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Beliefs and Behavior in Teaching

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RESearch on the relationship between beliefs and behavior in teaching has found that how teachers behave in the classroom is strongly influenced by what they believe. Teaching behavior is related not only to beliefs about classroom situations (educational philosophy) but also to beliefs about the fundamental questions of philosophy, or the basic content and structure of the teacher's belief system.

Continuing studies by Brown (1962, 1963, 1966, 1967_a, 1967_b, 1968_a, 1968_b, 1968_c, 1968_d) have shown that specific fundamental philosophic beliefs of teachers are even more consistently related to the observed classroom behavior of teachers than are their educational beliefs. Earlier, McGee (1955) found that the generalized authoritarian-egalitarian beliefs of teachers, measured by the California F Scale, were predictive of their classroom behavior, measured by the *Classroom Observation Record*.

Similarly strong relationships between teachers' scores on Rokeach's Dogmatism Scale and their observed classroom behavior were found by Brown (1968_d), Ober (1967), and Coates (1968). Harvey and his associates (1964, 1965_a, 1965_b, 1966) found further evidence that teachers' belief systems have a pronounced effect on the behavior of teachers, measuring both beliefs and behavior along a concrete-abstract dimension. In addition, Gordon and Combs (1968) identified a number of specific concepts of the teacher's role, particularly relating to the

use of subject matter, which were related to observed teacher behavior.

In a discussion of beliefs, semantics becomes involved. Psychological constructs which predispose an individual to act upon his environment have been measured and classified as attitudes, beliefs, interests, needs, and values. These terms often overlap in meaning and are defined differently by those who have attempted to assess them. In fact, the terms "attitudes" and "beliefs" have been used interchangeably. However, investigation of the procedures used to measure these constructs reveals that the instruments used to identify attitudes have often been developed either out of thin air or by fiat, whereas belief measures usually are developed from some theoretical foundation.

Inductively built instruments fall short in investigations of the relationship between measured attitudes and observed behavior; often no relationship is found, largely because of the difficulty in identifying the factors which the attitude scales have measured. The *Minnesota Teacher Attitude Inventory* is a case in point. Although it has enjoyed a lasting popularity as a measure of teacher attitudes, attempts to identify significant relationships between MTAI scores and teacher behavior have failed (Giebink, 1967). Therefore, for our purpose in reviewing the research in beliefs and behavior, we shall consider only the measures of beliefs and attitudes which have been made with instruments built on a logical rationale or theory,

thus making it possible to explore belief and behavior relationships.

Kerlinger (1966, 1967) has explored the relationship between attitudes toward education and perceptions of desirable characteristics of teachers. He has found that educational attitudes are dualistic; two relatively independent dimensions of these attitudes have been identified which correspond to views of education labeled "progressivism" and "traditionalism." He reports that these dimensions affect a judge's perception of desirable teacher traits.

Kerlinger's work has made important contributions to the methodology of studying attitudes and beliefs; the sophisticated statistical analysis of his data has been the great strength of his research. It is with disappointment, however, that one finds he has limited his investigation to the relationship of attitudes to perceptions of teacher characteristics and has not, at least as yet, explored their relationships to teacher behavior.

A smaller study of educational beliefs has been reported by Curran, Gordon, and Doyle (1966). Using items garnered from several sources, they have developed an instrument to measure the dimensions of a teacher's philosophy of education. This measure is based on a continuum ranging from most rationalistic to most experimental. Their conceptions of philosophic belief constructs have similar dimensions to those identified by Kerlinger; but they are developed within a tighter theoretical framework, one which measures the logical consistency of an individual's concepts of reality, knowledge, and values.

Sorenson and associates (1963, 1968), in an approach to the problem of measuring teacher effectiveness, have developed instruments to measure the concepts that persons hold of the teacher role. Basing their work on role theory, they have found that people indeed differ in their beliefs about the teacher's role; even among educators there are differing and contradictory role expectations. They hypothesize that teaching behavior may be predicted from the role expectations of a teacher; however, they have yet to explore this dimension.

The belief instruments discussed above, all being squarely based on theory, show promise as useful assessments of teacher beliefs and attitudes. They are limited, however, by the lack of evidence that they measure beliefs which are related to teacher behavior. Without empirical investigation, there is no way to identify those exact attitudes and beliefs which have a direct relationship to specific classroom behaviors and those which have little or no influence on what transpires in the classroom. Rather, one must take on faith that each of these instruments represents a general, global set of beliefs which affect all areas of behavior in the same manner to the same degree. Research on the relationship between beliefs and behavior shows that such an assumption is not warranted.

The single greatest impetus in the study of teacher behavior has come in the past decade through the development of systematic observation. Systems have been designed to describe and quantify the classroom behavior of teachers and their students. These systems attempt to measure the intellectual activity in the classroom (Bellack and others, 1963; Gallagher and Aschner, 1963; Taba and others, 1964; Brown and others, 1968); the communication patterns (Withall, 1949; Flanders, 1960; Hughes, 1963; May and DeVault, 1967; Ober, 1968); the management of the classroom (Kounin, 1968); and the reinforcement patterns of the teacher (Bloom, 1967).

In addition, multidimensional systems have been developed (Medley and Mitzel, 1958 and 1963; Perkins, 1964) which attempt to assess more than one dimension of teacher and pupil behavior. There has been no dearth of observation systems devised, however, these systems have been used largely to describe teaching patterns or to identify relationships between teacher behavior and pupil achievement. Their most serious shortcoming has been that they have made no attempt to assess the content and structure of the belief systems which influence the observed behavior. Thus they can only describe what happens in the class-

room; they have no power to explain or predict the behaviors they have measured.

An investigation of the influence of teachers' belief systems on their classroom behavior has been made by Harvey and associates (1966). They have found that an individual's belief system may be conceptualized as a point on a continuum between concreteness and abstractness. After responding to instruments designed to measure the concreteness-abstractness of belief systems, teachers were classified as to the structure of their beliefs and subsequently observed and rated on twenty-six behavioral dimensions by trained observers. The results were consistent in showing the more abstract teachers differ from the more concrete teachers in their teaching approaches and in the classroom atmospheres they generated for their students in ways which were presumed to be more educationally desirable. The important finding here was that teachers' beliefs were found to have a pronounced effect on their observed behavior in predictable directions.

A singular approach to the study of the relationship between beliefs, teacher behavior, and evaluation of that behavior has been made by Brown (1968_b). He has developed a system of classroom observation and instruments to measure fundamental philosophic and teaching beliefs, all of which are based on the same theoretical dimension—agreement-disagreement with John Dewey's experimentalism. Hypothesizing that both basic and educational beliefs will affect a teacher's classroom behavior, Brown has conducted research to investigate these relationships. It was found that professed beliefs do influence observed teaching behavior, but not always in a clear-cut direction. Indications were that professed educational beliefs had a generalized effect upon teaching behavior; specific fundamental beliefs were most powerful in influencing specific classroom behaviors.

It was also found that teachers often hold inconsistent beliefs. Their fundamental philosophic beliefs were not congruent with their beliefs about teaching and this inconsistency was reflected in their teaching be-

havior. This work clearly indicates that measuring educational beliefs does not provide enough information.

We hold that study of the relationship between beliefs and behavior is a most important key to unraveling the complexities in explaining and predicting teacher behavior. Belief instruments which have no theoretically related observation systems and observation systems which have no method of measuring beliefs along a similar theoretical dimension can do only half the job. Fruitful investigations into teacher behavior demand both.

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