to identify unequivocally the behaviors which define "effective teaching" much less establish an association between such behaviors and enduring personal attributes of teachers.⁷

More specifically, Hayes states,

The population is defined by the sample and the manner in which it is drawn. The only populations to which the inferences strictly apply are those which individuals have equal likelihood of appearing in the sample.⁸

The rationale for the selection of the teacher sample to be used in the experiment will be made in Chapter III. Finally, Ryans states,

Generalizations are appropriate only when made to populations which it seems reasonable to believe are not significantly different from the small group employed in the study. Conclusions to be drawn are approximate, as are all inferences based on empirical data, which are by their very nature to some degree unreliable.⁹

⁷ Charters, W. W., "The Social Background of Teaching", Handbook of Research on Teaching, p. 726

⁸ Hayes, William L., Statistics for Psychologists, (New York: Holt, Rinehart and Winston, 1963), p. 216

⁹ Ryans, David G., Characteristics of Teachers, (Washington, D.C.: American Council of Education, 1960), p. 398

Rationale for the Study

Attitudes are based on organizations of beliefs.

Beliefs are based on perceptions and cognitions of the environment.

Beliefs are factors in perceptions and affect the nature of perceptions.

Beliefs also affect further perceptions, i.e., perceptions are influenced by personal beliefs.

Perceptions and cognitions are elements of behavior.

Behavior is a function and sometimes a consequence of perceptions.

Behavior may infer personal beliefs.

Importance of the Study

The importance of the study is viewed by the investigator in terms of its practical application to teachers and teacher-training. The most accessible suggestions of teacher personal characteristics come through the observable behavior exhibited in the classroom. Teachers must therefore be sensitive as to how they interact with learners and, in turn, how the subsequent behavior of learners is changed as a result of the interaction with the environment provided by teachers.

This study will give the teacher a place to begin introspection by providing a means to classify and organize what he sees in other teachers; and through them eventually

in himself. This will lead either to reinforcement of positions now held or to modification of those positions.

A teaching philosophy is needed which a teacher is able to delineate and subsequently examine and continually re-examine in a systematic manner. The philosophy could be based upon his beliefs which could then be used to develop his teaching methods, approaches and, finally, to understand better his attitudes toward his classroom practices.

The teacher's classroom behavior delineates the social and professional role he wishes to and/or is expected to play. Self-analysis concerning this role is difficult, first, because personal educational beliefs do not lend themselves to verbalization and systematic examination, and secondly, the teacher is self-conscious of what he is expected to believe by the general society. The attempt to delimit the teacher's educational beliefs, as provided by this study, will permit an orderly approach toward actualization of his professional role concept.

The most important use of the Belief Identification Instrument to be developed in this study is with in-service training courses in public school situations and with graduate level education courses in universities. The instrument could also prove useful with courses involved in undergraduate teacher-training as a diagnostic experience before entering the teaching field.

The need for a deeper human sensitivity across our culture is becoming increasingly evident. The study would serve this need at both the inter-personal and intra-personal levels. The sensitization of the teacher's perceptive awareness would permit a fresh and clear look at his colleagues, his clients and himself.

Overview

Chapter I outlined the need for the study; to clarify teachers' educational beliefs as a guide to their classroom behavior. It stated the purpose of the study as the development of an instrument which would be useful in identifying and examining teacher educational beliefs. It stated the hypotheses to be tested, presented a synopsis of the procedures and design of the study and defined the terms used. This chapter also set forth the rationale and the limitations of the study. Finally the importance of the study, both in theory and in practical application, was proposed.

Chapter II documents the rationale of the study by reviewing pertinent professional literature on perception; attitudes, beliefs and behavior; and related studies in attitudinal measurement.

Chapter III describes the selection and function of the criterion group and the development of the teacher performance roles. It describes the rationale, development

and production of the video tape and the accompanying Belief Identification List. This chapter also relates the experimental procedures used and describes the administration of the instrument.

Chapter IV presents and analyzes the data collected which concerns the validity and reliability of the Belief Identification Instrument.

Chapter V summarizes the study and draws pertinent conclusions, discusses implications for further study, and includes recommendations for modifications and further development.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

It is the purpose of this chapter to document the rationale of the study by reviewing pertinent professional literature in Social Psychology on attitudes, beliefs and behavior; perception; and related studies in attitudinal measurement.

Attitudes, Beliefs and Behavior

As suggested in the Purpose of the Study, the teacher's beliefs could be a point of departure in understanding his attitudes toward his classroom activities. A discussion of beliefs with respect to their relationship with attitudes would prove useful here:

Helen B. Lewis defines an attitude as "an interrelated set of opinions organized around a point of reference." In the above definition the point is clearly made that the elements are underlying beliefs rather than expressed opinions.¹

¹ Lewis, Helen B., "An Approach to Attitude Measurement", Psychologist's League Journal, (1938), pp. 2, 64-65, cited by Rokeach, Milton, Beliefs, Attitudes and Values; A Theory of Organization and Change, (San Francisco; Jossey-Bass Inc., 1968), p. 112

Mager further expands the nature of attitudes:

Actually, "attitude" is a word used to refer to a general tendency of an individual to act in a certain way under certain conditions. The use of the word "attitude" is based on what someone says or what he does. It is based on visible behavior.²

Rokeach's definition of an attitude is,

...an organization of several beliefs focused on a specific object (physical or social, concrete or abstract) or situation, predisposing one to respond in some preferential manner. Some of these beliefs about an object or situation concern matters of fact and others concern matters of evaluation. An attitude is thus a package of beliefs consisting of interconnected assertions to the effect that certain things about a specific object or situation are true or false, and other things about it are desirable or undesirable.³

Rokeach continues,

All beliefs are predispositions to action, and an attitude is thus a set of interrelated predispositions to action organized around an object or situation.⁴

An attitude as an organization of beliefs is also reinforced by Krech and Crutchfield who take the view that all attitudes incorporate beliefs but not all beliefs are

² Mager, Robert F., Developing Attitude Toward Learning, (Palo Alto, Calif.: Fearon Publishers, 1968), p. 14

³ Rokeach, Milton, Beliefs, Attitudes and Values, (San Francisco: Jossey-Bass, Inc., 1968), p. 159

⁴ ibid., p. 114

necessarily part of attitudes. They explain:

Attitudes can be designated as either "pro" or "anti", while beliefs are conceived of as neutral. We speak of a pro-British attitude or an anti-Russian attitude, but we do not speak of pro or con when we are describing a man's belief about the spherical nature of the earth.⁵

Berelson outlines quite another approach to attitudes and beliefs:

These terms do not have fixed meanings in the literature, but in general they refer to a person's preference for one or another side of a controversial matter in the public domain--a political issue, a religious idea, a moral position, a certain practice. Attitudes and beliefs are rational and/or emotional judgements on such questions. They differ from one another in their generality or in the intensity with which they are held. Opinions commonly refer to topical and short-run judgements, usually dealing with public affairs; attitudes are somewhat more enduring and inclusive; beliefs are more basic still, having to do with central values of life. Thus, people have opinions on the latest economic proposal, attitudes regarding the welfare state, and beliefs about freedom.⁶

Jastrow suggests that,

A belief is any simple proposition, conscious or unconscious, inferred from that

⁵ Krech, D., and Crutchfield, R. S., Theory and Problems of Social Psychology, (New York: McGraw-Hill, Inc., 1948), p. 153

⁶ Berelson, Bernard, and Steiner, Gary, Human Behavior: An Inventory of Scientific Findings, (New York: Harcourt, Brace and World, Inc., 1964), pp. 557-58

what a person says or does, capable of being preceded by the phrase, "I believe that..."⁷

A belief has three components, a cognitive component, an affective component, and a behavioral component. Rokeach leads us to the relationship between beliefs and behavior:

This definition departs from one widely-held distinction between belief and attitude, namely that beliefs have only a cognitive component while attitudes have both cognitive and affective components.⁸

Beliefs have a direct relationship to behavior through this behavioral component. A belief relates to its behavioral component because:

The belief, being a response predisposition of varying threshold, must lead to some action when it is suitably activated. The kind of action it leads to is dictated strictly by the content of the belief. Even a belief that merely describes is a predisposition to action under appropriate conditions. Consider, for example, my belief, "Columbus discovered America in 1492." The behavioral component of this predisposition may remain unactivated until I am one day leafing through two history books to decide which one to buy for my young son. One gives the date as 1492 and the other as 1482. My belief will predispose me, other things equal,

⁷Jastrow, J., "The Animus of Psychical Research", in Murchison, C., editor, The Case For and Against Psychical Belief, (Worcester, Mass.: Clark University Press, 1927), p. 284, cited by Rokeach, Beliefs, Attitudes and Values, p. 113

⁸ibid., p. 115

to choose the one giving the 1492 date. I am "pro" the 1492-book and "con" the 1482-book.⁹

Perception

It is the opinion of the investigator that the main concern of the Review of the Literature should be directed toward an analysis of perception. The assertion is made on the grounds that: beliefs are based on perceptions, beliefs are factors in perceptions and affect their nature, perceptions are influenced by beliefs and, behavior is a function of perceptions. To initiate the discussion, MacLeod offers the following.

If we are to understand the social behavior of man we must understand the structure of the social world to which he is responding... not merely the social world as independently defined by the omniscient sociologist, but the social world as it is actually interpreted by the behaving individual. The problem then is essentially a cognitive problem and the basis of cognition is perception.¹⁰

Krech reinforces:

Many processes in attitude change, suggestibility, and group dynamics become more meaningful when viewed from the "perceptual approach". Conversely, perceptual laws

⁹ ibid., p. 114

¹⁰ MacLeod, R. B., "The Place of Phenomenological Analysis in Social Psychological Theory", Current Perspectives in Social Psychology, Hollander, E., and Hunt, R., editors, (New York: Oxford University Press, 1963), pp. 32-33

can no longer be isolated from the social milieu of the perceiver.¹¹

Social psychologists have been studying perception as a means of understanding behavior. Bruner and Postman state three determinants of social perception.

...first, description of the physical stimulus and the environmental conditions; second, deliniation of organismic factors such as prevailing dispositions, available response patterns, expectations, and the like; third, knowing the stimulus and the prevailing set of the organism, we need to describe the dimensions of the percept which results.¹²

Unfortunately, Bruner and Postman note, accurate description of this perceptual component is extremely difficult and we do not yet have language or methods adequate for it.¹³

Most stimuli do not produce behavior in reflex fashion. The situation, rather, is perceived or "defined" by a person before he makes overt response. That is to say, "meaning" is achieved, and this meaning becomes the most crucial determinant of behavior.¹⁴

¹¹ Krech, David, "Psychological Theory and Social Psychology", Encyclopedia of Educational Research, Harris, Chester, editor, (New York: Macmillan Co., 1960), p. 944

¹² Bruner, Jerome S., and Postman, Leo, "An Approach to Social Perception", Current Trends in Social Psychology, Dennis, W., editor, (Pittsburgh, Penna., 1948), p. 315

¹³ Sargent, S. S., and Williamson, Robert C., Social Psychology, (New York: Ronald Press Co., 1958), p. 315

¹⁴ ibid., p. 313

Psychologists generally have assumed that since stimuli have objective existence the assumption follows that a stimulus is perceived in the same way by different individuals although they may respond to it differently.

This assumption has been criticized vigorously by Kurt Lewin and others interested in social psychology, clinical psychology, and personality. According to them a given situation, particularly a social one, never is psychologically identical for different persons. Each individual perceives and interprets a situation via his sensory capacities, attention, past experience, motives, attitudes, expectations and the like, i.e., in terms of his unique patterns of experience and personality.¹⁵

Although behavior is a function of perception, it is important to remember that psychologists mean perception at the present moment.

A person's behavior is, indeed, a result of his past experience, his life history. How he behaves right now, however, results from his ways of seeing, learned from his past experience, to be sure, but existing in his present perceptions at this time. The immediate view stresses that it is the way of seeing the situation at this moment, today, this instant, which produces the person's behavior at this instant.¹⁶

Sargent and Williamson state that the "definition of the particular situation", i.e., the "present moment"

¹⁵ibid., p. 199

¹⁶Combs, Arthur W., Perceiving, Behaving, Becoming, Combs, A. W., editor, (Washington D. C.: Association for Supervision and Curriculum, 1962), pp. 75-76

always operates as the final link in the chain of events which determines behavior.

We tend to overlook it in situations where social norms are rigid, as at a church service, funeral, formal meeting, or ritual of any kind. In such cases conformity occurs because everyone perceives these situations in approximately the same way. But where social behavior is more variable, as in a new, informal, or "unstructured" situation, understanding of the participants' differing perceptions is necessary to an explanation of their behavior.¹⁷

Bruner discusses the relationship of perception to role:

The selective effect of role relationship upon our perception of others is also worth noting. One does not see and assess one's parents in terms of the same dimensions reserved for friends; what we look for in our own children may differ from our way of looking at children in general.¹⁸

This selective effect also affects subsequent inferences.

The inferences about personality drawn from our observations differ as a function of the roles of the individuals involved. "High-brow" behavior in a white man and in a Negro may not lead to the same inferences about

¹⁷ Sargent and Williamson, Social Psychology, p. 398

¹⁸ Bruner, Jerome S., and Taguiri, Renato, "Perceptions of People", Handbook of Social Psychology, Lindzey, Gardner, editor, (Reading, Mass.: Addison-Wesley Publishing Co., 1954), p. 640

the person.¹⁹

The condition of the person at any particular moment can exert a selective influence.

The internal state of the perceiver is also of utmost importance. A person in a state of fear or insecurity may not perceive behavior or draw inferences in the same terms as one who is in a relaxed and secure state. We may be predisposed to perceive selectively the behavior of another and infer his "character" or "intentions" in a manner congruent with our own needs.²⁰

Combs is concerned with perceptual levels.

The varying levels of personal meaning are expressed in the words we use to describe perceptions. Arranged in order of increasing meaning, we speak, for example, of looking, seeing, knowing; of understanding, belief, conviction.²¹

Perception can also be defined as the gradual structuring of one's sensations into meaningful relationships.²² The process of perception occurs as the first in a series of events in a person's attempt to organize his behavior. Berelson offers examples of sensation and perception:

¹⁹ *ibid.*, p. 640

²⁰ *ibid.*, p. 640

²¹ Combs, Perceiving, Behaving, Becoming, p. 65

²² Sargent and Williamson, Social Psychology, p. 198

sensation...the immediate and direct apprehension of simple stimuli...the response of the sense organs to light, pressure, and the like...or the experienced results of that process. So, for example, we sense or have sensations of color, brightness, shape, loudness, pitch, heat, and so on.

perception...the more complex process by which people select, organize, and interpret sensory stimulation into a meaningful and coherent picture of the world. We perceive a friend in the crowd, or that a parking space is too small.²³

Sometimes a person's unwillingness or inability to share his thoughts and feelings affect the validity of perceptual research. Rogers states that in centering attention on the person (client-centered) his work has led him to adopt the client's perceptual field as the basis for genuine understanding. In trying to enter this world of perception by observation and direct inference he feels he gains a new advantage for understanding personality dynamics.²⁴

Allport further explains Rogers' approach:

An equally striking development in the right direction is the revolution in theory implicit in Rogerian or "client-centered" therapy. The position holds that the self, under proper conditions, is capable of reorganizing its perceptual field and thus of altering behavior.²⁵

²³ Berelson and Steiner, Human Behavior, p. 88

²⁴ See Rogers, Carl R., "Some Observations on the Organization of Personality", American Psychologist, (vol. II, 1947), pp. 358-68

²⁵ Allport, Gordon W., Personality and the Social Encounter, (Boston, Mass.: Beacon Press, 1960), p. 29

Finally, Combs gives impetus to our future efforts:

If we can understand how a person is perceiving right now, we may be able to help him change his behavior even if we do not know how he got this way. That is, if human behavior is a function of perception and if perception exists in the present, then it should be possible to change behavior if we can change present perceptions. This opens vast new possibilities for education.²⁶

Related Attitudinal Studies

Psychologists and social scientists have designed numerous instruments to identify beliefs and measure attitudes. Most of these investigators conceived an attitude as a general predisposition to respond to a given stimulus, be it object, person, or situation. This characteristic response may be either positive or negative. Sargent and Williamson list some pioneer efforts:

The early scales were little more than collections of statements presumably related to the attitudes being studied. Students taking the test noted their approval or disapproval of the statements made or checked the item most nearly approximating their own attitude. Each item was scored in some fashion and a total for the test was computed.²⁷

Thurstone's early work involved:

...devising a more scientific procedure for the construction of attitude measures. He main-

²⁶Combs, Perceiving, Behaving, Becoming, p. 76

²⁷Sargent and Williamson, Social Psychology, p. 227

tained that an attitude score could have meaning only if the weight given each item were empirically determined. Thurstone and various associates have prepared attitude scales in a number of areas by the use of their judging technique. High reliability was reported and the tests have been widely used.²⁸

Soon, however, Likert insisted that Thurstone's judging technique was laborious and that an arbitrary assignment of scores to the questionnaire items is just as satisfactory. He proposed an alternative method.

A large number of statements relating to a subject are collected. These are presented to groups of persons who are instructed to indicate their approval or disapproval on a five-point scale. The value of a given item is determined by discovering whether or not it correlates highly with the rest of the list.²⁹

There has been considerable discussion over the various aspects of the Thurstone and Likert methods. Some improved procedures have been suggested:

Guttman, for example, has developed a "scale-analysis" technique, which selects about ten to twelve consistent items and arranges them along a single dimension. A person's rank on the continuum then shows fairly accurately how he answered the questions both above and below. Edwards later proposed a somewhat complicated "scale-discrimination" method which attempts to combine the better points of the Thurstone, Likert and Guttman techniques...

²⁸ *ibid.*, p. 228

²⁹ *ibid.*, p. 228

Lazarsfeld has contributed a rather complex "latent structure analysis" which was used, along with the Guttman method, in studying the attitudes of servicemen during World War II.³⁰

Rokeach, in his Belief Inventory³¹, dealt with changing beliefs and subsequent measurement of the amount of change rather than with the identification and measurement of existing beliefs. Of interest was the attempt to equate the weights of the belief statements.

The California F Scale³² was examined. This inventory simply identified open and closed-mindedness without regard to degree or intensity. The scale elicited the same type of agree-disagree response choice which was employed in this study.

Sargent and Williamson address themselves to the validity of the measurement instrument and its improvement:

In evaluating the measurement of attitudes it is evident that all of these approaches have some degree of validity, though critics differ as to just how much. It will be recalled that validity refers to the ability of the instrument to measure what it purports to measure. In other words, will the respondents genuinely feel and demonstrate in their action the characteristics indicated by their performance on the attitude scale? In general, validity is improved by such techniques as combining the Thurstone equal-

³⁰ibid., p. 229

³¹Rokeach, Beliefs, Attitudes, Values, pp. 26-29

³²Rokeach, Milton, The Open and Closed Mind, (New York: Basic Books, Inc., 1960), pp. 416-19

appearing intervals with the Likert summated rating, i.e., the five-point scale, or through development of projective and other indirect techniques.³³

The measurement and analysis of attitudes has shown itself to be a complex endeavor.

It is usually difficult to provide for behavioral tests, so the hope lies in a combination of conventional verbal scales with projective techniques. Although the latter have the advantage of depth, and tap to some degree unconscious factors, there is a problem of standardization in the testing instrument.³⁴

Summary

Attitudes are organizations of beliefs predisposing one to behave in some preferential manner.

Beliefs are composed of cognitive, affective, and behavioral components and it is the last component which gives beliefs relationship to behavior.

Beliefs are based on perceptions, are factors in perceptions and affect their nature. Perceptions are influenced by beliefs and are functional to behavior.

A given situation is perceived or defined by the individual before a response is made in the form of overt behavior. Each individual thus responds uniquely to a given stimulus. Inferences drawn from observation of be-

³³ Sargent and Williamson, Social Psychology, p. 230

³⁴ ibid., p. 231

havior (stimulus) are unique even as the perception and definition of that behavior are unique.

Several attitudinal studies were reviewed and relevant aspects of each noted. The studies indicated that the measurement and analysis of attitudes is a complex endeavor.

CHAPTER III

PROCEDURES

Introduction

It is the purpose of this chapter to describe the selection and function of the criterion group and the development of the teacher performance roles. The rationale, development and production of the video tape and the accompanying belief statement list will also be described. Lastly, this chapter will outline the experimental procedures used in the study and describe the administration of the experiment.

Selection and Function of the Criterion Group

Two professors currently involved in teacher training in the Michigan State University College of Education were selected and asked to serve as the criterion measure for the study. (See Appendix A.) Their task involved assessment of the content validity of both the video tape and the accompanying belief statement list by viewing the tape and responding to the list. Comparisons of the responses of the criterion group were made in order to seek out faulty statements. Any item not agreed upon by the members

of the criterion group was either modified or discarded. If an item was modified the criterion group was consulted as to the nature of the modification so that ultimate agreement between them was reached. Any item deemed unsuitable by either member of the criterion group was discarded and replaced with a new item. Agreement on all new items was reached in the same way.

Comparison was then made between the responses given by the criterion group and the responses for which each belief statement was designed. Response items which did not agree with the response items selected by the criterion group were either modified in the manner previously described or discarded. The criterion group functioned as consultant in the task of modification and replacement of irrelevant or ambiguous items.

The criterion group was asked to answer the following questions:

1. Does the video tape allow the experimental group to identify the behavioral acts portrayed?
2. Does the video tape allow the experimental group to make inferences concerning the beliefs underlying those behavioral acts?

Validity of content was established in two ways:

1. The criterion group ultimately agreed that each behavioral act on the video tape was capable of inferring some underlying belief to which the experimental group could respond.

2. The criterion group agreed on a "criterion" or "correct" response for each displayed behavioral act.

Description of the Teacher-Performer

The teacher-performer roles were played by actors from the Department of Theater Arts. Selection was based upon:

1. demonstrated effective performance of role by audition,
2. ability to project the desired stereotype role,
3. confidence of both the experimenter and the performer that the desired role could be convincingly portrayed,
4. interest in the project.

Description of the Teacher-Performer Roles

The roles displayed stereotypes of teaching approaches and behavior traits frequently exhibited by teachers in classroom situations. Two roles reflected the extreme characteristics in the behavioral-organismic continuum. The terms "behavioral" and "organismic" as used in this study will be defined in detail in the Development of the Belief Identification Instrument. A third role reflected a preponderance of behavioral tendencies with only a few of the organismic and a fourth role contained the converse of the third role's tendencies. The rationale proposed

is that nearly all teacher personalities reflect varying strengths of characteristics from both approaches rather than situations whereby the roles are totally contained in only one or the other approaches.

Development of the Belief Identification Instrument

The readings in the literature suggested two divergent teaching and learning approaches. These approaches were given the designations "behavioral" and "organismic" as a consequence of reading a passage by Maslow:

I think it is now possible to begin to delineate this view of human nature as a total, single, comprehensive system of psychology even though much of it has arisen as a reaction against the limitations (as philosophies of human nature) of the two most comprehensive psychologies now available...behaviorism and classical Freudian psychoanalysis. Finding a single label for it is still a difficult task, perhaps a premature one. In the past I have called it the "holistic-dynamic" psychology to express my conviction about its major roots. Some have called it "organismic" following Goldstein.¹

The material gleaned from the readings in the literature was synthesized into the Belief Comparison Chart. (see Appendix B) The term "behavioral" was expanded to connote and describe a synthesis of approaches to educational concerns listed in the Development of the Belief Comparison Chart which gravitated toward classical behaviorism.

¹ Maslow, Abraham H., Toward a Psychology of Being, (Princeton, New Jersey: D. Van Nostrand Co., Inc., 1962) p. 177

This view is supported by Skinner², Smith and Moore³, and Miller and Dollard⁴. The term "organismic" was expanded to connote and describe a synthesis of approaches to educational concerns listed in the Development of the Belief Comparison Chart which gravitated toward the holistic or organismic aspects of perceptual psychology. This view is supported by Maslow⁵, Combs⁶, Rogers⁷, and Bruner⁸. In addition, twenty more sources were also used in researching the various pertinent elements of interest to the topic such as learning theory, curriculum development, study of successful educational leaders, principles of effective learning situations and assessment of social behavior. These references are listed in the bibliography of the study.

²Skinner, B. F., Science and Human Behavior, (New York: Macmillan Co., 1958)

³Smith, Wendell I., and Moore, J. William, Conditioning and Instrumental Learning, (New York: McGraw-Hill Book Co., 1966), pp. 1-134

⁴Miller, Neal E., and Dollard, John, "Reward", Reinforcement: An Enduring Problem in Psychology, (Princeton, New Jersey: D. Van Nostrand Co., 1961), pp. 1-35

⁵Maslow, Psychology of Being, passim

⁶Combs, Arthur W., Perceiving, Behaving, Becoming, ed. Combs, A. W., (Washington, D.C.: Association for Supervision and Curriculum, 1962)

⁷Rogers, Carl R., On Becoming a Person, (Boston, Mass.: Houghton Mifflin Co., 1961)

⁸Bruner, Jerome S., The Process of Education, (Cambridge, Mass.: Harvard University Press, 1960)

The following sources were used because they contained comparisons of divergent philosophies: Atkinson and Maliska⁹, Ryans¹⁰, Hilgard¹¹, and Kerlinger and Pedhazur¹².

Development of the Belief Comparison Chart

A list of twenty-six items of educational concern was compiled. Each item was then defined from both the behavioral and the organismic perspective. This yielded a list of fifty-two items which was named the Belief Comparison Chart.

The Belief Comparison Chart, together with Kerlinger's Education Scale¹³ and Forcier's Statements of Belief¹⁴ was further refined into fifty-five items called the Belief Concept List. (see Appendix C)

⁹Atkinson, Carroll, and Maliska, Eugene T., "Structuralism and Functionalism", "Behaviorism and Gestalt Psychology", Development: Physical and Emotional, Intellectual, Social and Personality", The Story of Education, (Philadelphia, Pa.: Chilton Books, Publishers, 1962), pp. 314-18, pp. 318-21, pp. 337-352

¹⁰Ryans, David G., Characteristics of Teachers, (Washington, D. C.: American Council of Teachers, 1960)

¹¹Hilgard, Ernest R., Theories of Learning, (New York: Appleton-Century-Crofts, Inc., 1948)

¹²Kerlinger, F. M., and Pedhazur, E. S., "Attitudes and Perceptions of Desirable Traits and Behaviors of Teachers", (Washington, D. C.: United States Department of Health Education and Welfare, 1967)

¹³ibid., pp. 130-31

¹⁴Forcier, Richard C., "A Pilot Study Concerned with the Design of an Educational Belief Inventory Instrument",

Development of the Belief Concept List

Each item on the Belief Comparison Chart was further refined into a declarative statement of a specific educational belief reflecting the perspective of one or the other divergent teaching-learning approaches. These statements were concerned with:

1. educational values, goals, expediency, effectiveness and efficiency
2. traditional and progressive teaching and learning approaches
3. educational psychological theories: behavioral and organismic

The items in the Belief Comparison Chart comprised a resource pool from which the Belief Concept List and finally the Belief Identification Instrument were developed.

The Belief Comparison Chart was developed with four areas of educational concern in mind:

1. how and why learning takes place
2. teaching methods and approaches to achieve desired goals
3. the use of motivation in learning
4. the importance of subject content in learning

The Belief Comparison Chart was then used to:

1. describe the two bi-polar teaching approaches

2. develop the Belief Concept List
3. shape the description of the teacher performance roles (see Appendix E)

Belief statements were designed to be immediately and easily comprehensible by using non-jargon language, e.g., "internalize", "underachieve", and by using short sentences composed in a conversational style. Maximum reading time and maximum response time was eight and five seconds respectively. Thurstone's guidelines were considered:

1. The statements should be as brief as possible so as not to fatigue the subjects who are asked to read the whole list.
2. The statements should be such that they can be endorsed or rejected in accordance with their agreement or disagreement with the attitude of the reader. Some statements in a random sample will be so phrased that the reader can express no definite endorsement or rejection of them.
3. Every statement should be such that acceptance or rejection of the statement does indicate something regarding the reader's attitude about the issue in question.¹⁵

Shaw and Wright suggest:

Items should be stated in as simple and clear language as possible, should contain a single idea, and should be unambiguous. One should avoid the use of items that are factual, irrelevant to the attitude object, or non-discriminatory i.e., items that are likely to be

¹⁵ Thurstone, L. L., "Attitudes Can Be Measured", Readings in Attitude Theory and Measurement, Fishbein, M., editor, (New York: John Wiley & Sons, 1967), p. 84

answered the same way by persons having both favorable and unfavorable attitudes.¹⁶

Development of the Video Tape

It must be stressed that the taped roles of teaching behavior were not merely a recording of reality. They were staged performances deliberately emphasizing and to some extent exaggerating the traits of each teacher stereotype portrayal. Every effort was taken to make the viewer's judgements as clear as possible both in his mind and on the belief statement response sheet.

Each taping was of the highest technical quality possible with the equipment available and each role performance was as convincing as the performing talent was able to achieve. The performers were given a list of specific behavioral acts which comprised their particular role. They were given approximately one week to decide in which order they would arrange the acts comprising their role and to translate them into visible behavior consistent with their own unique personality characteristics. It was emphasized that it was they who would decide how each behavior could best be observed and how they, according to their professional instincts, would work each behavior into a believable classroom event.

¹⁶ Shaw, M. E., and Wright, J. M., Scales for the Measurement of Attitude, (New York: McGraw-Hill Book Co., 1959), pp. 566-67

Four teacher roles were originally designed. Each incorporated behaviors manifested by;

1. beliefs from the behavioral list only
2. beliefs mostly from the behavioral list plus a few from the organismic list
3. beliefs mostly from the organismic list plus a few from the behavioral list
4. beliefs from the organismic list only.

It became apparent in the taping sessions that two problems were beginning to develop. The experimenter had collected responses from several small pilot groups who were functioning as an on-the-spot evaluative instrument. The quality of the responses in these pilot sessions dropped noticeably after the viewing of the second role. The respondents indicated that the program had become overly-long and, after the second role, was beginning to be irritatingly repetitious. It was concluded that the variable of time and the variable of repetition were beginning to affect the nature of the responses.

The original program, including the initial instructions and the inserted belief statements, ran for fifty minutes. Roles one and four were judged to more clearly exhibit the desired behaviors and to more efficiently elicit the criterion responses than roles two and three. Roles one and four were the segments which exhibited only behavioral and organismic tendencies with randomly mixed statements which agreed and disagreed with each role.

The pilot groups were of the opinion that the attempt to blend behavioral tendencies from both perspectives was not as convincing as the straight roles. Both roles two and three were subsequently dropped from the instrument and roles one and four were slightly lengthened so that more response items could be included. The adjusted instrument elicited sixteen response items from the behavioral role and eighteen response items from the organismic role. The finished video tape came out to thirty-one minutes in length, including time for initial instructions and insertion of thirty-four belief statements. Additional pilot trials revealed that the response quality remained more constant due to the deletion of many repetitious behavioral acts in the performance roles and the shortened overall showing time of the video tape.

It must be admitted that this adjustment was difficult for the experimenter to make because it involved discarding much preparation and work for the sake of a more highly controlled experimental situation having two less variables. The results proved to be worth the ambivalent apprehension on his part.

Description of Technical Equipment and Specifications

An Ampex 5100 helical scan one-inch tape monochrome video recorder-playback machine was used to both record and edit the role segments.

The video camera was a Sony model VCK 2100 vidicon tube equipped with a Sony model VCL 20, 20-80 millimeter zoom lens.

The video tape used was Scotch brand one-inch 357-1-300.

The microphone used was a Shure model 579 SB low impedance lavalier type equipped with a twenty-foot cable. A low impedance microphone permitted use of a much longer cable enabling the performer to more naturally move about the set. The lavalier style was used because it enabled very close placement to the throat of the performer. This permitted an extremely high fidelity imprint of the voice and almost totally excluded unwanted background noise.

Rationale for the Use of the Video Tape Technique

The minimization of unwanted and/or undetected variables was accomplished in the following ways:

1. The highest possible level of television production techniques with the available equipment was used.
2. The effects of non-relevant background "noise"* which may cause response variance was minimized.
3. The highest possible enhancement of a convincing stereotype performance was sought.

* noise....any interference with the transmission of the desired message, aural or visual, caused by the introduction of irrelevant variables

4. Television, a medium which is a first-level abstraction rather than a written instrument which is a second-level abstraction, was used.*

*levels of abstraction....steps or levels involved in the process of developing successively broader generalizations (abstraction proceeds from more specific levels to less detailed levels by successively omitting particular characteristics).¹⁷

Description of the Experiment

The criterion group viewed the taped video segments and responded to the belief statements. Any modifications of the belief statements were made at this time on the basis of their recommendations.

The experimental group members responded to the list of belief statements during the viewing of each separate segment. Each group member made an agree-disagree choice response for each belief statement in terms of whether or not he perceived the statement to be reflecting the behavior being displayed. These responses indicated the beliefs to which the observer was making inference while viewing the role-played segments. The degree of variance in comparison to the criterion group, as detected by the

¹⁷Good, Carter V., Dictionary of Education, (New York: McGraw-Hill Book Co., 1959), p. 3

statistical analysis, was the amount of subjective interpretation perceived by the experimental group. A device was used to insure the anonymity of the experimental group members for the purpose of minimizing unwanted and undetected variables in the experiment and the statistical analysis.

Description of the Experimental Group

The experimental group was composed of enrollees in a graduate-level education course offered by the College of Education at Michigan State University. The sampling technique for the experiment was justified in two ways:

1. A graduate-level course was selected because the class population was composed largely of full-time teachers attending class during after-school hours.
2. A general education course was selected because the public school teachers in the immediate area receive special salary increments on the basis of continuing course work.

Experimental Procedures

Administration of the Belief Identification Instrument

The experimental group members viewed each tape segment and, at precisely determined points in the segment, were asked to make a response choice to a specific belief statement. These statements were treated randomly in two

ways: behavioral and organismic statements were randomly mixed, and the particular statements chosen elicited agree or disagree responses randomly. Order in both cases was assigned from a standard table of random numbers.¹⁸

An overhead projector was used to display the statements on a screen placed directly above the television monitor and was unlighted except for the precise moment when each statement was displayed. This was done by means of a masking technique on the stage of the overhead projector. There were two reasons for employing this technique. The time given to read the statement and to respond was precisely controlled and, the belief statement messages were minimally distracting from the video tape segment.

Description of the Response Technique

A punch-type answering key was used. This particular device was selected because of the minimal response time needed and because of the simplicity of the response procedure. The key consists of two pressboard plates glued face-to-face and between which a pre-cut piece of paper is placed (like a sandwich). The front plate has two vertical rows of holes, each horizontal set of two holes corresponding to an agree or disagree response. The response to each item asked is made by punching a metal key

¹⁸Senders, Virginia L., Measurement and Statistics, (New York: Oxford University Press, 1958), pp. 557-565

through one or the other of the pair of holes. The key is left in position while the observer is waiting to respond to the next item. This is done because the whereabouts of the key is always known and because the key is never more than a half-inch away from the horizontal pair of holes to be used for the next response. The routine becomes fixed after responding to one or two items. Upon completion of the experiment the punched pieces of paper are either signed by the testee or coded in some way and collected for scoring and analysis. One piece of paper is used for each role segment.

Tabulation is done by placing a scoring mask over the punched paper and by counting the number of punched holes visible through the mask. Various different masks lend themselves to either scoring the number "correct or incorrect" or to several forms of item analysis.

Rationale for the Response Instrument Design

The response instrument was designed to fulfill these considerations:

1. It is important that the time lapse between the observed behavior and the observer's response be minimal.
2. It is important that the reading of the belief statement and the recording of its response be minimally distracting from the video tape segment.

3. It is important that the time taken to perform the following functions be minimal:
 - a) read the statement
 - b) comprehend the statement
 - c) make a response decision
 - d) punch the desired response

Rank Ordering of Roles

The experimental group members were asked to rank order the roles in terms of from more to less effective teaching situations.

Role Identification

The experimental group members were asked to make the following selections:

- 1.) Which role do I think I resembled in my first-year teaching?
- 2.) Which role do I think I most resemble presently?
- 3.) Which role do I think I would like to resemble if I could painlessly reshape my personality?
- 4.) Which role most resembles my favorite teacher when I was in school?
- 5.) Which role resembles the teacher I liked least when I was in school?
- 6.) Which role do I think most students nowadays prefer to see in their teachers?

- 7.) Which role would my principal most likely think to be the epitome of a good teacher?

Statistical Analysis Rationale

Questions have been raised about the validity of indirect techniques, and relatively little research evidence is available to answer them. Actually, there is not much evidence of the validity of direct techniques depending on self-report, such as interviews and questionnaires. The validity of such instruments is less often questioned, however, probably because of the "obvious" relevance of the questions to the characteristics they are intended to measure.¹⁹

A measure of face validity was achieved to test the first hypothesis employing a selected criterion group. In studying the feasibility of the use of a selected criterion measure Forcier has found that two factors are important: empathic skills of the judges and motivation to make accurate judgements.

In an experimental study, whenever experts are employed rather than a randomly selected criterion group, a question concerning the accuracy of the expert's judgement is often raised. Regarding this pilot study, the experimenter felt that a reasonable degree of accuracy could be achieved by first, seeking close agreement among the experts, and second, devising a careful selection procedure. In selecting the experts, the following factors were considered. Taft identified several variables related to empathic skill and concluded that probably the most important area of all is that of motivation:

¹⁹Selltiz, Claire, et al., Research Methods in Social Relations, (New York: Holt, Rinehart and Winston, Inc., 1962), p. 311

if the judge is motivated to make accurate judgements about his subjects and if he himself feels free to be objective, then he has a good chance of achieving his aim...²⁰

On a theory of judgement, Bruner and Taguiri offer the following two conclusions:

Taken from the point of a theory of judgement, relatively few firm conclusions can be drawn. Tentatively, the most reasonable seem to be these:

- a) Accuracy is aided by similarity between judge and judged. To some extent this may be a function of 'resonance' between judge and judged; to some extent it may be a function of better acquaintance with people like oneself, with more intervening opportunities for observing their behavior. To some extent it could be projection, which happens to be accurate when the other person is like one's self.
- b) Accuracy depends upon having cues to work on. Traits with little behavioral manifestation are poorly judged. Individuals whose expressiveness is damped are harder to judge.²¹

The second, third and the validity aspect of the fourth hypothesis were tested by means of percentage comparisons. The comparisons were made with respect to the summation of response items across all experimental group

²⁰Forcier, "A Pilot Study", p. 19

²¹Bruner, Jerome S., and Taguiri, Renato, "The Perception of People", Handbook of Social Psychology, Lindzey, Gardner, editor, (Reading, Mass.: Addison-Wesley Publishing Co., 1954), p. 646

members and with respect to the summation of experimental group members across all item responses in combination with the criterion group responses.

The reliability aspect of the fourth hypothesis was tested by treating the response items of the experimental group as dichotomous variables.

The binomial population distribution is made up of only two points. The binomial variable X_i is a discrete variable which can take on only two values, 0 and 1. The development of statistical theory relating to the binomial distribution and descriptive measures of a binomial population is based on the treatment of the codes 1 and 0 as if they are true item values or scores. Therefore, regardless of the scale of measurement of the original population data, after conversion to a binomial population, it is possible and meaningful to compute descriptive measures such as the mean and the standard deviation.²²

Statistical Analysis

To assess the content validity of the video tape, the criterion group read the Belief Identification List and judged whether the displayed behaviors on the video tape in fact did allow those beliefs to be inferred. Necessary adjustments in the video tape were made with the consultation and upon the recommendations of the criterion group.

Comparison was made between each item response of

²²Armstrong, Sidney J., Introduction to Statistical Analysis and Inference: For Psychology and Education, (New York; John Wiley & Sons, Inc., 1967), pp. 272-73

the criterion group and each respective item response for which each belief statement was designed. The Procedures Used in the Study indicates that agreement on each item response was reached between the criterion group and the experimenter using this method. This step also served to establish the validity of the video tape and the Belief Identification List as an effective measurement device.

Inter-comparisons were made between each item response of the criterion group and the computed means (μ) of each aggregate respective item response of the experimental group. This again served to establish the validity of the video tape and the Belief Identification List as an instrument for the examination of teacher educational beliefs.

The mean aggregate score of the experimental group for each item was computed by:

1. assigning an item response by the experimental group member which agreed with the respective item response of the criterion group a value of 1.
2. assigning an item response by an experimental group member which disagreed with the respective item response of the criterion group a value of 0.

It is useful to assign the code 0 (zero) to each of the items in one category of a binomial population and the code 1 to each of the items in the other category. It is immaterial to which category each of these codes is assigned. It is advantageous, however, to assign the code 1 to the category of primary

interest in an analysis.²³

Each respective item response for the total experimental group was summed. The summation score was divided by the number of members in the experimental group and was thereafter labelled the mean (μ) score for each respective aggregate item response.

The means (μ) and the standard deviations (σ) of the respective item responses which were treated as dichotomous variables were computed for each experimental group member to determine and establish the reliability of the video tape and the Belief Identification List as a measurement device.

An item analysis was performed on both the criterion group responses and the experimental group responses so that comparisons in percentages could be made. Intra-comparisons were made in the experimental group and inter-comparisons were made between the criterion group and the experimental group.

The Rank Ordering of Roles was studied in terms of transitivity logic.* This was done by comparing the Role Identification questions with the rated role performances to ascertain whether the respondent's logic remained consistent.

*transitivity logic...e.g., if $A > B$, and $B > C$, then $A > C$

²³Armstrong, "Statistical Analysis", p. 272

Glossary of Terms Used in the Study

Behavioral approach...used in this study as a method of teaching and learning as put forth by certain behavioral theorists which is highly goal-oriented and highly structured.

Organismic approach...used in this study as a method of teaching and learning which is a process of self-actualization and adjustment and which is reflected in the writings of several personality theorists.

Belief Comparison Chart...Items of educational concern (learning theory, teaching methods and approaches, motivation, importance of subject content) are defined from both the behavioral and organismic perspective in the form of a comparative list.

Belief Concept List...Each item on the Belief Comparison Chart is developed into a declarative statement of a specific educational belief reflecting the perspective of one or the other divergent psychological approaches.

Belief Identification Statement and Belief Identification List...a specific statement(s) of belief inference to which an observer is asked to respond (agree-disagree) while viewing the teacher roles in the video tape segments. These are taken from the Belief Concept List pool of items.

Belief Identification Instrument...the "package" consisting of the video tape together with the included Belief Identification List and the response device.

Teacher performance role...a composition of several specific behaviors performed and designed to infer specific Belief Identification Statements.

Summary

Two professors involved in teacher training were selected to serve as the criterion measure for the study. They assessed the validity of both the video tape and the Belief Identification List.

The video taped roles displayed stereotypes of teaching approaches exhibited in the classroom and reflected examples of behavioral and organismic tendencies.

The readings in the literature were used to synthesize the Belief Identification List using the behavioral and the organismic perspectives as poles and interpreting them in the light of selected educational concerns.

The criterion group viewed the tape and responded to the Belief Identification List. Adjustments were made according to their recommendations.

The experimental group viewed the tape and responded to the Belief Identification List during the viewing of each segment. The data was thus collected for analysis.

CHAPTER IV

FINDINGS OF THE STUDY

Introduction

It is the purpose of this chapter to present, analyze, and discuss the data collected in the experiment. Of concern was the content validity of the Belief Identification Instrument, i.e., the performance roles on the video tape and the accompanying belief statements. Of further concern was the degree of positive correlation between the criterion group members, between the criterion group and the experimenter, between the criterion group and the experimental group, and between the members of the experimental group (and of the general population called teachers, over time). This last concern is defined as the reliability of the Belief Identification Instrument. Appropriate methods were designed and implemented to test these concerns.

Data was programmed for the IBM 1130 computer by preparing punchcards in the APL programming language. Data output was in the form of a printout.

Presentation and Analysis of Data

In designing the procedures for the statistical analysis the following six questions were considered and solutions provided. The solutions at which the experimenter arrived both answered the questions and tested the hypotheses stated earlier.

1. Can the belief statements be inferred from the displayed behaviors?
2. Can the criterion group agree among themselves concerning the validity of the belief statements and the displayed behaviors?
3. Can the criterion group agree with the experimenter concerning the validity of the belief statements and the displayed behaviors?
4. How does the criterion group agree with the experimental group with respect to:
 - a. each experimental group member concerning all items?
 - b. each item concerning all experimental group members?
5. How do the individual members in the experimental group agree among themselves with respect to each item?
6. Is each experimental group member's rank ordering and role identification logical with respect to transitivity?

The criterion group viewed the video tape and responded to the original Belief Identification Statements as developed by the experimenter.

Ultimate agreement was reached on all items used in the Belief Statement List in the following manner. Those items on which agreement could not be reached were either modified so that agreement could be reached or they were discarded. Upon completion of this procedure the remaining items were considered to be directly related to the behavioral acts on the video tape and were thereafter labeled the Belief Identification Instrument. There was disagreement between the criterion group members on three items. Two items were modified and one was discarded.

The responses on the adjusted Belief Identification Instrument were compared to the responses as intended by the experimenter. Further adjustments were made on one more item so that agreement on all item responses was complete.

Table 1 indicates the criterion group determinations of the agree-disagree response items on the adjusted Belief Statement List.

In developing the master data sheet for the item analysis the experimenter was interested in analyzing the data in two ways: first, with respect to the summation of response items for each experimental group member and, secondly, with respect to the summation of experimental group members for each item response.

TABLE 1

DISTRIBUTION OF AGREE-DISAGREE CHOICE
DETERMINATIONS OF THE CRITERION GROUP

item no.	Behavioral Role	item no.	Organismic Role
1	Agree	17	Disagree
2	Disagree	18	Agree
3	Agree	19	Agree
4	Disagree	20	Agree
5	Disagree	21	Disagree
6	Agree	22	Disagree
7	Agree	23	Agree
8	Disagree	24	Disagree
9	Disagree	25	Agree
10	Agree	26	Agree
11	Agree	27	Disagree
12	Agree	28	Agree
13	Disagree	29	Agree
14	Agree	30	Disagree
15	Agree	31	Disagree
16	Agree	32	Agree
		33	Disagree
		34	Agree

The percentage of agreement between each experimental group member's total responses and the responses of the criterion measure is taken to be positively correlated with that particular member's ability to perceive others' beliefs as manifested by their behavior. This subjective interpretative ability functions in close conjunction with

with each person's personal beliefs which, in turn, are synthesized from his own unique past experiences.

Table 2 shows both the level of inferential skill of each experimental group member and the degree to which his personal beliefs influence his perceptive ability.

TABLE 2
ITEM ANALYSIS-INTERCOMPARISON
PERCENTAGE OF AGREEMENT BETWEEN THE CRITERION GROUP
AND EACH EXPERIMENTAL GROUP MEMBER ACROSS ALL ITEMS

group member no.	% agreement	group member no.	% agreement
1	100.	21	79.4
2	97.	22	88.2
3	100.	23	88.2
4	97.	24	91.1
5	94.1	25	91.1
6	73.5	26	97.
7	82.3	27	91.1
8	76.4	28	73.5
9	79.4	29	91.1
10	64.7	30	94.1
11	100.	31	88.2
12	100.	32	100.
13	91.1	33	85.2
14	91.1	34	91.1
15	97.	35	94.1
16	91.1	36	91.1
17	97.	37	100.
18	97.	38	97.
19	94.1	39	91.1
20	94.1	40	94.1

Examination of Table 2 reveals that 72% of the experimental group agreed with the criterion measure on 90% of the items. A large majority (93%) agreed with the criterion measure on 75% of the items.

For purposes of classification, it is suggested that a person who agreed with the criterion measure in 90% or higher of the cases could be said to possess an above average degree of inferential skill, 75%-90% average skill, and less than 75% a below average degree of inferential skill. Using the above figures 72% of the experimental group can be rated as above average, 20.5% average and 7.5% below average.

Table 3 presents a comparison of each criterion response item with the percentage of agreement for that respective item of the total experimental group.

Examination of this table indicates that 97% of the total items on the belief statement list yield an agreement by 80% of the experimental group, 59% of the items by 90% of the group, and 44% of the total items yield an agreement by 95% of the experimental group.

The percentage of disagreement between the criterion measure and the experimental group on each item response is interpreted to be the amount of subjective interpretation or perception on the part of the experimental group members. The validation measures taken in the design of the performance roles and the development of the belief statements minimize disagreement due to ambiguity and/or irrelevance between the roles and the statements.

TABLE 3

ITEM ANALYSIS-INTERCOMPARISON
 PERCENTAGE OF AGREEMENT BETWEEN THE CRITERION GROUP
 AND EACH RESPECTIVE AGGREGATE ITEM ACROSS THE TOTAL
 EXPERIMENTAL GROUP

item no.	% of agreement	item no.	% of agreement
1	82.5	18	100.
2	95.	19	95.
3	82.5	20	95.
4	97.5	21	77.5
5	82.5	22	95.
6	92.5	23	95.
7	85.	24	97.5
8	97.5	25	92.5
9	87.5	26	87.5
10	85.	27	82.5
11	100.	28	97.5
12	82.5	29	87.5
13	92.5	30	85.
14	87.5	31	95.
15	92.5	32	92.5
16	97.5	33	82.5
17	95.	34	97.5

Table 4 presents the data used to predict the reliability of the Belief Identification Instrument. For this purpose the response items on the Belief Statement List are considered as a binomial or dichotomous distribution of scores. The probability statement can now be made, for example, that given a mean of .82 and a standard deviation of .38, teachers of similar description to those used in the experimental group will make responses in agreement with the criterion group 82 times out of 100 on each of the thirty-four belief statements.

The following table shows the computation of the mean $(\mu)^*$ and the standard deviation $(\sigma)^*$ for each item response. The mean is equivalent to the probability statistic $(p)^*$. The mean correlation statistic $(\frac{\sum \mu_i}{N})^\#$ of the entire set of scores is .905.

$$^1 * \mu = \frac{\sum \mu_i}{N}$$

$$* \sigma = \sqrt{p(1-p)}$$

$$* \mu = p$$

$$\# \frac{\sum \mu_i}{N}$$

¹ See Armore, Sidney J., Introduction to Statistical Analysis and Inference, (New York: John Wiley & Sons, 1967), p. 274

TABLE 4

ITEM ANALYSIS-INTRACOMPARISON

MEAN AND STANDARD DEVIATION FOR EACH RESPECTIVE ITEM
 RESPONSE SHOWN AS A DICHOTOMOUS VARIABLE FOR THE
 ENTIRE EXPERIMENTAL GROUP

item no.	mean (μ)	standard deviation (σ)
1	.825	.383
2	.950	.219
3	.825	.383
4	.975	.168
5	.825	.383
6	.925	.272
7	.850	.356
8	.975	.168
9	.875	.336
10	.850	.356
11	1.000	0.0
12	.825	.383
13	.925	.272
14	.875	.336
15	.925	.272
16	.975	.168
17	.950	.219
18	1.000	0.0
19	.950	.219
20	.950	.219
21	.775	.422
22	.950	.219
23	.950	.219
24	.975	.168
25	.925	.272

TABLE 4 CONT'D

item no.	mean (μ)	standard deviation (σ)
26	.875	.336
27	.825	.383
28	.975	.168
29	.875	.336
30	.850	.356
31	.950	.219
32	.925	.272
33	.825	.383
34	.975	.168

Limitations of Statistical Inference

Inferences from the data in Tables 2 and 3 can only apply to teachers or teacher populations similar to the experimental group sample defined in Chapter III. Inferences from Table 4 can be made only to members of the experimental group and not to similar populations. Hayes' caution is repeated:

The population is defined by the sample and the manner in which it is drawn. The only populations to which the inferences strictly apply is that which individuals have equal likelihood of appearing in the sample.²

² Hayes, William L., Statistics for Psychologists, (New York: Holt, Rinehart and Winston, Inc., 1963), p. 216

Likewise, Ryans adds:

Generalizations are appropriate only when made to populations which it seems reasonable to believe are not significantly different from the small group employed in the study. Conclusions to be drawn are approximate, as are all inferences based on empirical data, which are by their very nature to some degree unreliable.³

Table 5 presents the tabulation in percentages of the responses of the experimental group to the Role Identification section of the instrument. A small number did not respond to questions 1 and 7 because they felt that they had too little information and/or experience to make a meaningful choice. The majority of the group felt that they exhibited more behavioral tendencies when they first began their teaching career than presently. Almost all of the respondents who thought they resembled the organismic role presently also felt that they did so because of personal preference rather than because of social pressure or fortuitous circumstance. A small majority remembered their favorite teacher as organismic while a large majority felt that their least-liked teacher exhibited numerous behavioral traits, especially those manifested in rigid structure and authoritarianism.

³ Ryans, David G., Characteristics of Teachers, (Washington, D. C.: American Council of Teachers, 1960), p. 398

TABLE 5

PERCENTAGES OF IDENTIFICATION OF
THE EXPERIMENTAL GROUP TO THE
BEHAVIORAL OR ORGANISMIC ROLES

question no.	Role #1	Role #2	no resp.
1. Which role did I most resemble in my first-year teaching?	68	24	8
2. Which role do I think I most resemble presently?	8	92	0
3. Which role do I think I would like to resemble if I could painlessly reshape my personality?	8	92	0
4. Which role most resembles my favorite teacher when I was in school?	36	64	0
5. Which role resembles the teacher I liked least when I was in school?	92	8	0
6. Which role do I think most students nowadays would prefer to see in their teachers?	0	100	0
7. Which role would my principal most likely think to be the epitome of a good teacher?	40	48	12

Of interest was the fact that all respondents without exception thought that students presently would prefer organismically-oriented teachers. A slight majority felt that their administrative superiors favored the organismic role as a more effective teacher role.

Each experimental group member rated the performance roles in terms of more and less effective teaching situations according to his individual perception. 88% of the group favored the organismic role while 12% preferred the behavioral role. All members responded to this question.

Numerous respondents were anxious to explain the qualifying reasons for making their particular choices to this last question. The most common remark was that they were drawn to various elements from each role, but perhaps more from the organismic than the behavioral. Most also felt that the "ideal" teacher would be a composite of many organismic principals and some selected behavioral traits.

Summary

The criterion group viewed the video tape and responded to the Belief Identification List. Agreement by both members of the criterion group was reached on all items by modification or discarding questionable items. Using this method, two items were modified and one was discarded. Agreement with the criterion group on item responses is interpreted to positively correlate both with

level of ability in inferential skill and degree of personal influence upon perceptive ability.

Examination of data reveals that a large majority (93%) of the experimental group agreed with the criterion measure on 75% of the item responses. 80% of the experimental group agreed with the criterion measure on 97% of the total items. The average correlation of all item responses on the Belief Identification List is (.90).

88% of the experimental group favored the organismic role as the more effective teaching situation and, in general, most group members indicated that the most effective teacher role, all things considered, would be a composite role including the best elements of each educational perspective.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

Summary

The main body of research concerning teacher beliefs centers around observation and measurement of teacher classroom behavior. It is posited that a teacher will be more effective if he can scrutinize his beliefs with respect to various educational perspectives. This study was undertaken to afford the teacher the opportunity to organize and classify what he sees in other teachers and, through them, in himself.

The purpose of the study was to design and develop a useful instrument in identifying and examining the teacher's beliefs by comparing his actions with those of another person and making inferences as to that person's beliefs as manifested by those actions. Similarity of beliefs could then be considered in conjunction with the comparison of behavioral traits.

The instrument provides an efficient means to identify teacher educational beliefs and to examine them using a systematic procedure employing the indirect method of observation and inference. The observer views a video

tape of a simulated classroom situation in which a teacher-performer role-plays stereotypes of selected teacher behavior. Inferences are made as to the beliefs held by the role-playing teacher on the basis of his displayed behavior. The observer then identifies with one of the educational perspectives by rating the roles as to effective classroom practices.

The item responses were analyzed for percentages of agreement between the criterion measure and the experimental group both with respect to each experimental group member across all items and with each item response across all group members.

The criterion measure was selected from the faculty of the College of Education and the video tape performance roles were filled from the Department of Theater Arts at Michigan State University. The experimental group was composed of teachers attending classes in graduate level education.

The Belief Identification Instrument was designed and developed by synthesis of the professional material in the Review of the Literature into two divergent educational perspectives or teaching-learning approaches. These approaches were then used to both develop the Belief Identification Statements and design the Behavioral and Organismic teacher-performance roles.

The experimental group viewed the tape and made agree-disagree response choices in terms of whether or not they perceived the belief statements to be reflecting the behaviors displayed. They then responded to seven questions designed to elicit role identification and were asked to choose the role they felt was generally more effective.

An internal comparison of the item responses of the experimental group indicated that a high reliability was achieved from which a probability statement could be made predicting outcomes of future replications on similar statistical populations. The only population of teachers to which these probabilities apply are those who have an equal likelihood of appearing in the sample and who are not significantly different from the sample group employed in this study.

Conclusions

Since it was evident that the item response choices were made as a result of personal preferences for and identification with one educational perspective or the other, it is concluded that the experimental group members were able to perceive parts of and gain insights into their own professional educational roles. They were able to "see themselves" in others' behavior thereby implying the aptitude to examine their own beliefs as suggested by their personal behavior.

The criterion group, selected on the basis of sensitivity to other people, agreed closely with each other and easily suggested adjustments to the few items on which they disagreed. The content of the performance roles and the Belief Identification Statements are therefore taken to possess a measure of face validity.

As put forth in the Analysis of Data, a high positive correlation exists between the criterion measure and the experimental group's ability to perceive others' beliefs as manifested by their behavior. This same correlation is also present between the criterion measure and the experimental group's level of subjective influence upon these perceptive or inferential abilities.

The validity of content of the Belief Identification Instrument has been demonstrated and a high positive correlation exists between the criterion group and the experimental group as shown by comparison of their respective item responses. It is submitted that the Belief Identification Instrument is in fact useful for identification and examination of educational beliefs. The teacher's personal classroom behavior can be brought to conscious awareness thereby permitting inferences to beliefs to which he himself may subscribe.

Implications for Further Study

The development of this study has suggested several possibilities for further research.

The particular choices of a given respondent made in the Role Identification section of the instrument could be examined in terms of correlation to his educational history and unique past experiences. Correlational studies could also be made between the item responses from the video tape portion of the instrument and those of the Role Identification section in order to examine possible reasons or motives for personal identification with one or the other educational perspective. It could be hypothesized that the reasons for particular choices may be linked to present beliefs, attitudes or values (derived from and based on past experiences) which have been now at least superficially identified and examined.

An additional possibility for further research is a comparison, possibly by analysis of variance, between preparing teachers and those already in the professional field. This might be done with two separate population samples at the same time or on the same sample, by means of the pretest and posttest method, over a given period of time.

Recommendations

The following recommendations are given to enhance the effectiveness of the Belief Identification Instrument.

1. Construct the video tape in such a way that the experimenter does not have to stop the tape manually or shift attention away from the television monitor to project a belief statement. A stop-time or stop-action feature could be built into the tape during its construction which would permit more precise control of the reading and response time and reduce possibilities of annoying technical "accidents" such as bulb burn-out, tape out of synchronization, etc. It would also permit the experimenter to vacate the front of the room thereby eliminating a distracting variable. Insertion of the belief statements onto the television picture by means of a superimposition slide would be a preferable method to the use of transparencies. The video tape and the Belief Identification Statements would be a completely independent "package" with less moving parts, less variables and less potential "accidents". It would also be more simple and convenient to administer.

2. Reduce or eliminate all possible background "noise" (See Chapter III) by using a more stylized classroom appearance rather than attempting to scrupulously copy a real one item for item. The camera should be kept on the teacher at all times with a minimum of distracting movements, such as from teacher to students and back. The children in the classroom need merely be suggested by the teacher's actions and dialogue and need not be seen by the viewer.

3. Add a "practice" section to the beginning of the video tape which would give the experimental group the opportunity to become more comfortable in the execution of their task before the actual measurement of their responses is begun. The quality of perception and the ability at inference of the group improved as each performance role developed and as more information was added to the group's knowledge of each performance role. The variable of "improvement of responses" should be kept at a minimum.

4. Encourage honesty in responding to the items by making it as clear as possible that it is pointless to attempt to "outguess" or "psych out" the instrument. Since uniqueness of individual responses is of prime concern and not a high score, indicate that one's subjunctive interpretation can best be elicited by putting down first impressions, which are usually the true personal perceptions of a given situation.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Allport, Gordon W. Personality and the Social Encounter. Boston, Mass.: Beacon Press, 1960.
- Anderson, Vernon R. Principles and Procedures of Curriculum Improvement. New York: Ronald Press Co., 1965.
- Armstrong, Sidney J. Introduction to Statistical Analysis and Inference: For Psychology and Education. New York: John Wiley & Sons, Inc., 1967.
- Atkinson, Carroll, and Maliska, Eugene T. "Structuralism and Functionalism", "Behaviorism and Gestalt Psychology", "Development: Physical and Emotional, Intellectual, Social and Personality." The Story of Education. Philadelphia, Pa.: Chilton Books, Publishers, 1962.
- Berelson, Bernard, and Steiner, Gary. Human Behavior: An Inventory of Scientific Findings. New York: Harcourt, Brace and World, Inc., 1964.
- Bills, R. E. "Attributes of Successful Educational Leaders" Interdisciplinary Research in Educational Administration, Hopper, R. L., editor. Lexington, Kentucky: University of Kentucky Press, 1953.
- Bloom, Benjamin S., et al. Taxonomy of Educational Objectives: The Classification of Educational Goals. New York: David McKay Co., Inc., 1956.
- Bradford, Leland P. "The Teaching-Learning Transaction." The Planning of Change, Bennis, W. G., Benne, K. D., and Chin, Robert, editors. New York: Holt, Rinehart and Winston, Inc., 1962.
- Brodbeck, May. "Logic and Scientific Method in Research on Teaching." Handbook of Research on Teaching. Chicago: Rand McNally & Co., 1963.
- Bruner, Jerome S., and Postman, Leo. "An Approach to Social Perception." Current Trends in Social Psychology, Dennis, W., editor. Pittsburgh, Pa.: University of Pittsburgh, 1948.

- Bruner, Jerome S., and Taguiri, Renato. "The Perception of People." Handbook of Social Psychology, Lindzey, Gardner, editor. Reading, Mass.: Addison-Wesley Publishing Co., 1954.
- Bruner, Jerome S. The Process of Education. Cambridge, Mass.: Harvard University Press, 1960.
- Burton, William H. "Basic Principles in a Good Teaching-Learning Situation." Phi Delta Kappan, vol. XXXIX. March, 1968.
- Bush, Robert N., and Allen, Dwight W. "A Framework for High School Education." A New Design for High School Education. New York: McGraw-Hill Book Co., 1964.
- Byrnes, Robert F. "Effective Teaching; Our First Need." The Challenge of Curriculum Change. New York: College Entrance Examination Board, 1966.
- Campbell, Donald T. "The Indirect Assessment of Social Attitudes." Psychological Bulletin, vol. XLVII. 1950.
- Charters, W. W. "The Social Background of Teaching." Handbook of Research on Teaching. Chicago: Rand McNally & Co., 1963.
- Combs, Arthur W. Perceiving, Behaving, Becoming, Combs, A. W., editor. Washington, D. C.: Association for Supervision and Curriculum, 1962.
- DeCecco, John P. The Psychology of Learning and Instruction. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1968.
- Good, Carter V., editor. Dictionary of Education. New York: McGraw-Hill Book Co., 1959.
- Doll, Ronald C. Individualizing Instruction. Washington, D. C.: Association for Supervision and Curriculum Development, 1964.
- Harris, Chester W., editor. Encyclopedia of Educational Research. New York: MacMillan Co., 1960.
- Forcier, Richard C. "A Pilot Study Concerned with the Design of an Educational Belief Inventory Instrument." Unpublished Ph. D. dissertation, Michigan State University, 1969.

- Gage, N. L. Handbook of Research on Teaching. Chicago: Rand McNally & Co., 1963.
- Grannis, Joseph C. "The School as a Model of Society." Technology and the Curriculum, Witt, Paul W. F., editor. New York: Teachers College Press, Columbia University, 1968.
- Grennan, Jacqueline M. "Education's Challenge-Teaching Children to Structure Experience." The Challenge of Curriculum Change. New York: College Entrance Examination Board, 1966.
- Hayden, Alice H. The Body of Knowledge Unique to the Profession of Education. Washington, D. C.: Pi Lambda Theta, 1966.
- Hayes, William L. Statistics for Psychologists. New York: Holt, Rinehart and Winston, Inc., 1963.
- Hilgard, Ernest R. Theories of Learning. New York: Appleton-Century-Crofts, Inc., 1948.
- Jastrow, J. "The Animus of Psychical Research." The Case For and Against Psychical Belief, Murchison, C., editor. Cited in Rokeach, Milton. Beliefs, Attitudes and Values. San Francisco, Calif.: Jossey-Bass, Inc., 1968.
- Kerlinger, Frederick M. "Foundations of Behavioral Research." Educational and Psychological Inquiry. New York: Holt, Rinehart and Winston, Inc., 1966.
- Kerlinger, F. M., and Pedhazur, E. J. "Attitudes and Perceptions of Desirable Traits and Behaviors of Teachers." Washington, D. C.: United States Department of Health Education and Welfare, 1967.
- Krech, David. "Psychological Theory and Social Psychology." Encyclopedia of Educational Research, Harris, Chester W., editor. New York: Macmillan Co., 1960.
- Krech, D., and Crutchfield, R. S. Theory and Problems of Social Psychology. New York: McGraw-Hill Co., 1948.
- Lewis, Helen B. "An Approach to Attitude Measurement." Psychologist's League Journal, 1938. Cited in Rokeach, Milton. Beliefs, Attitudes and Values. San Francisco, Calif.: Jossey-Bass, Inc., 1968.

- Lippit, Ronald. "Value Issues for a Classroom Change-Agent." Values in American Education. Bramfield, T., and Elam, Stanley, editors. Bloomington, Indiana: Phi Delta Kappa, Inc., 1964.
- MacLeod, R. B. "The Place of Phenomenological Analysis in Social Psychological Theory." Current Perspectives in Social Psychology, Hollander, E., and Hunt, G., editors. New York: Oxford University Press, 1963.
- Mager, Robert F. Developing Attitude Toward Learning. Palo Alto, Calif: Fearon Publishers, 1968.
- Maslow, Abraham H. Toward a Psychology of Being. Princeton, New Jersey: D. Van Nostrand Co., 1962.
- Medley, Donald M., and Mitzel, Harold E. "Measuring Classroom Behavior by Systematic Observation." Handbook of Research on Teaching. Chicago: Rand McNally & Co., 1963.
- Miles, Matthew B. "Educational Innovation: The Nature of the Problem." Innovation in Education. New York: Bureau of Publications, Columbia University, 1964.
- Miller, Neal E., and Dollard, John. "Reward." Reinforcement: An Enduring Problem in Psychology. Princeton, New Jersey: D. Van Nostrand Co., Inc., 1961.
- Rogers, Carl R. On Becoming a Person. Boston, Mass.: Houghton Mifflin Co., 1961.
- Rogers, Carl R. "Some Observations on the Organization of Personality." American Psychologist, vol. II. 1947.
- Rokeach, Milton. Beliefs, Attitudes and Values. San Francisco, Calif.: Jossey-Bass, Inc., Publishers, 1968.
- Rokeach, Milton. The Open and Closed Mind. New York: Basic Books, Inc., 1960.
- Ryans, David G. Characteristics of Teachers. Washington, D. C.: American Council of Teachers, 1960.

- Ryans, David G. "Teacher Behavior Theory and Research: Implications for Teacher Education." The Journal of Teacher Education, vol. XIV. Sept. 1963.
- Sargent, S. Stansfeld, and Williamson, Robert C. Social Psychology. New York: Ronald Press Co., 1958.
- Selltiz, Claire, et al. Research Methods in Social Relations. New York: Holt, Rinehart and Winston, Inc., 1962.
- Senders, Virginia L. Measurement and Statistics. New York: Oxford University Press, 1958.
- Shaw, M. E., and Wright, J. M. Scales for the Measurement of Attitude. New York: McGraw-Hill Co., 1959.
- Simon, Herbert A., and Newell, Allen. "Models: Their Uses and Limitations." Current Perspectives in Social Psychology, Hollander, E., and Hunt, G., editors. New York: Oxford University Press, 1963.
- Skinner, B. F. Science and Human Behavior. New York: Macmillan Co., 1958.
- Smith, Wendell I., and Moore, J. William. Conditioning and Instrumental Learning. New York: McGraw-Hill Book Co., 1966.
- Taft, Ronald. "The Ability to Judge People." Psychological Bulletin, vol. LII. 1965.
- Thurstone, L. L. "Attitudes Can Be Measured." Readings in Attitude Theory and Measurement, Fishbein, M., editor. New York: John Wiley & Sons, 1967.
- Urick, Ronald, and Freymier, Jack R. "Personalities, Teachers and Curriculum Change." Supervision: Emerging Profession. Washington, D. C.: Association for Supervisors and Curriculum Development, National Education Association, 1969.

General Reference

- Allport, Gordon W. Becoming: Basic Considerations for a Psychology of Personality. New Haven, Conn.: Yale University Press, 1955.
- Borg, Walter R. "Personality and Interest Measures as Related to Criteria of Instructor Effectiveness." Journal of Educational Research, 1957.
- Brown, J. S. The Motivation of Behavior. New York: McGraw-Hill Book Co., 1961.
- Bruner, Jerome S. Toward a Theory of Instruction. Cambridge, Mass.: Harvard University Press, 1966.
- Bruner, Jerome S., and Krech, David, editors. Perception and Personality: A Symposium. Durham, North Carolina: Durham University Press, 1950.
- Bruner, Jerome S., and Postman Leo. "Perception, Cognition and Behavior." Journal of Personality, 1949.
- Cattell, Raymond B. Personality and Motivation Structure and Measurement. New York: World Book, Inc., 1957.
- Combs, Arthur W., and Snygg, Donald. Individual Behavior: A Perceptual Approach to Behavior. New York: Harper & Bros., Inc., 1959.
- Combs, Arthur W. The Professional Education of Teachers. Boston, Mass.: Allyn & Bacon, Inc., 1965.
- Combs, Arthur W. "Seeing is Behaving." Educational Leadership, vol. XVI. 1958.
- Downie, N. M., and Heath, R. W. Basic Statistical Methods. New York: Harper & Row, Publishers, 1965.
- Farquhar, William W. "Writing a Thesis Proposal." (Mimeograph), Michigan State University, 1969.
- Farquhar, William W. "Directions for Thesis Preparation." (Mimeograph), Michigan State University, 1969.
- Flanders, Ned, et al. Helping Teachers Change Their Behavior. Ann Arbor, Mich.: University of Michigan Press, 1963.

- Freymier, Jack R. "Motivating Students to Learn." NEA Journal, vol. LVII. Feb., 1968.
- Griffiths, Daniel E. "Administration Theory and Change in Organizations." Innovation in Education, Miles, M., editor. New York: Bureau of Publications, Columbia University, 1964.
- Hebb, D. O. The Organization of Behavior. New York: Science Editions, Inc., 1961.
- Lambert, William W. "Stimulus Response Contiguity and Reinforcement Theory in Social Psychology." Handbook of Social Psychology, Lindzey, Gardner, editor. Reading, Mass.: Addison-Wesley Publishing Co., Inc., 1954.
- Maguire, Thomas O. "Value Components of Teachers' Judgments of Educational Objectives." Audio-Visual Communications Review, vol. XVI. Spring, 1968.
- Maslow, Abraham H. New Knowledge in Human Values. New York: Harper & Bros., Inc., 1959.
- Porter, Andrew H. "Guidelines for Formulating a Research Project." (Mimeograph), Michigan State University, 1969.
- Turabian, Kate L. A Manual for Writers of Term Papers, Theses, and Dissertations. Chicago: University of Chicago Press, 1967.
- Wallen, Norman E., and Travers, Robert M. "Analysis and Investigation of Teaching Methods." Handbook of Research on Teaching. Chicago: Rand McNally & Co., 1963.

APPENDICES

APPENDIX A

INSTRUCTIONAL MEDIA CENTER

March 15, 1970

Dear Sir,

Your assistance is requested in the selection of two of your colleagues in the College of Education whom you feel are well-qualified to serve as members of a criterion group in an upcoming research project.

These persons will be chosen on the basis of their sensitivity to other people.

The purpose of the study is to develop an instrument which would be useful in identifying and examining teacher educational beliefs. The instrument would provide the teacher with a means to compare his classroom practices with his educational beliefs by identifying particular displayed behavior patterns and by inferring underlying educational beliefs which foster them. He would bring his personal classroom behavior to conscious awareness by observing a controlled situation displaying some stereotypes of teaching methods which inherently infer underlying beliefs.

Two professors currently involved in teacher training in the Michigan State University College of Education will be selected and asked to serve as the criterion measure for the study. Their task will be to assess the validity of the content of both the video tape and the accompanying belief statement list by viewing the tape and by responding to the list.

Please complete the enclosed form and return it to me in care of Dr. James L. Page, faculty sponsor of this research project. Instructional Resource Center, Erickson Hall.

Thank you for your cooperation.

Sincerely,

Joseph S. Yanick, Jr.

Please return to: Joseph S. Yanick, Jr.
 Instructional Resource Center
 Erickson Hall

I would like to suggest:

and

to serve as members of the criterion group in the
research project you have described.

INSTRUCTIONAL MEDIA CENTER

March 20, 1970

Dear Dr.

In a letter sent on March 15 to professors involved in teacher training in the College of Education, I requested assistance in the selection of two members of a criterion group in an upcoming research project under the sponsorship of Dr. James L. Page.

You have been nominated by your colleagues as being exceptionally well-qualified by reason of your demonstrated sensitivity to other people.

I would like to ask you to serve as a member of the criterion measure on this project.

Enclosed is a description of the purpose and the design of the proposed study.

You would be asked to view a twenty-five minute video tape of professional actors engaging in the performance of stereotypes of teacher roles and to respond to a corresponding belief statement list. Your task would be to assess the validity of content of both the video tape and the belief statement list.

Please contact me by responding to the tear-off stub below. I may be reached at 355-9892 for further information.

If you are willing to honor my request I would be willing to meet with you personally to discuss this and to arrange further details at any time convenient to you.

Thank you for your interest.

Sincerely,

Joseph S. Yanick, Jr.

I would be happy to serve. _____

Sorry, I will be unable to serve. _____

I would like more information. Please contact me. _____

APPENDIX B

Belief Comparison Chart

ITEM	BEHAVIORAL	ORGANISMIC
teaching technique	teaching techniques are based on the commonality of certain learner characteristics	teaching techniques are based on the unique characteristics of each learner
environmental control	environmental control is essential	environmental control may inhibit the desired process
goals	highly specified goals necessary to learning	goals are personal and self-projected
motivation	externally imposed	internally induced
number of learners	possible to learn as a group	individual...learning takes place differently in each learner
environmental structure	authoritarian, i.e., highly structured environment necessary	learner suggests or passively imposes structure, if any
punishment	avoidance of penalty used as reinforcer	non-relevant
content	selection and arrangement extremely important	content is suggested by the process
content structure	precise structure necessary	content is merely the vehicle for the learning process
content limitations	highly specified limits	learner-imposed limits, if any

Belief Comparison Chart

ITEM	BEHAVIORAL	ORGANISMIC
content importance vis-a-vis orientation	goal oriented...suggest new or more content as goal	content important only in the sense of process orientation
content vis-a-vis learning method	rote learning response sets important with respect to subject content	practice in conceptual development important with respect to subject content
nature of goal	goal is a product (change of behavior)	goal is a process which fosters self-adjustment which, in turn, is a process
statement of goal	goal is clearly described to the learner before the learning commences	non-relevant...as some goals are long-range and others are difficult to verbalize
object of learning	change of behavior (skill, mastery of content)	healthy self-image ease of self-adjustment, self-actualization
nature of the learner	structure of the environment and the content is as important as the nature of the learner	nature of the learner is of prime importance and environment and content is of secondary importance
teaching approach	stimulus-response-reinforcement	self-actualization
focus of the learning situation	instructor-centered	learner-centered
nature of learning	mass learning is a desired goal...greater efficiency of existant resources	each learner's unique characteristics preclude mass learning

Belief Comparison Chart

ITEM	BEHAVIORAL	ORGANISMIC
content importance	knowledge of factual content is necessary to the nature of the structure to be designed but not necessary for achievement of goal, i.e., the product	content is important only in that it is meaningful
orientation	goal oriented	process oriented
self-concept	non-relevant	positive self-concept very important outcome
inter-changability of learner	non-selective learner is inter-changable	highly selective learner is unique and non-interchangable
failure	(wrong answer or no answer) failure is important in the sense that the structure is designed so as to avoid it	(lack of self-adjustment) failure is important in that it is an absence of adjustment to the situation
ability	ability to learn is fixed	ability to learn is capable of being influenced
anxiety	certain amount of anxiety enhances learning	low anxiety is conducive to learning

APPENDIX C

Belief Concept List

BEHAVIORAL

1. The learning situation should be based on successful experiences.
2. The sequencing of materials is an important factor in the design of the instructional environment.
3. The learning experience should contain an orderly arrangement of subjects representing the best of our heritage.
4. The subject content in a learning situation is the facts to be learned and the skills to be acquired.
5. Practice is an essential element in learning.
6. Because human nature is flexible and adaptive the learner can easily conform to a well-designed lesson.
7. Teachers should keep in mind that pupils have to be made to work.
8. What we need in education is respect for the authority of the teacher, such as when I was in school.

Belief Concept List

BEHAVIORAL

9. To sacrifice discipline, even to the interests of the learners, is to allow the educational environment to exceed the control of the teacher.
10. The learning situation should always present attainable goals, both short and long-range.
11. The best way to measure a learner's progress is to measure his academic achievement.
12. Subjects that sharpen the mind, like math and Latin, should be stressed.
13. Learners need and want more supervision and discipline than they usually get from teachers. They don't admit it because they are afraid of being ridiculed.
14. Subject content is composed of factual material and skills.
15. One product in learning is an increase in the learner's fund of knowledge.

Belief Concept List

BEHAVIORAL

16. The teacher is the supreme authority in the classroom. A teacher's status as a professional guarantees this and the privilege is rarely abused.
17. The learner's capacity to gain knowledge is fixed at birth.
18. Learning is most effective if stimuli are presented which call for reinforceable responses.
19. Learning is increased by immediate knowledge of results.
20. Each subject taught should develop an area of the learner's physical and mental discipline.
21. Learning is building a fund of knowledge for use in the future.
22. The basic task of education is, as it has always been, to teach reading, writing and arithmetic.
23. A good teacher will more effectively attain course objectives by careful organization of course content and class time.

Belief Concept List

BEHAVIORAL

24. A learner will feel more secure if he knows precisely what is expected of him at all times.
25. Learners are flexible and readily adapt to different classroom situations.
26. A well-organized classroom is a sign of a well-organized teacher.

ORGANISMIC

1. Knowledge of the learning process is more important than knowledge of subject content.
2. Learning must be experimental if we are going to discover and develop better teaching and learning methods.
3. All learners are unique and different.
4. The needs and demands of our society should be the basis of the learner's school experience.
5. Standards of work shouldn't be the same for all learners. They should vary with each individual.

Belief Concept List

ORGANISMIC

6. It is not essential to stay within subject matter lines.
7. A learner should know how to test all available alternatives before accepting any of them.
8. The inquiry method is highly suited to teaching children because of their innate curiosity.
9. Interaction between pupil and teacher and between pupil and pupil is more important than the learning of subject content.
10. Motivation is more important than classroom control.
11. Learning will occur most efficiently when the learner himself develops the desire to learn.
12. All learners have physical, intellectual, social, moral and spiritual needs which the school should reach out to meet.
13. Subject content is composed of concepts, constructs, and ability in analysis, synthesis and critical thinking.

Belief Concept List

ORGANISMIC

14. The learner's goals should be suggested by his interests and needs.
15. It is more important to be able to view all manner of problems in a critical and objective way than it is to memorize correct answers.
16. A primary aim of education is the encouragement of the learner to analyze and constructively criticize his own and other peoples' ways of doing things.
17. Learning is most effective when the learner is actively engaged in the process.
18. A learner should be taught starting at his own individual level, not at the level of the grade in which he happens to be.
19. If a learner is interested, motivated and involved, there will be no discipline problems.
20. Some learners are more highly motivated when they are producing ideas than when they are consuming them.

Belief Concept List

ORGANISMIC

21. A learner's progress should be measured in terms of emotional and social development.
22. Not all positively motivated students move toward teacher or peer approval.
23. The instructional experience can strengthen the learner's self-concept.
24. Learning is most effective when the pupil shares in structuring the learning experience.
25. Learning should be organized around life, not around academic subjects.
26. Learning will take place most efficiently when the learner perceives it as meaningful to him.
27. We should design the learning experience around the child, somewhat like a doctor's perscription.
28. The formation of attitudes is more important than the ingestion and regurgitation of facts.

Belief Concept List

ORGANISMIC

29. The less time spent on non-learning activities, the more learning will occur.

APPENDIX D

BELIEF IDENTIFICATION INSTRUMENT

- | | Belief statements | Behavioral role |
|----|--|-----------------|
| | statement no. | |
| 1. | A good teacher will more efficiently attain course objectives by careful organization of class time. | |
| 2. | The less time spent on non-learning activities, the more learning is bound to occur. | |
| 3. | A learner will feel more secure if he knows precisely what is expected of him at all times. | |
| 4. | Standards of work shouldn't be the same for all learners. They should vary with the individual. | |
| 5. | Knowledge of the learning process is more important than knowledge of subject content. | |
| 6. | Learners need and want more supervision and discipline than they usually get. | |
| 7. | The learning experience should contain an orderly array of the best of our heritage. | |
| 8. | A learner's progress should be measured in terms of emotional and social development. | |

BELIEF IDENTIFICATION INSTRUMENT

Belief statements Behavioral Role...cont'd

statement no.

9. The instructional experience can strengthen the learner's self-concept.
10. Learners are flexible and readily adapt to different classroom situations.
11. Learning is building a fund of knowledge for use in the future.
12. The learning situation should always present attainable goals, both short and long-range.
13. A learner should be taught at his level...not at the level of the grade he is in.
14. Learning is increased by immediate knowledge of the results.
15. The sequencing of materials is an important factor in the design of the instructional situation.
16. A well-organized classroom is a sign of a well-organized teacher.

BELIEF IDENTIFICATION INSTRUMENT

Belief statements Organismic role

statement no.

1. The best way to measure a learner's progress is to measure his academic achievement.
2. Learning will take place most efficiently when the learner perceives it as meaningful to him.
3. Our society and the real world should be the basis of the learner's school experience.
4. It is not essential to stay within subject content lines.
5. The learning experience should contain an orderly array of the best of our heritage.
6. The sequencing of materials is an important factor in the design of the instructional experience.
7. Learning is most effective when the learner is actively engaged in the process.
8. Subjects that sharpen the mind, like math and languages, should be stressed.
9. The instructional experience can strengthen the learner's self-concept.
10. Interaction of pupil-teacher is more important than the learning of subject content.

BELIEF IDENTIFICATION INSTRUMENT

Belief statements Organismic role...cont'd
statement no.

11. The subject content in a learning situation is the facts to be learned and the skills to be acquired.
12. The instructional experience should train the learner's ability in analysis, synthesis and critical thinking.
13. A learner should know how to test all available alternatives before accepting any of them.
14. A primary product in learning is an increase in the learner's fund of knowledge.
15. The learner's capacity to gain knowledge is fixed at birth.
16. Some learners are more highly motivated when they are producing ideas than when they are consuming them.
17. The teacher is the supreme authority in the classroom. Chaos is the alternative.
18. We should design the learning experience around the child, somewhat like a doctor's perscription.

APPENDIX E

General Instructions for Performance Roles

Extreme care must be taken to assure that over-emphasis or "overacting" do not lend unwanted shadings to the roles. It is particularly important that the Behavioral role does not become curt, stand-offish or abrupt. It is similarly important that the Organismic role does not become shaded with lack of direction, indifference or overpermissiveness.

Give the general feeling that you are confident in yourself both as a person and as a teacher of this class.

Behavioral Role Description

1. Make reference to the fact that you run a well-structured class with the teacher in command at all times. There are to be nice straight rows, no talking unless called upon, and raised hands to be acknowledged.
2. Outline exactly what is to be learned in this lesson. Indicate the specific reward to be given if the lesson is successful and the specific penalty if it isn't.
3. Give a simple definition. Let it come out of the subject you are dealing with in this scene. Have

the class copy it word for word in their notebooks. Be very specific about exact wording. Indicate that you want it memorized by everyone for tomorrow's class. You will ask each pupil to recite it letter perfect for a grade in your gradebook.

4. Lecture on a point. Insist that notebooks and pencils be ready to take notes. Instruct the notebooks to be collected at the end of class so that you may check them for completeness and neatness.
5. Make an issue of the fact that a child has tried to speak without having either raised his hand or having been acknowledged by the teacher.
6. Make a statement about the importance of getting a high grade on an upcoming test. Read off one or two names with the highest grades and one or two names with the lowest grades on the last test. Praise the top children and sincerely encourage the low ones. Make every effort not to be nasty or pedantic.
7. Criticize a pupil in a way which is just a bit sarcastic. Rationalize to him and the rest of the class that a little embarrassment is good for him.

8. Answer a pupil's question concerning why they have to learn a certain subject anyway by explaining that they will understand better later on...when they are older.
9. Give the class a list of something to memorize. Indicate that everyone who gets the entire list correct on a quiz will have no homework for the following day. Those who get any wrong will have to turn in each item they missed written out ten times for the next day's class.
10. Create an incident where a pupil makes a non-relevant interjection to the topic with which you are dealing. Bring the stream of thought quickly back strictly to your original topic. In a sincere manner, explain that such deviance wastes class time. You have much more to cover before the six-week period ends and you must finish covering what is on your daily lesson plan before the bell rings.
11. Pass out a ditto list you have prepared for the class. Indicate that the list will have to be recited letter perfect by every member of the class...for a grade. Assign this for homework to be completed by tomorrow morning.

Organismic Role Description

1. You are making a point pertinent to the lesson you are teaching. Someone in the class interjects with an item which has happened to him or about something which he has just read. It has some commonality with your point. "Spontaneously" tie his point in with yours, thank him for his contribution, and go on with your point.
2. Give the general feeling that you believe in running a democratic classroom. At some point in the scene create a specific incident which will show this point clearly.
3. Take a topic or an issue spontaneously brought up in the classroom by a pupil and use it as a means to teach something you want them to learn.
4. Suggest and encourage the initiation of a group project. It is to be completely governed by the interested pupils in the class. Your assistance and advice will be available to them. They need only ask for it.
5. Create an incident to show that a particular pupil's goal(s), or that the personal goals of all the pupils in the class, are important to you as their teacher.

6. Invent a situation in which you show the viewer that the specific subject content is merely a means to demonstrate a process and that the process is the important lesson...not the factual material.
7. Correct someone in a positive way. Don't use any negative words or references. Mention some strong point about the pupil and give him some specific word of encouragement.
8. Refer to the fact that the students will be able to use the fact, technique or skill you just taught them in other areas outside the classroom and outside of school.
9. Devise a way to make the point that it is more important to learn the technique of analysis than it is to memorize factual material for one specific case. Generate this point out of the lesson you are teaching.
10. Announce a topic you would like to treat in class in the near future. Ask and encourage the pupils to bring in articles, pictures, personal effects or anything that they feel would enhance your topic. Make it clear that both you and they will explore the subject together rather than your talking and their listening.

11. Refer to the fact that the students will be able to use a technique you have just taught them over a wider range of contexts than merely the classroom situation.

12. Give a book to a pupil to read so that he may delve a bit deeper into a topic he's shown interest in. Get someone started on a self-instructional program to spurt ahead on a topic he finds easy to grasp. Tell a new pupil who has been having a difficult time reading that he can catch up with the rest of the class by listening to a pre-recorded tape. Give it to him and send him to a carrel in the rear of the room to continue on his own.

APPENDIX F

Video Script Opening Statement

This instrument has been developed as an attempt to aid you as a teacher in examining your beliefs concerning education. It will give you the opportunity to compare your classroom behavior with that of another teacher and to infer what that teacher might believe as a result of viewing his behavior.

This could be a point of departure...a place to begin introspection by providing a means of classifying and organizing what you see in other teachers and, as a result, perhaps in yourself.

You will observe teaching in a simulated classroom situation. At several points in each scene statements of belief will be made. You are to decide whether or not the teacher being viewed holds those statements to be true.

Here is an example:

teacher: "I want to talk about last week's assignment before I pass them back. Mary, I had to take ten points off because I simply couldn't read your writing. Alice, you received five extra points because you typed your report. Tony, you forgot to rule margins on your paper and your work is just too messy to read. You'll just have to do it over if you want any credit for the assignment."

On the basis of what you have just seen, mark a plus if you feel that the teacher, not you, but the teacher, believes that statement. Do you believe that the teacher before you holds the following belief to be true, as inferred by his actions in the scene? Conversely, mark a minus if you feel that his actions show that he does not hold this statement to be true.

statement: Children feel more secure if they know exactly what is expected of them at all times.

Role #1 Behavioral

1. teacher: "O.K., let's have it quiet...you two, in the back...settle down, will you please? We've got a lot to cover. Look, if we could just get this class in the room and in your seats, so that when the last bell rings I can get right to it, we could get a lot more accomplished in here...you know...all the jabbering...get all the talking out of your system during the five-minute break...that's what it's for."

2. teacher: "Now, let's get these rows straightened out. It's very sloppy in here...I don't know where the aisles are and where they're not. Just line up your desk behind the front person in the row...that's all it takes. I want to see nice

straight aisles and nice straight rows. It doesn't take that much to keep the room looking nice."

3. teacher: "All right, now, what we're going to be doing today are two things. We're going to start the unit today on the first fifteen amendments to the Constitution. This is on page forty-three of your text, so before I say anything else, turn to page forty-three and just have it ready. The other thing we're going to do today is start to talk about the Supreme Court. It's become very important lately...in the newspaper, on TV, everywhere you look. In fact, the president's nominating a new person to fill the vacant seat is hot stuff right now. So I think you people should know what the Supreme Court is all about and who's on it."
4. teacher: "You'll notice on the board behind me an explanation of what the first fifteen amendments mean. The amendments themselves are listed on page forty-three in front of you. I also have some auxiliary notes on the board here that I also want you to know. So while I'm talking I want you to be taking down the notes on the board. You'll be responsible for not only what's in the book, but also the notes on the board, for the

next test. Now, I want you to get your notebooks in shape because I'm going to collect them as usual on Friday and read them over for completeness and neatness. I repeat, your notebooks in this course are ten percent of your grade so get caught up if you've missed anything, or if they're sloppy. No sense in losing points you don't have to lose."

5. teacher: "You see the comments on the board parallel the book like this: here you see that, in general, the Constitutional Convention was held in 1787. That's the first thing you'll have to remember. Specifically, the thirteenth amendment abolished slavery, the fourteenth forbade the abridgement of the privileges and immunities of U. S. citizens and the denial of their equal protection under the law. We'll get into what each of these phrases mean later. The fifteenth gives the ex-slaves suffrage...that means the right to vote. So that's what we'll be dealing with; the first fifteen amendments and what they mean."

6. teacher: "Then in 1788 the Constitution was drawn up and ratified by nine states out of the original thirteen."

A student begins to speak to the teacher from the

back of the room.

teacher: "Tom, I told you I have a rule in here, that you raise your hand. If I don't acknowledge you that means that I want to go on so that I don't forget what I'm saying. If it's that important it'll wait until the end of the class, won't it? As a matter of fact, if you people have any questions about the Bill of Rights I'd kind of like you to wait until we deal with them further after tomorrow's class because we're going to take them one at a time."

7. teacher: "Now, concerning the Supreme Court justices, I've taken the time to type up a ditto list of the present justices. Would you please pass these out? Now, the list has nine names. You see that each name is followed by a year. O.K., everybody got one now? Good. I also want you to know that the chief justice here is Warren Burger. He was appointed chief justice in June of 1969. There is going to be a quiz Thursday morning and I want you to take this list and memorize it. Memorize it in order from Black in 1937 to Marshall in 1967. There's no sense in knowing the names unless you can spell them correctly so spelling counts. That's why I gave you the list."

8. teacher: Yes, Ruth, what is it?"

Ruth asks if the quiz will count for a grade.

teacher: "Yes, this will be given the same weight as a regular test as far as a grade is concerned, so let's do a good job on it. The usual rules: if you get them all right you won't have any homework for the next day. Those of you who get any wrong will automatically turn in each one you got wrong written out ten times as an assignment for Friday morning. And don't take these assignments lightly. I don't give them for my health. If you don't know the answers, this is the way you're going to learn them."

9. The teacher has just asked a question of a student and has received a satisfactory answer.

teacher: "That's correct, Sheila."

The teacher notices that a boy in the back of the room obviously has other interests than the lesson at hand.

teacher: "When Larry is through looking at Susan back there, you tell him what the answer is, Sheila." This brings about general giggling and laughter around the classroom. Larry is obviously embarrassed by the remark.

teacher: "Larry, don't forget how to blush like that when you get older. The girls will really

like that. A little embarrassment's good for you. It keeps the color in your cheeks. Now, class, you've got your assignment about the Supreme Court justices. We can't get into the subject of how they work until you know who they are so I'll be waiting for you to get this list memorized."

11. A raised hand is acknowledged and the student asks why it is important to learn about the Supreme Court justices. It doesn't seem relevant to the interests of junior high students and that it seems remote and non-affecting to them.

teacher: "What you're really asking is, 'Why do I have to learn this, anyway?' isn't it? Well, I guess you're right. I guess it wouldn't seem terribly important at your age. Later on though, you're going to be very interested in things of this sort...you know...what's going on in Washington, and things like that, because you'll be more directly affected by them."

- 12.- teacher: "I want to get this straight, now. The

13. assignments you have from me for the rest of the week are: memorize the list, quiz on Thursday on the Supreme Court justices, correct spelling and the right order. No homework if you get them right and ten times apiece if you get any wrong, due

Friday morning. And the other topic we started today: read the first fifteen amendments to the Constitution and have down pat the things you copied off the board in your notebooks. Have your notebooks ready Friday to hand in to be checked. Grades will be given for the quiz and for your notes. I don't want any complaints that you don't know what's expected of you in this class."

14. teacher: "I want to say something about these quizzes. We're still early in the semester and I'd like to see you get off to a good start as far as grades are concerned. Don't start loafing in the first part of the semester and then come running up two weeks before school's over for extra work to push up your grade. Grades are important all the time so let's get a good start here in the beginning. The way to get along with me is to get your work done and everything will be fine."

15. A raised hand is acknowledged. The student asks if they might talk about the recent Chicago riots. teacher: "Well, we've got a lot to cover between now and the end of the semester. I'm not trying to dodge the issue...it might be interesting. But we've got to keep up with the other three junior highs in the system so you'll all have had the same background when you go up to the high school.

One thing I like to do as a teacher is to do everything we started out to do. But if we get all our work done before the end of the semester, I'd be glad to talk about the Chicago riots, or anything else you might want to bring in."

16. teacher: "The bell is going to ring in a few seconds. Let's get these rows straightened up. Everybody line up your desk exactly behind the first person in each row and you'll have a nice straight row. If anybody comes in here I want them to see a classroom and not a pigpen. Get all the paper picked up off the floor around your desks. That's all...see you tomorrow."

Role #2 Organismic

1. A student in this Civics class has just asked the teacher what is to be learned in this class.
- teacher: "Well, John, it might be three hundred facts out of that book in front of you. It might be a lot of right answers on a test I may give you at the end of the semester. When I began teaching I thought of it as more or less that I knew more about Civics than you did and that the book and I would teach you some of what we

had to offer. So that if you could tell me back what the book said and if you could tell me back what I said that you'd at least know more about Civics than when you came in. And if you could do this on a test, then we'd both know that we'd succeeded."

2. teacher: "But I don't see it that way any more. If I had to define it for you now, this class, I mean, I would say that it's what is happening to us every day. It's how we operate as a society; it's how we treat each other as citizens; how we're treated by the people we elect. These things change every day. I'm not denying that we have to know something about what's gone on before us. I suppose I would call this the history of this government, or the history of this country looking at its government. It's how the people brought it into being, how the people are affected by it, how the people change it when they feel that it needs to be changed. O.K.? Does that answer your question about this class?"

3. teacher: "What I'd like to deal with today are some notions on how our federal court system works; how it's the top rung on a ladder or system of justice that starts in our own municipal court

houses, goes up through county, state, regional and finally to the federal Supreme Courts. I think that it would be a good topic to talk about in class because it's an important issue out in the street right now. All you get through the media these days are items having to do with court proceedings and judgements, or appeals made by people who don't feel they've been given a fair shake in court. I guess the first place, or the logical place to start, would be right here in our own local municipal courts."

4. A student asks, "Does this federal court business we're going to talk about have anything to do with the Chicago riots...you know...the Conspiracy Seven?"

teacher: "It certainly does."

student: "What laws did they break? It seems to me that the papers and a lot of people are saying that they shouldn't be persecuted...you know...that they're innocent."

teacher: "Would you be surprised to hear that you made those laws? Not directly, but, because of the way our courts operate, we elect people to Congress to represent us. Supposedly we elect them because we trust them to make laws which will be good for us. It's those laws that they've enacted, in our behalf, that the seven people in Chicago are accused

of breaking. So I guess if you can follow the circle we've been going around what we're really talking about is that these seven people are accused of breaking laws which we, the people, have set up for our own protection and the protection of our rights."

5. teacher: "Would you people like to continue this discussion? I'd be glad to spend as much time as you want on it because it seems to me that it's happening to us right now. If we're reading newspapers and looking at TV newscasts concerning the trial it should be more interesting to all of us if we know a little more about it. It's my hunch that if we do, you're going to know more about the federal court system, and the entire legal court system for that matter, than if we read it out of a book."

6. student: "Does it make any difference whether we start with the federal courts and work our way down or the other way around?"

teacher: "You could start in the middle if you wanted to, I suppose. I think what's important is that we tie the things we talk about in here to real life. Its not just something you have between the covers of that book in front of you."

Civics is real and if it can't be real, if it's going to be a subject that we just learn a few hundred facts about, then I expect that we should have a different way to go about learning it."

7. teacher: "Tell you what: those of you who want to, why don't you stick around for a few minutes before you go home and organize a way to go about this. I'll be here if you need any help but let's see if you can't get something together. You know, one use for this project when it's done would be to submit it to the school paper. Come to think of it, the suburban paper would be sure to use it if it were well-organized. It would make a good feature article for them."

8. teacher: "Before we get into this any further, let me ask a question. What's been happening right here in our own city that has to do with our municipal courts?"

student: "There was an item on last night's news. It said that a clerk in city hall was accused by the city law director of embezzling city funds and the man said he was only borrowing it for awhile. Is that what you're getting at?"

teacher: "Exactly. You know, it would be fun to follow this issue and the Chicago incident in par-

allel for the next few weeks and draw similarities between them as they happen. As a matter of fact, would some of you like to try this as a group project?"

9. teacher: "My question is: what's the difference between the federal judges on the Supreme Court and the federal judges in the various federal court districts around the country?"

student: "The federal district judges are elected by popular vote and the federal judges on the Supreme Court are political appointments by the President of the United States."

teacher: "Let me hear the reasoning behind your answer, Rosemary."

10. Rosemary replies that she thinks it's this because the district judges sit in large cities all around the country and it seems fair that they should be elected by the people who live in those areas. Since the federal judges on the Supreme Court all live in Washington they should be close to the president and it makes sense that they should be appointed by him.

teacher: "That's a good line of reasoning, Rosemary. It does make good sense because that's precisely how municipal judges are elected at the

local level. When we get to the federal level we find that they're all appointed positions rather than by popular election. That was good thinking though, Rosemary, because you just described the reasons that municipal and county judicial officers are elected."

- 11.- teacher: "Justice is a process by which you can
12. take your case to other courts until you've exhausted all the available courts or until one of them reverses your decision. It seems to me that its a basic idea that if all the courts along the line reaffirm the fact that you're guilty, then maybe they're right and you're wrong. What I'm saying is another matter we might take up some other time. What's more important is that I could care less whether you memorize a list of municipal court, county court, this court, that court, federal court... I suppose that's useful information to some people but if you do nothing else but get the idea that one has the right to appeal, and that you have alternatives, I'll be a very happy Civics teacher. And this is not something you're simply going to pack into your heads and spit back to me on a test and then forget it, at least I hope you you don't."

13. teacher: "It would be nice if one of the things that would happen in this room would be that when we bounce ideas off each other that we always test what we hear in here. Is it true or not? Is it good for us or not? Does it only apply to us in this room or to everybody outside as well? This to me is how you learn Civics or at least this is the most interesting way to get something out of a topic like Civics. The Civics I learned when I was your age was a lot different. A lot of the things that come up in this class didn't even exist fifteen years ago."

14.- teacher: "I'd like to ask a question of someone."

15. Tom, take a second to think about this. Tell me what it is that you want to get out of this course. You know what I mean, as a result of the interaction of thirty of us in here. What do you want out of this personally? I don't mean a 'nice' answer you think I'd like to hear as a teacher. I mean, what would really help you, as an individual?"

Tom answers that his father is a police officer and that he doesn't understand some of the problems his father brings home with him from work. It seems that his father feels that the public doesn't understand what law enforcement is all

about and which is a source of irritation to him. Tom therefore wants to better understand some of the problems his father brings home with him.

teacher: "Any ideas, anyone? How Tom can get what he's looking for? Yes, Kathy?"

Kathy asks whether the class could explore what the police really do in their community and maybe develop it into a unit in class.

teacher: "You know how I feel about things like this so let's do it. But we're going to need some background."

16. teacher: "I'm sure we could get lots of things. We could start with the police department itself. I could make the initial contact if you'd like or you can do it yourself. We might even get a patrolman's manual and read what it says. I've let you people develop units before so I know what you're capable of. So bring it in...features, articles, pictures, you-name-it. Tom, you can be a big help here with your father being a policeman. Could you bring in some of his personal effects and things? After we get this all together and after your interviews are done and everything's collected we can start to organize it into something that makes sense, both to us and to anybody else that wants to look at it. It's a good assembly idea..."

17. teacher: "Our class could take over a whole assembly if we could pull this off in a nice, tight manner. The deal I'll make is this. It'll be your assembly. I'll push from behind if and when you need it but you'll be out front from beginning to end. What do you think? Come on, let's get a discussion going."
18. teacher: "A couple of things before we break up. George, I got that article I said I'd bring in about military law...the one you said you'd be interested in reading. Pick it up on the way out...it'll be right here on the desk. And Marilyn, I just got a note from the media center. They have a number of tapes of speeches of great people. This would be a good place to pursue it if you're still interested in comparing the last three or four presidents' speech-making techniques. All you have to do is go in and sign out the tapes. You can listen to them right there or bring them back here. O.K., that's all. See you tomorrow."

MICHIGAN STATE UNIVERSITY LIBRARIES



3 1293 03169 6002