This paper reviews research on the subject of teacher-student interaction on the nonverbal, psychological, and subjective level. It is recognized that the teacher-learner process is more than what is consciously taught in the school curriculum. What each person takes into the situation, such matters as personality, attitudes, expectations, socioeconomic status, and sex, has an effect on what is learned. Young children in the early years of schooling tend to model a teacher's behavior and to accept the teacher's assessment of them. High expectations, respect, and supportive behavior on the part of the teacher will elicit high achievement on the part of the child. On the other hand, a teacher may unintentionally reveal a subtle dislike or indifference to a child that can have a highly detrimental effect on the child's learning achievement. The conclusion is reached that a teacher's attitude and overt behavior has a powerful effect on the learning process and that teachers should be aware of the influence of their own biases, personality traits, and expectations. (JD)
John Bremer (1971), in a lecture entitled "Curriculum is the Child", spoke of the effect of how people behave toward each other as the most significant and least understood phenomenon of schooling. He suggested that educators must not only be conscious of the stated curriculum of what is being taught, but also the subliminal curriculum of how learning takes place. The Association for Supervision and Curriculum Development devoted its yearbook of nineteen seventy to this theme. In the book, The Unstudied Curriculum -- Its Impact on Children (Overly, 1970), there was contained a collection of chapters written by experts that were entitled: "The Consequences of Schooling", "Curriculum as Educational Process", "The Impact of School Philosophy and Practice on Child Development", "The Moral Atmosphere of the School", and "Teacher Expectations and Pupil Learning". In sum, the chapters were an indication of the multi-faceted aspects of schooling that have an impact on students.

The "unstudied curriculum" commonly was referred to as the "hidden curriculum." One of the reasons that it was hidden, was
that historically it had not been an accepted field of study. Recent studies (cited in the following review of the literature) were evidence that this is no longer true. The subject, however, remains difficult to unravel. Analyzing curriculum in terms of stated objectives, methodology, resources, and standardized achievement scores is relatively easy. It is quite different to determine curriculum on the basis of attitudes, non-verbal and verbal behavior, morales, and values. Such factors are so much a part of each person, that to analyze them objectively is difficult. In common terms, one is not able "to see the trees from the forest." Even if one can be objective, an added scientific dilemma remains. Affective variables are difficult to analyze as to cause and effect. Instrumentation for doing so is relatively unsophisticated and, at best, can only infer some relationship between and among variables. For these reasons, to say that the 'hidden curriculum' is not an easy concept to study was an understatement. B. V. Ristow (1972), in a summary of the research, wrote, "... the 'hidden curriculum' is a very loose, ambiguous and not yet clearly conceptualized field of study."

Researchers having no empirical precision as to the boundaries of what is happening subtly within a school, have had to take a "scattergun" approach. They have gone off in many areas, attempting to isolate significant variables as they explore the terrain.
Evidence is mounting that there is a relationship among variables of teacher personality (including behavior and attitudes) and student outcomes. Such research has been an outgrowth of a philosophical and psychological theory of knowledge and learning.

**Philosophical and Psychological Overview**

Correlation studies of students and teachers were derived from a philosophical and psychological view of the nature of knowledge. Jean Piaget (1970) in his philosophical treatise entitled *Genetic Epistemology* reconciled the conflict between the philosophies that viewed knowledge as either external to man or constructed by man. Piaget pointed out that knowledge is not derived from one in the absence of the other. Instead, it is the interaction of man with the external environment that results in knowledge. Piaget (1970, p. 77) wrote

...Knowledge results from continuous construction, since in each act of understanding, some degree of invention is involved; in development, the passage from one stage to the next is always characterized by the formation of new structures which did not exist before, either in the external world or in the subject's mind.

Psychologists such as Piaget (1970), Jerome Bruner (1966), A. H. Maslow (1962), Carl Rogers (1962), Arthur Combs (1962), and Earl Kelley (1947) have used this interactional assumption as the basis for their clinical and research work. Interactional appli-
cation to education was to focus on the particular individual in regard to his immediate environment. The concern was with what each does to each other or the process between them. Therefore, the focus for studying certain student outcomes was to study the student with his mates, superiors, and physical environment. To study certain teacher outcomes was to study the teacher with her peers, superiors, and physical environment.

**General Studies of Teacher-Student Interaction**

Attention and controversy have been riveted to the field of interactional studies since the Rosenthal and Jacobsen (1966) study, *Pygmalion in the Classroom*. In this study, they found an increase in achievement in first grade youngsters who were arbitrarily labelled, at the beginning of the year, as high potential achievers ("bloomers"). Other students of similar ability were not labelled and were used as a control group. Their performance was normal but significantly less than the labelled youngsters. The finding that teachers and students actually responded to a false expectation to make it self-fulfilling was the first suggestion, statistically recorded and brought to the public's attention, that there was something of a non-pedagogical nature at work in schools.
Since that time, numerous researchers have studied other non-instructional variables that effect students. Rosenthal and Rubin (1971), Beez (1968), Larrabee and Kleinsasser (1967), and Brophy and Good (1971) have verified the influence of expectations on certain outcomes. Flanders (1960), Wallen (1966), Doyal and Forsyth (1973) have found significant relationships between student and teacher on personality and attitude variables. Yee (1968), Sikes (1971), Veldman and Peck (1969), and Adams and Biddle (1970) have found significant relationships with physical and social variables such as social status, economic class, and sex type.

The findings of the cited research, enabled one to conclude that the teacher-learner process was much more than what was consciously taught. What each person takes into the situation, such matters as personality traits, attitudes, expectations, socio-economic status and sex, had an effect on what is learned. In addition, these variables influenced how learning took place. All of these matters were labelled as the "hidden curriculum." Biber and Minuchin (1970) in their study of staff and school influence on the mental health of students concluded that non-academic processes had a significant influence. Biber and Minuchin (1970, p. 49) stated that the results

...suggest that the impact of the school (if consistent) is indeed broad, going far beyond the academic material it may identify as its curriculum.
Modeling Studies

Any attempts to ascertain cause and effect in human correlation studies were limited. Such studies cannot be strictly controlled to isolate one variable as stimulus. A substantial case, however, for children modeling adults in correlations of attitudes, personality traits, and perceptions, can be made based on psychological theory. According to such theory, a child in long and intimate contact with an adult, would acquire some of those adult characteristics.

Bandura (1969) provided a rather complicated definition of modeling. For the purposes of this review, it was sufficient to simplify it into two components. Modeling is the process of observation and then imitation of one person's characteristics by another. Butler (1970) added to this definition by focusing on why this process occurs. She wrote (p. 74)

The potency of the model is considerably enhanced when the child feels a strong emotional involvement with the model, when there are complex patterns of interaction, when the person is perceived as having high status, and when the model represents a group of which the child is or aspires to be, a member.

It was obvious that in many circumstances, a teacher can meet this requirement. This role that a teacher must play has been the focus of the writing of such educational psychologists as Arthur Combs (1972), Arthur Jersild (1955), William Purkey (1970), and such clinical psychologists as A. H. Maslow (1954)
and Carl Rogers (1961). They have all alluded to the importance of others in influencing a person to achieve his/her potential.

The type of person that a teacher was, was going to have a greater influence on her students than what she wanted them to be. Stated in simple terms, "what you do speaks so loudly that I can hardly hear what you say."

The evidence that persons who are viewed as important by children have an effect on their behavior was well documented. That young children were influenced in such areas as decision making, altruistic behavior, and charity had been established through the research of Bandura and Whalen (1966), Bandura and McDonald (1963), Hartup and Coates (1967), Bandura and Houston (1961), Bryan (1969), and Rosenhan and White (1967). The evidence that the adult became a significant model dependent on the degree of power, intimacy and nurturance towards the child is demonstrated in the research of Bandura and Kupers (1964), Bandura (1965), Grasec and Mischell (1966), and Bandura, Ross and Ross (1963).

It was interesting to note that most of the conclusive findings on modeling were studies compiled on young children to about the age of ten. As Albert (1974), p. 7) pointed out, in her review of the literature on modeling, there are few studies of older students (middle school or high school). This can be explained within the social-psychological theory of Erikson (1959).
As a child becomes older, adults lose their significance and are replaced in importance by peers. This would indicate that with older students, the modeling effect with regard to teachers might not be significant. This had been the case in many diverse studies done by Zellers (1972), Pumphrey (1968), Marino (1965), Jones (1973), Woolfolk (1970), Collins (1970) and Buckley (1969).

In addition to significant studies being limited to young children, another commonality was that modeling studies have been focused on the imitation outcomes of the process. The first dimension of the process, that of observation, has not been clearly studied. In other words, the act of how one initially begins the process, by perceiving in a unique way (selecting and screening from the environment) may have a degree of importance all by itself. Does the simple perception of the model have a powerful influence on the child?

An affirmative answer was tentatively given as a result of the studies done by McNiece (1969) and Mann (1974). They found a link between how teachers view certain student perceptual or attitudinal outcomes. McNiece studied five hundred and sixty students, grades four through six with their fifty-six teachers. She found that the teachers' perception of authoritarianism in the school related to students' responses on dogmatism of beliefs. Mann studied six hundred and eighty-five students with their twenty-seven teachers, grades three through six. He found that
teacher's perceptions of human nature correlated with their students' perceptions of themselves. Both studies were suggestive of the importance of the role of perception in influencing the teacher-student relationship.

**Perception of Climate Studies**

Studies of teachers' perceptions of their school climate in regard to how they perceive their principal and their peers have been correlated with certain student outcomes. Andrew Halpin (1966, p. 131) defined organized climate as the way that a school "feels" or its own "personality". He wrote,

> It is this 'personality' that we describe here as the 'organizational climate' of the school. Analogously, personality is to the individual what organizational climate is to the organization.

As evidenced by the research of Reilley (1973), and Panushka (1970), teacher perception of aspects of the school environment has appeared to be a predictor of student achievement. Smith (1973) found a relationship of teacher perception of climate with student morale.

A more idiosyncratic link has been found by Thayer (1971) and Glickman (1976) between an individual teacher's perception of his/her school climate with his/her students' perception of their classroom climate. It would appear that how a teacher perceives her working relationship with her peers and principal, influences
Personality and Socio-economic Variable

Personality traits and behavioral characteristics of teachers have been given the most attention by researchers since the advent of the Interactional Analysis Grid developed by Ned Flanders (1970). Flanders (1960), and Norman Wallen (1966), have found relationships between teacher personality traits and student outcomes. For example, Wallen (1966, p. 609) in a study of seventy-six, first and third grade teachers and their pupils found

"...such (teacher) characteristics as overt affection and strong personality need for achievement and control were negatively correlated with 'desirable' (student) outcomes."

On the other hand, he found that teachers who were stimulating and intellectually alive and at the same time were warm and supportive had students who performed high in both achievement and attitude towards school. Additionally, they were more divergent in their thinking and had less personal anxiety.

Interactional studies have proliferated in the last ten years. Although the research has not indicated one particular 'best' type of teacher personality, the evidence has supported a causal link between certain teacher traits with certain student results. For example, G. T. Doyal and R. A. Forsyth (1973) con-
cluded from their research that teachers who possessed high anxiety had students with a similar level of anxiety.

The variables of expectations, attitudes, perception, climate, and personality traits were not the only variables that have been researched as influential in the school process. Others that need to be mentioned have been social status, economic class, sex-type, and race. Edgar Z. Friedenberg (1970) wrote of the entrenchment of middle-class values in the school. Those students who do not accept the values of competition and conformity are viewed as deviants. Children raised in a culture that has values different from the mono-cultural institutions are at a disadvantage. Friedenberg stated (1970, p. 23)

The function of school routines is to link the student's self esteem to his ability to accept lower-middle class values and styles of life without rebelling against them or becoming a troublemaker.

Friedenberg linked social status with economic class. A. Yee (1968) separated economic status and studied, for two years, two hundred intermediate grade teachers and their students. Those studied were from middle and lower class populations. Yee made several significant findings. First, teachers judged students as good or bad on the basis of economic class rather than on individual ability. Secondly, teachers favored middle class over lower class children. Thirdly, middle class students had a more favor-
able attitude towards school than lower class students. In summary, a clear delineation, based on economic position, existed between teacher attitudes to students, and student attitudes toward school.

There are additional variables of sex type and race that have been documented as factors in school. Sikes (1971), Veldman and Peck (1964), and Adams and Biddle (1970) were some of the researchers who have found significant differences in the teaching-learning process as a result of teacher and student sex. Finn (1972), Roibovits and Maehr (1973), Leacock, (1969) and Byers and Byers (1972) who have found significant differences in the treatment and results of students of different race. Sex and race discrimination are perhaps the most widely publicized variables of schooling and therefore are the least hidden of the interactional processes at work in the educational setting.

Summary

With the exception of race and sex-typing, the role that variables of attitudes, expectations, perceptions, climate, socioeconomic status, and personality factors have on teacher and students is not widely understood. Although these variables are the focus of theory and research, the application to teacher training is virtually non-existent. In fact, the writer's own experience in conducting graduate courses and in-service programs
on the "hidden curriculum" for teachers was to find that most teachers are surprised but intrigued by the idea that their students are learning far more than the curriculum and textbooks in hand. The research appears to support that a teacher lives; his/her perceptions, attitudes, expectations, behaviors, etc., provides a most powerful lesson to his/her students.

It is the writer's opinion that teachers are not ill intentioned people. If they were aware of some of the detrimental effects that they were having, they probably would be willing to work towards change. However, the tragedy of the matter is that teachers are unaware of what they are doing. Jere Brophy and Thomas Good (1974) after concluding the personality studies were amazed to find what the teachers in the studies were dismayed to find out how they were treating students on a personal, preferential basis. They were totally unaware of how their own personality traits, biases, expectations, etc., had been influencing students.

In conclusion, Brophy and Good (1974, p. 277) stated the point well.

If one assumes . . . that this factor (unawareness) . . . is the major cause of inappropriate classroom teaching, it follows that much inappropriate teaching can be eliminated simply by making the teacher aware of what he is doing.

This awareness will come about if educators involved in teacher training institutes and in-service programs will address themselves
to the task of uncovering the "hidden curriculum", and thus give teachers an opportunity to look at their own personalities and assess their effect on students.
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