DOCUMENT RESUME

ABSTRACT
                This study was undertaken to test the authenticity of
an earlier study by Olmsted, Blackington, and Houston which devised a
way of categorizing teachers according to their responses on a number
of scales having to do with their attitudes about the profession. The
previous study used 60 preservice teacher interns, mostly female,
from Michigan State University. Seven identifiable types were
discovered. The unique characteristics of each type concerned such
things as respect for authority, concept of the goals of teaching,
conformity, and alienation from other teachers. The present study
used 60 randomly chosen teachers from six school districts. The
subjects included male and female teachers, elementary and secondary
teachers, and new and experienced teachers. Only five types were
identified in this study, and those types did not have as definitive
characteristics as in the first study. It was concluded that the
Olmsted test could not be generalizable to a larger sample of
teachers and therefore should be used neither to predict teacher
behavior nor as a screening tool for teacher education programs or
for hiring. It was recommended that future studies of teacher
attitudes utilize clearer and more definite scales and that better
ways of measuring reliability of raters be established. (References
and tables are included.) (CD)

The Use of Professional Beliefs in the Study

of Teachers and Teaching

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The purpose of this study was to explore the feasibility of using professional beliefs as a means by catagorizing teachers using a narrowly tested interview schedule (Houston, 1973) which purports to measure these beliefs.

Professional beliefs take in the perceptions that teachers have of themselves as teachers and of the things involved in their teaching environment. This may include such perceptions as those concerning the nature of children (e.g. children as unique individuals as contrasted to as a monolithic group), perceptions as to the legitimacy of power based on postition in an organizational structure, and perceptions of the teaching task as self-fulfilling.

A basic problem encountered in many studies of teachers and teaching has been the absence of authentic and predictive teacher descriptors. The problem is really two-fold. First, are these ways of describing and classifying teachers which describe real categories which exist in the field? Do people who are observed actually behave in ways that the descriptors describe? This is a basic question and is important from a statistical as well as from an experimental viewpoint since the forcing of categories will inevitably result in the loss of a good deal of variance along the criterion variables.

Perhaps of greater import, however, is the question of generalization. If categories used for describing teachers are arbitrary or simply artifacts of a given sample of the entire population of teachers, their usefulness in describing a sample of teachers other than those from which the original categories were drawn is questionable. It would be quite possible to find teachers in the population who fit into none of the categories. It is the usefulness of these categories as descriptors that is important here. If we are given a study which develops teacher categories and sets them up as useful descriptors of teacher characteristics, would other studies be able to replicate these findings in terms of the number of categories and the descriptions of the categories derived from the original study?

Any system of categorization is, by its very nature, reductionalistic. There is no question that a certain amount of variance will be lost in the process of categorization. However, the basic problem in building a categorization system is that of identifying clusters or patterns and tying them in with observed behavior rather than identifying isomorphic relationships.

This brings up the second problem: the predictability of the categorization. Will teachers characterized into different groups behave differently? That is, will a teacher placed in category A behave differently from a teacher in category

3

B when both are categorized using a given system? Furthermore, will teachers in category A behave similarly along a series of criterion variables? Can we predict certain behaviors of teachers on the basis of the categories they fall into? As with any system of categorization the concern is whether or not describing people in a particular way is at all useful. The question is that of construct validity and predictive validity of the categorization system.

The payoff involved in the development of a system of categorization for teachers which meets the criteria described above is great enough to make the endeavor worth-while for a number of reasons. The development of such a system of characterization could be viewed as defining an aptitude for future aptitude-treatment interaction studies (c.f. Cronbach and Snow, 1968) involving teachers and teaching. Such studies could provide guidlines.

The trend toward redesigning teacher preparation programs in many institutions of higher education requires and will continue to require the making of many decisions by the people involved in these programs. It is important that these decisions be made on the basis of strong empirical evidence. To this end, a broad empirical base relating to issues in teacher education is essential. The establishment of a relationship between professional beliefs and teacher behavior could be a useful part of this empirical base.

Finally, if professional belief categories could be found which have good predictive value they could be useful in the screening of applicants for teacher education programs as well as for screening candidates for teaching positions.

A Phenomenological Base

Phenomenological theory holds that "... one cannot understand and predict human behavior without knowledge of S's conscious perceptions of his environment and of his self as he sees it in relation to the environment" (Wylie, 1961, p.6).

If as Combs and Snygg (1959), Maslow (1962), and Patterson (1973) indicate, a person's perceptions are the determiners of behavior, the study of professional beliefs should prove to be a fertile area of research in understanding the antecedents of teacher behavior and in predicting these behaviors. Gooding (1964) showed that it was possible to make inferences concerning beliefs of teachers from observations and interviews with high levels of reliability. Redall (1951), Taylor (1953), Carlson (1965), Culler (1966), and Combs, Avila, and Purkey (1971) have pointed out that important beliefs are frustratingly stable. Changes in these beliefs occur slowly and sometimes only over long time periods.

The Michigan State Study

Houston (1973) and Olmsted, Blackington and Houston (1974) report a study where teacher professional beliefs were inverstigated using inferential techniques. The subjects were sixty teahcer interns (mostly female) involved in a preservice professional prearartion program in elementary education at Michigan State University (c.f. Corman and Olmsted, 1964). During the interns' final year of study they were interviewed to proble their perceptions and beliefs in fifty-six areas. These areas were determined as a result of previous interviews and observations made over the course of the interns' participation in the program as well as through a review of related literature. The scales used were a series of four point scales. Some asked the rater to make an overall assessment of the teacher. However, the majority of the scales simply required a decision that a given belief or trait was either present, absent, or neither clearly present or absent.

Pairs of trained raters, working independently, rated the interview transcripts along the fifty-six scales with a median perfect agreement of 75 percent over all pairs of judges. Scores obtained from these rating scales were then analyzed using the McQuitty Rank Scale Typal Analysis (McQuitty, 1961). The McQuitty analysis compares individuals and groups them according to the critertion that if $\Upsilon xy > \Upsilon xz$ and $\Upsilon xy > \Upsilon yz$. Thus, each preservice teacher must be more like any other preservice teachers iwth whom she was typed than like any other preservice teacher in any other group. Using this decision rule, seven "stance types" were obtained.

1) <u>Child Focusers</u> are child advocates who perceive the child as an unfinished personality with special needs which the teacher must try to serve. To them schools exist for individual children.

2) <u>Pragmatists</u> believe that experience teaches and that they can learn from their experience. They are good politicians who avoid dramatic confrontations. They are good organization people who are loyal to their school system in public. They work well on committees without complaint. Pragmatists do things because they achieve goals and negotiate between the needs of children and their own needs for autonomy.

3) <u>Task Focusers</u> see their main goal as helping children master their assignments. They believe that school is a very serious business. They feel a great deal of pressure and believe that the basic problem is how to motivate pupils. There is never enough time for them. The greatest problem they have is the conflict between their beliefs and the values that predominate in many schools.

4) The Contended Conformist, while finding working with children satisfying, is primarily concerned with the achievement of his own personal goals, they do what is expected of them with as much skill as they have. There is no feeling of pressure since they believe that teaching is not a job requiring the making of choices, but merely of doing as one is told. Thus, teaching provides the Contended Conformist with both security and self-fulfillment. They accept the authority of their superiors and expect their pupils to accept their authority, as well.

5) Timeservers do not share the Contended Conformists' good feelings about teaching and teachers. They accept authority, but only with a good deal of complaining. They have little concern for their own professional achievement and feel that teaching neither requires special knowledge nor serves society. This is due to the fact that Timeservers lack an integrated belief system about education. Also, as a result of this they are easily threatened by children and adults. They are the only type which give intrinsic value to order and are, thus, very concerned with problems of classroom management.

6) Ambivalents appear to be people in transition. What they do is filled with inconsistencies.

7) The Alienateds' chief distinction is their inability or refusal to identify with other teachers or see any worth in the tasks schools set for children. However, they are the most varied type since the reasons for their negative beliefs are so varied. Some reject certain groups of children assigned to them or the particular faculty with whom they work. Some deny the validity of the curriculum. They seem to be highly egocentric and easily threatened people.

The Present Study

If valid and reliable, the results of the Michigan State study would represent a breakthrough in the understanding of teacher behavior. The usefulness of an understanding of professional beliefs in arriving at these understandings has been previously pointed out.

In an attempt to begin validation of professional beliefs, the following questions and actions were proposed:

1. Are the professional belief categories derived by the Michigan State study found in a more general population of teachers?

2. <u>Are there variables this validation study will identify</u>
    <u>which can be used in studies of teacher behavior?</u>

Procedure

Sample

It was recognized that the sample used in this study and the population from which this sample was drawn would be an important factor in determining the generalizability of the results of this study.

The ideal sampling procedure of random sampling teachers from the entire United States was rejected on the basis that the tentativeness of the theoretical base would hardly justify the enormous cost.

The idea of sampling teachers randomly from a smaller geographical area was also rejected on the basis of various administrative difficulties.

The sampling procedure actually used involved the selection of school which would attempt to produce a sample of schools that was representative of types existing in the United States. First, contact was made with some central office administrators in order to explain the study and to explain the nature of the cooperation needed. In all cases, save one, approval was granted.[1] Ten teachers were then sampled randomly from each of the six school districts. It should be noted that the teachers proved most cooperative and at no time did any teacher chosen refuse to participate in the study.

Table 1 summarized the data describing the school districts which were sampled.

The sample was composed of sixty teachers. Twenty-eight of the subjects were males and thirty-two were females. Twenty-one of the subjects taught at the elementary level (K-6) and thirty-nine were secondary teachers (7-12). The number of years of teaching experience each teacher had ranged from one (first year teacher) to thirty-eight years with a median length of teaching experience of six years.

This constituted a diverse sample upon which to test the reliability of the procedures used in the Michigan State study.

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[1] The assistant superintendent in one school district said that the teachers in his school district were too busy to participate in the study when he was approached to ask his cooperation in carrying out this research.

Data Collection

Interviews

Subjects were interviewed using the interview schedule employed by Houston and his associated at Michigan State. Each interview was conducted in the subject's school during or immediately following the regular school day and were audio taped with the subject's knowledge. The same interviewer conducted all interviews with only the subject and the interviewer present in all cases.

Ratings

Raters were trained to rate the interviews along the fifty-six rating scales. Each interview was rated by two independent raters after an acceptable level of interrater reliability was obtained. Interrater reliability ratings were obtained using the analysis of variance procedure described by Ebel (1951) rather than by the use of agreement scores due to the unequivalence of reliability coeffecients and agreement scores described by Jensen (1972). The mean of the tow scores was used as the subject's ratings on each scale.

Data Analysis

To deal with question one, the interview rating scale scores were put through the McQuitty Typal Analysis. Types were identified along with individual subjects falling into each type. The saliency of each of the fifty-six variables (as defined by scales) was determined as in the Michigan State study and these were compared.

In attempt to deal with question two, factor analytic techniques were employed. Using the interview derived data, a principal components solution with a veriman rotation was done as described by Harmon (1967). The results of this analysis were examined for possible variables to be used in future studies using techniques similar to those employed by Samph and White (1973).

Results

Question 1 - Replication of the Michigan State Study

Raters required twenty-six hours of training. At the end of this time fifty-four of the scales' reliability estimates fell between .448 and .863 with a median reliability of .656. For the remaining two, rather extraordinary reliability estimates of -.028 and .044 were obtained.

The average rater scores were found for each scale for each subject and these were used to calculate agreement scores for each subject. Thes agreement scores were analyzed using the McQuitty Analysis. Five types were derived

consisting of 19, 16, 15, 6, and 14 members, respectively.

Table 2 presents the five types which were derived by the analysis and their constituent scales. Examination of this table revealed a lack of consistency on most scales for Type V teachers. Aside from their beliefs in the validity of authoritative acts, their concern for academic objectives, and their satisfaction with their own teaching, they are diverse individuals. Yet, these characteristics clearly set them apart as a group.

Types I through IV were not nearly as definitive as Type V and for this reason they are simply referred to by number to avoid inferring any specific belief conceptualizations or behavioral correlations with these types.

The lack of clear cut distinctions between Types I through IV make conceptualization of these types difficult. Five scales did not discriminate between types at all. Eighteen scales discriminated only for Type I, the descriptors in Types I through IV being identical (see Table 3).

The minimum agreement scores for entering a sign in the table was determined from the values used in the Michigan State study. In these cases, the same minimum agreement score was used for these types. However, three of the types derived in this study contained numbers of members not found in the previous study. Plotting the number of members in the types against the minimum agreement values used in the Michigan State study revealed a nearly linear function corresponding to the equation $y = 1.37 = .65x$.

Question 2 - Deriving Behavioral Variables Using Factor Analysis

The factor analysis yielded fourteen factors with eigenvalues greater than 1.0 accounting for 81.3 percent of the total variance (see Table 4). Variables (scales) were assigned to factors using the decision rule that assignment should be to the factor on which the variable loaded highest. In two cases this rule was suspended and the second highest factor was used in order to make the factors more interpretable. For the same reason, two variables were assigned to two factors each where the first and second highest loadings were very close to each other. The fourteen factors have been described as:

I -   Perceptions of the nature of teaching and children.

II -   Perceptions of relationships with students.

III -   Acceptance of authority.

IV -   Perceived importance of order.

V -   Responses to problems and problem solving.

9

VI - Teaching as the facilitation of academic learning.

VII - Saliency of the status of teaching as an occupation.

VIII - Allienation from student and collegues.

IX - Ability to think analytically.

X - Importance of personal security.

XI - Perceptions of subordinates.

XII - Egocentrism.

XIII - Teaching as a feminine occupation.

XIV - Importance of externals.

Table 5 represents the composition of these factors.

Discussion and Conclusions

Question 1 - Replication of the Michigan State Study

Types Derived

The findings of this study failed to replicate those of the Michigan State study. Only five types were derived and these were not nearly as definitive as those found in the original research.

Type V was the most definitive of these types. Members of this type appear to tend toward authoritarian beliefs. They accept authoritative acts of their superiors and, in return, expect their students to comply with their demands. These teachers consistently perceive academic objectives as important while varying in their perceptions of the value of social and psychological growth. This is not uncongruous. Teaching may have many goals; all or most of which deal with academic objectives.

It was not possible to generalize among teachers in Types I through IV. There were no clear differences or commonalities between or within groups that would clearly define these types in a meaningful way. This is in marked contrast to the Michigan State study results which showed a great amount of between group variance and inferred little or no within group variance.

A number of explanations present themselves in attempting to explain the failure to replicate the results of the previous study. The sample used in this study was composed of teachers from a broad variety of teaching situations and having a widely varying number of years in service. The sample included both male and female teachers. The sample used in the Michigan State study was composed primarily of female preservice interns. These differences in the nature of the samples could account for the differences observed.

Individuals new to teaching enter the field with varied beliefs regarding themselves, children and teaching as a profession. As they spend time in the school environment their beliefs may change as a function of their experiences over periods of time. Similarities in various school environments may tend to produce similar beliefs in teachers. In essence, the socializing atmosphere of the teaching profession may tend to limit variability in members of the profession. Olmsted, et.al. (1974) point out some facts that may support this idea. They observed differential drop-out rates among interns who came into the program based on student objectives in entering teaching (e.g. security, authority, personal achievement). If these trends are common in teacher education programs and if they carry on during the inservice period, they could account for the decreased variability observed in teachers with more time in service than the Michigan State interns. Teachers who are not socialized by the atmosphere of the school may soon leave the profession. As a result variability would be decreased.

A third explanation of the lack of deficitiveness could be a general lack of inferential ability on the part of the raters who rated the taped interviews. If the raters were uniformly low in inference they might have been expected to show good interrater reliability while displaying poor validity. Their ratings would have been, more or less, descriptions of self-reports. Self-reports are generally colored by attempts to protect self-esteem and to conform to societal, professional, and peer norms (Combs, et al, 1963, Combs, et al, 1971). Rater validity could have been estimated by having raters in this study rate protocols used in the Michigan State study and then comparing the sets of ratings. However, neither of the two reports of the previous study provided any raw data, nor were sample interview results and ratings available from the investigators and, as a result, rate validity could not be determined. This was particularly critical since the coding rules used for rating the scales were vague and lacked precision.

Question 2 - Deriving Behavioral Variables Using Factor Analysis

The failure to replicate the findings of the Michigan State study and the unresolved question of rate validity made any attempt to use the results of the factor analysis to derive behavioral criteria rather pointless. However, the factor analysis provided some useful information and guidlines for future studies in this area.

Principal component solutions are designed to derive the first factor so as to maximize its contribution in terms of the variance it accounts for. The verimax rotation further attempts to make the final solution of low complexity by adding to the upper and lower factor loadings at the expense of the middle ones. This low complexity was desired in order to make the results of the analysis as interpretable as possible. In fact, the low complexity resulted in a very large factor containing 46 percent of the total number of scales and almost a third of the total variance. Many of the vatiables on which Factor I loaded heaviest dealt with the teacher's perceptions of the teaching task and the nature of children. A number of them, however, seemed to fall in neither of these categories. This made interpretation of this factor extremely difficult. Other factors accounted for less variance, but were more interpretable. This points out the possible desirability of using a factor analytic technique other than principal components in future studies of this type.

Much more significant, however, is the finding that the scales used in both this and the Michigan State Studies were definitely not independent. The overlap between scales indicated by the amounts of variance shared by the scales is evidence of this. Table 6 indicates rather high communalities and, thus, a great deal of shared variance between the variables. This intercorrelation between variables could also explain the lack of definitiveness in both the types generated by the McQuitty analysis and in the factors derived by the factor analysis. This phenomenon also suggests that the same information obtained by the fifty-six scales might be obtained by a group of fewer independent scales. Dealing with fewer scales may simplify the gathering of data and further facilitate such studies.

Summation

The results of this study did not justify the use of the techniques used by the Michigan researcher for screening applicants to teacher education programs or for making decisions in hiring and staff deployment. This is not to imply that use of professional beliefs could not prove to be useful in studies of teachers and teaching. Before more work along this line is done, however, a number of things should be accomplished.

A clear and concise set of coding rules must be established. This would involve operationalizing the descriptions of the scales to the point that there is little doubt of what is meant by each of them. Once this is done, raters should be trained in using these more precise scales. A standard set of protocols and ratings should be established against which to test rater validity. Particular care should be taken to insure independence of the rating scales. These steps will begin to provide for the increase reliability and validity necessary before future studies in this direction can hope to be fruitful.

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Table 1

SUMMARY OF DESCRIPTIVE DATA OF SCHOOL DISTRICTS
FROM WHICH THE SAMPLE WAS DRAWN.

District	Percentage of Operating Expenses from State Aid	Ethnic Composition		Environment
		Students	Faculty	
1	75	.6% from minority groups	.4% from minority groups	Rural. Farms with 2 small villages.
2	70	.9% from minority groups	None from minority groups	Rural. Farms with a single small village.
3	65	.5% from minority groups	None from minority groups	Some farming. Small village. Within 10 mi. of a city over 200,000. Many residents commute.
4	27	30.7% from minority groups	6.1% from minority groups	Small amount of truck farming. Within commuting distance of city over 8 million. Many residents commute.
5	33	28% from minority groups	3% from minority groups	Urban. School district in city of over 8 million people.
6	38.5	70% from minority groups	18.4% from minority groups	Urban. School district in city of over 200,000.

TABLE 2

Self-Concept Types and Constituent Scales

Key to Descriptors: [3] + = Positive; - + Negative;
Blank = Irrelevant

Scale Domains and Scales	Self-Concept Types				
	1	2	3	4	5
COGNITIVE STRUCTURE					
Able to analyze problems (1)	+	+	+	+	
Belief system well integrated (2)	+	+	+	+	
Source of belief system external (3)			-	-	
Belief system consistent (14)		+	+	+	
Verbally fluent (17)	+	+	+	+	
MOTIVATIONAL STRUCTURE					
Sense of personal worth (18)	+	+	+	+	
Altruism (6)	+	+	+	+	
Egocentricity (5)				+	
Personal achievement salient (15)		+	+	+	
Personal security salient (16)	+			+	
Demand excellence of self (52)	+	+	+	+	
Persistent in solving problems (56)	+	+	+	+	
SATISFACTION WITH WORK SETTING					
Finds satisfaction in working with children (23)	+	+	+	+	
Compatible with present group of children (35)	+	+	+		
Compatible with present teaching situation (36)					
Finds self-fulfillment in teaching (53)	+	+	+	+	
Easily threatened by children and/or adults (37)	-	-	-	-	
Alienated from teaching as an occupation (54)					
Satisfied with own performance (55)	+	+	+	+	+
PERCEPTION OF AUTHORITY					
Willing to conform to authority (4)			+		
Accepting of specific acts of authority (9)		+			+
Accepting of functional authority (7)				-	
Accepting of change (47)	+	+	+	+	
Adults salient among concerns (21)					

TABLE 2 (cont.)

	1	2	3	4	5
Order and classroom control salient (44)			-		
Order valued for its own sake (45)					
Versitility in teaching methods valued (46)	+	+		+	
Subjects valued for their own sake (48)	-	-	-		
Pupil's understanding valued over drill (49)	+	+	+	+	
Pupil's excitement in learning valued (51)	+	+	+	+	

	TYPES	1	2	3	4	5
Number of teachers in each type;		19	16	5	6	14
Min. agreements for entry in table;		12	12	5	5	11

[3]Descriptors were determined by examining the ratings of members
of each type on each particular scale. If the number of people in
the type rated to the left of center on a scale reached or exceeded
the minimum agreements required for that type, the positive descrip-
tor was used. If the number of people rated to the right of center
on a scale reached or exceeded the minimum, the negative descriptor
was used. If neither of these conditions were met, the space was
left blank.

TABLE 3

Scales Which Do Not Discriminate Between Types

Scale	Description	Sign
	Scales Showing No Discrimination	
36	Compatible with present teaching situation	(blank)
54	Alienated from teaching as an occupation	(blank)
55	Satisfied with own performance	+
21	Adults salient among concerns	(blank)
45	Order valued for its own sake	(blank)
	Scales Discriminating Only for Type V	
1	Able to analyze problems	+
2	Belief system well integrated	+
17	Verbally fluent	+
18	Sense of personal worth	+
6	Altruism	+
52	Demands excellence in self	+
56	Persistent in solving problems	+
23	Finds satisfaction in working with students	+
37	Easily threatened by children and/or adults	−
47	Accepting of change	+
19	Importance of being respected by children	+
31	Children treated as individuals	+
34	Accepting of children	+
51	Children's attitudes considered important	+
22	Believes teaching demands special knowledge	+
10	Compliance demanded from children	(blank)
24	Believes teaching serves society	+
53	Finds self-fulfillment in teaching	+

TABLE 4

Eigenvalues of Factors and
Amount of Variance Accounted
for by Factors

actor	Eigenvalue	Percent var.	Cum. Percent Variance
1	17.57803	31.4	31.4
2	3.85098	6.9	38.3
3	3.41235	6.1	44.4
4	3.10396	5.5	49.9
5	2.97012	5.3	55.2
6	2.34924	4.2	59.4
7	2.09379	3.7	63.1
8	1.98080	3.5	66.7
9	1.68966	3.0	69.7
10	1.45818	2.6	72.3
11	1.39295	2.5	74.8
12	1.35800	2.4	77.2
13	1.15233	2.1	79.3
14	1.13350	2.0	81.3

TABLE 5

Factor Loading of the Scales on the Factors
Obtained by the Factor Analysis

	Scale	Description	Factor Loading
Factor I	6	Altruism of teacher............	.77696
	10	Response of teacher to being in a superordinate position.......	-.54400
	15	Teacher's orientation toward personal achievement...........	.61128
	17	Teacher's strong verbal fluency	.57777
	23	Occupation provides satisfactions inherent in working with children	.78295
	24	Occupation provides means of serving society................	.59309
	25	Occupation provides means of serving self...................	.58324
	27	Occupation provides challenge and variety....................	.74572
	28	Occupational responsibility restricted to classroom........	.70971
	29	Occupation is demanding in time and energy................	.76359
	31	Teacher sees children as individuals....................	.82114
	32	Teacher sees children as complex	.81122
	34	Teacher's acceptance of children	.78267
	35	Assessment of teacher's compatability..................	.83522
	39	Teacher sees task as guiding the learner....................	.73707

TABLE 5 (cont.)

	Scale	Description	Factor Loading
	40	Teacher sees goals of teaching as multiple......................	.67915
	42	Social growth of student important........................	.59888
	43	Personal growth of student important........................	.83509
	46	Teacher's versatility...........	.71669
	47	Teacher's attitude toward change...........................	.55560
	49	Teacher sees academic learning as understanding material.......	.79447
	50	Teacher sees learning how to learn as important..............	.76415
	51	Teacher sees children's attitudes toward learning as important....	.86029
	52	Teacher's demand on self for excellence......................	.62991
	53	Teaching task as self-fulfilling to teacher...........	.72096
	56	Teacher's attitude toward problems.........................	.43678
Factor II	18	Personal worth...............	.81937
	19	Being respected as teacher by children........................	.63944
	20	Being liked as a teacher by students......................	.62763
	33	Degree of consistency of teacher's demands on children.............	.41776
	55	Teacher's level of satisfaction with own performance............	.84976

TABLE 5 (cont.)

	Scale	Description	Factor Loading
Factor III	7	Teacher's source of authority	.60713
	9	Response by teacher to authoritative acts by superordinate persons.........	.81942
Factor IV	44	Teacher attitude toward order and organization........	.89403
	45	Teacher considers order as having instrinsic value.......	.80777
Factor V	2	Depth of belief system of teacher....................	.50850
	37	Teacher's response to threatening behavior..........	-.70720
	38	Degree of consistency of teacher's demands of self and others....................	.50949
	56	Teacher's attitudes towards problems......................	.41252
Factor VI	11	Professional identification of teacher....................	.30846
	41	Academic growth of student important.....................	.82195
Factor VII	26	Saliency of status of occupation for teacher...........	.64589
Factor VIII	48	Teacher sees subject matter as valuable for its own sake..	-.54789
	11	Professional identification of teacher....................	.38314
	54	Saliency of teaching as alienating....................	-.71715

TABLE 5 (cont.)

Scale		Description	Factor Loading
Factor IX	1	Teacher's analytical ability...	.45888
	14	Teacher's consistency..........	.80254
Factor X	16	Saliency of personal security for teacher....................	.74176
	22	Occupation demands knowledgeable teacher........................	.57020
Factor XI	8	Authority based on competence..	.56266
	12	Teacher's preference in children.......................	-.41124
	21	Saliency of adults for teacher.	.74928
Factor XII	4	Teacher's willingness to conform........................	.68598
	5	Egocentricity of teacher.......	.47217
Factor XIII	30	Saliency of teacher as an occupation for women...........	.69585
Factor XIV	3	Source of belief system of teacher........................	.43014
	13	Teacher's awareness of occupational characteristics.......	.71322

The fourteen factors have been described as:
Factor I - Perceptions of the nature of teaching and children.
Factor II - Perceptions of relationships with students.
Factor III - Acceptance of authority.
Factor IV - Perceived importance of order.
Factor V - Responses to problems and problem solving.
Factor VI - Teaching as the facilitation of academic learning.
Factor VII - Saliency of the status of teaching as an occupation.
Factor VIII - Allienation from students and collegues.

Table 6

Communality Estimates

Scale	Estimated Communality	Scale	Estimated Communality
1	.71330	29	.85533
2	.66295	30	.22514
3	.27919	31	.87788
4	.44990	32	.87788
5	.39891	33	.64787
6	.77048	34	.76362
7	.55876	35	.78551
8	.55450	36	.42925
9	.55876	37	.32399
10	.39891	38	.64787
11	.40461	39	.69351
12	.39103	40	.75479
13	.39867	41	.42522
14	.52840	42	.59886
15	.64044	43	.81071
16	.43059	44	.78691
17	.71130	45	.78691
18	.66443	46	.76529
19	.65124	47	.67955
20	.65124	48	.37418
21	.35909	49	.81132
22	.43059	50	.81132
23	.79398	51	.81071
24	.61008	52	.68488
25	.63889	53	.79398
26	.31758	54	.39012
27	.75972	55	.66443
28	.85533	56	.54162