

ANALYSIS OF MOTIVATIONS FOR CHOOSING
THE TEACHING PROFESSION

Thesis for the Degree of M. A.
MICHIGAN STATE UNIVERSITY

Takako Mori

1963



LIBRARY
Michigan State
University

ABSTRACT

ANALYSIS OF MOTIVATIONS FOR CHOOSING THE TEACHING PROFESSION

By Takako Mori

The main purpose of this study was to make and evaluate an instrument for studying the motivations for entering the teaching profession by Guttman's Theory of Facet Analysis. Therefore, this study could be called a pilot study or pre-test for a more scientific study.

In developing this instrument, the following assumptions were made:

1. One's motivation influences one's behavior not only through initiation, but also through determining its direction, strength, and perseverance.

2. Occupational choice is a social and psychological phenomenon. The individual choice of the particular occupation is based on the balances between the individual self concept of his needs and his evaluation of the occupational values.

3. The structure of the occupational values which are evaluated by the individual or society could be analyzed into two elements, Requirements and Satisfactions, which are offered the persons in Pre-job, On-job, and Post-job situations by the occupation.

4. These elements of occupational values should be obtained from the different dimensions of the occupation, such as Physical condition, Economic condition, Social condition, Interpersonal condition, Intellectual condition, and Ethical condition.

As a result, three facets were set up. The elements of each facet can be tabulated as follows:

<u>A. Job-Person Interaction</u>	<u>B. Aspects of Job</u>	<u>C. Time</u>
a ₁ Requirements	b ₁ Physical condition	c ₁ Pre-job
a ₂ Satisfaction	b ₂ Economic "	c ₂ On-job
	b ₃ Social "	c ₃ Post-job
	b ₄ Interpersonal "	
	b ₅ Intellectual "	
	b ₆ Ethical "	

By using these facets, the semantic framework within which to view the subuniverses, each of which has three components, one from each facet, was presented. From this a certain statistical structure for the matrix of correlation coefficients was predicted. The empirical data were then examined to see whether or not they revealed the statistical structure predicted from the semantic structure.

In this study, 26 subuniverses, which were selected and developed from previous studies concerning reasons for entering teaching, were presented and arranged on the semantic scale, $a_1 < a_2$, and then the simplex correlation structure was predicted by Guttman's Contiguity Hypothesis.

In the empirical design, from 26 subuniverses, 26 pairs of questions about the evaluation of the occupational values of teaching and its influence upon the motivations for becoming a teacher were made up.

The data were obtained from the 556 prospective teachers at Michigan State University. The findings were that the difference

by sex was recognized in almost all problems by Chi-square test, and that some occupational values of teaching were related to the motivations for becoming a teacher strongly and positively (or negatively), but other occupational values of teaching which contain the factor, Requirements, did not affect the motivations. Also, by examining the intercorrelation coefficients between 26 subuniverses, the facet analysis in this study was evaluated. It was very adequate. Therefore, it is hoped that by further study complete Cartesian product may be made up, according to these facts.

ANALYSIS OF MOTIVATIONS FOR CHOOSING
THE TEACHING PROFESSION

BY

TAKAKO MORI

A THESIS

Submitted to

Michigan State University

in partial fulfillment of the requirements
for the degree of

MASTER OF ARTS

Department of Sociology and Anthropology

1963

625 111
5/18/53

ACKNOWLEDGMENTS

I wish to sincerely thank Dr. Louis Guttman, Dr. Wilbur B. Brookover, and Dr. Walter Stellwagen for their guidances throughout the preparation of this study.

Takako Mori

TABLE OF CONTENTS

Chapter	Page
I. THE PROBLEM.	1
1. Introduction to The Problem	
2. Definition of Terms	
3. Purpose of The Study	
4. Limitations of The Study	
5. Related Studies	
II. HOW THE STUDY WAS CONDUCTED.	15
1. The Questionnaire Phase	
2. Description of The Sample	
3. Analysis of Data	
4. Examination of Facet	
III. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS.	56
1. Summary	
2. Conclusions	
3. Recommendations	
BIBLIOGRAPHY.61
APPENDIX Questionnaire.64

LIST OF TABLES

Table	Page
I. Description of Sample, by Year in College.	29
II. Description of Sample, by Age.	29
III. The Expected Level of Teaching Situation	30
IV. Father's Education Level.	30
V. Mother's Education Level.	31
VI. Classification of Father's Occupation	33
VII. Family Income	33
VIII. Time of The First Thinking of Teaching as a Career. .	34
IX. Time of Decision to become a Teacher.	35
X. Basis of Decision to become a Teacher	36
XI. The Expected Length of Staying in Teaching.	37
XII. Percentage Distribution in Each Sex Group, Based upon The Evaluation of the Teaching Occupational Values and Its Influence upon The Motivation for Becoming a Teacher	39
XIII. Correlation Coefficients between The Evaluation of The Teaching Occupational Values and Its Influence upon The Motivation for Becoming a Teacher.	44
XIV. Intercorrelation among Twenty-six Pairs of Questions about The Evaluation of The Teaching Occupational Values and Its Influence upon The Motivation for Becoming a Teacher.	55

CHAPTER I

THE PROBLEM

1. Introduction to the Problem

It has been recognized that many promising students do not enroll in Colleges of Education, and that many students in education do not expect to become permanent teachers. Students select a particular major field and/or change to another because of their evaluations of occupational values. In a society where a person's occupation exerts a pervasive influence on his life, one's occupational choice is one of the most important decisions.

On the other hand, there is no doubt that good education comes from good teachers. In order to get good teachers, we must have more precise information about the many meanings associated with teachers' situations. The study of motivation for entering teaching is not only a part of sociological and psychological studies, but is also important for the effective recruitment, education, and assignment of teachers.

In this study, it is the basic assumption that the motivation for choosing the particular occupation is based on the balance between the individual self concept of his needs and his evaluation of the occupational values. How are the occupational values of teaching evaluated today? Which value of the teaching profession strongly influences the motivation for becoming a teacher?

2. Definition of Terms

The basic assumption in this study is that the motivation

for choosing a particular occupation is the resultant force made by two vectors: the individual self concepts of one's needs and one's evaluation of the occupational values. The terms, MOTIVATION, SELF CONCEPT, NEED and OCCUPATIONAL VALUE should be defined.

MOTIVATION: The variables initiating and continuing behavior. Human motivation influences one's behavior not only through initiation, but also through determining its direction, strength, and perseverance.

SELF CONCEPT: The way in which one perceives oneself. Also it has strength and direction.

NEED: The thing, activity, or condition (internal or external) that is lacking. It has strength and direction.

OCCUPATIONAL VALUE: Any observable characteristics which each occupation has and which are recognized and evaluated by the individual and society.

3. Purposes of The Study

The study has been undertaken in an effort to discover what are strength or weakness of the previous studies concerning the motivations for choosing teaching as a career. The purposes of the present study are as follows:

1. To make the appropriate instrument, by applying Guttman's Theory of Facet Analysis.
2. To examine the facet analysis made in this study.
3. To analyse the motivations of a selected sample of prospective teachers.
4. To compare the motivating factors identified in this study with those in previous studies.

4. Limitations of The Study

No study using the same instruments or technique as this one has been reported. This study is designed to test the writer's facet analysis and assumption regarding motivation, and to explore the construction of better instruments for measuring motivations for choosing the teaching profession. It therefore is only intended as a step in the development of more comprehensive analysis of the motivation for choosing a career and methods for measuring it. The study is limited to the prospective teachers currently enrolled at Michigan State University, and may not be applicable to other populations.

5. Related Studies

Since 1923 when David Newmark made the first study of the motives for entering teaching, many investigators have tried to determine motives or reasons why people select teaching as a career. Some of them will be discussed herein. Primary attention is paid to the methodology of each study, rather than the results of the study.

David Newmark¹ questioned 113 male and 553 female students about their reasons for entering the Philadelphia Normal School in 1923. A total of 972 reasons were given, 463 of which were classified under the category "wanted to teach." It is interesting to note that Newmark concluded that the motives leading women to

¹David Newmark, "An Analysis of the Student Body of the Philadelphia Normal School, Educational Administration and Supervision, Vol. 11, 1925, 399-416.

teach are more lofty than those influencing men.

A. Scott Lee² distributed questionnaires to 826 students at the Jamaica Training School for Teachers, New York, in 1926. In the questionnaire, a check list of 25 statements which might explain reasons for choosing teaching as a profession were included. Students were asked to indicate the statements which represented "the strongest or greatest influence that led you to select teaching as a career," "the second greatest influence," and "the third greatest influence." In this study, such statements as "Teaching is a stepping stone to more desirable positions" and "My mother desired me to become a teacher," which are not indicative of any real professional interest, were ranked high. In addition to the check list, the 12 questions about the time of decision to become a teacher, the subjects studied in training schools and other topics were asked. Lee used a check list questionnaire for the first time in this study field.

In 1929, E. V. Hollis³ reported the reasons for choosing teaching as a career given by about 400 freshmen at State Teachers College, Morehead, Kentucky. The most frequently mentioned reasons, in rank order of frequency and as classified by the researcher into two categories, "Ought" and "Desire," are as follows:

Ought

Desire

- | | |
|--------------------------------|-------------------------------|
| 1. I like to be with children. | 1. Teaching provides the best |
| 2. I desire to serve humanity | immediate financial returns. |

²A. Scott Lee, "Motives of High School Graduates for Entering the Profession of Teaching," School Review, Vol. 36, 1928, 16-24.

³E. V. Hollis, "Why They Teach," Educational Administration and Supervision, Vol. 15, 1925, 678-684.

OughtDesire

- | | |
|---|---|
| <ol style="list-style-type: none"> 3. Teaching provides social and cultural advantages. 4. My parents want me to teach. 5. It permits the fullest uses of my powers of mind and soul. 6. I am happy and contented in the school-room. 7. I am so situated that I can prepare to be a good teacher. 8. It satisfies more of the yearnings of the human spirit than most vocations. | <ol style="list-style-type: none"> 2. It is stepping stone to a more desirable vocation. 3. Teaching has short hours. 4. It is interesting work. 5. The entrance standards are low. 6. It is clean work. 7. It is easy work. 8. I like to be in a position of authority. 9. It provides necessary temporary financial aid. 10. Teaching does not have the monotony of most work. |
|---|---|

The above data are similar to Mr. Lee's data. Hollis avoided any evaluation of these reasons, because he questioned whether merely "good" reasons for going into teaching were listed rather than the "real" reasons. He concluded that "It is not wise to work with teachers college freshmen on the basis that their vocational choice has made..... Apparently their being in teaching is more a matter of chance than of reasoned choice.

During the years 1932 and 1933, George Gould⁴ submitted a check list of motives including many items compiled from previous studies to student teachers with instructions to check three items in order of the strength of influence. The data indicated that the motives of men and women do not differ to any great extent. "Interest in a subject," "Interest in children of secondary-school age" (The greatest disparity between sexes was seen in this case.), and "The necessity of earning a living immediately," were major reasons. Information was also obtained from a question on the age

⁴George Gould, "Motives for Entering the Teaching Profession," Elementary School Journal, Vol. 35, 1934, 93-102.

at which the decision to prepare for teaching was made, and the question "If you were financially independent and could choose any occupation or profession that you might desire, would you have selected teaching? If the respondent answered 'No' to the preceding question, what other profession or occupation would you have selected?" The researcher found that the women made their decisions to enter teaching earlier than did the men: for the men students the median age was 18 years, while the median for the women was 15 years. In comparison with Lee's data in 1926 on the average age, Gould's subjects in both sexes decided to become a teacher about three years later than Lee's. Three hundred and five of the 450 respondents indicated that they would have selected teaching even if they had been financially able to prepare for some other professions.

In England, W. B. Tudhope⁵ submitted a list of 17 motives, which was compiled after preliminary discussions with groups of students about possible motives which had influenced their choice of the teaching profession, to 643 students in training at a two-year Teachers' Training College in 1944. He asked them to select motives and rank 1st, 2nd, 3rd, etc., in the order of the importance of their influence. Although there was the difference of the rank order by sex, "Interest in special subject," "Fondness for children," "Secure job," and "Fondness for teaching" were ranked high. It is interesting that Tudhope classified 17 motives into three categories; selfish motives, desirable motives, and incidental

⁵W. B. Tudhope, "Motives for the Choice of the Teaching Profession," British Journal of Educational Psychology, Vol. 14, 1944, 119-141.

motives. Also he thought that an understanding of these motives could be applied in two distinct ways. First by enabling the more worthy motives to exert their influence in a much wider sphere, and second, by attempting to ensure that the less worthy motives did not burden the profession with unsuitable members. He also asked students to state (a) the age at which they first formed the wish to become a teacher and (b) the age at which they decided to become a teacher. The male students generally both formed the wish and made the decision to enter teaching later than the women; more than a half of the female students formed the wish to become a teacher at 12 years old and below.

Robert W. Richey and William H. Fox⁶ studied the freshmen at Indiana University in 1942. They asked students to list the most desirable and undesirable features of public school teaching as a vocation, and the specific reasons they favored teaching as a vocation, and why they decided against teaching. They compared a group of prospective teachers with non-prospective teachers. The list of the desirable features of teaching was as follows:

Security, pay, advancement possibilities	24%
Working conditions, environment, hours	13
Opportunity for social service	16
Chance to work with young people	16
Personal prestige and satisfaction	9
Interesting and enjoyable work	8
Opportunity for social contacts	5
Miscellaneous, unclassified	4

It is interesting that the responses by those who did not plan to teach were classifiable into about the same categories as were the desirable features listed by those who planned to teach. The reasons

⁶Robert W. Richey and William H. Fox, "Analysis of Various Factors Associated with the Selection of Teaching as a Vocation," Bulletin of the School of Education, No.3, 1942, Indiana University.

for choosing the teaching profession were listed by the prospective teachers as follows:

Good salary	10%
Desire for working with young people	10
Social service opportunity, guidance possibilities	10
Good vocational prestige, personal satisfaction	10
Stimulating working conditions and environment	8
Steady employment, retirement status	7
Opportunity for outside work and recreation	7
Variety of interesting and pleasant activities	7
Opportunities for self improvement, advancement	7
Liking for the work	7
Social contacts	4
Athletic coaching opportunities	4
Need for teachers	3
Miscellaneous, unclassified	7

It is recognized that the reasons for choosing a teaching profession were almost the same as the desirable features of teaching. Although the investigators did not note that, it seems to suggest that there are relations between them.

Thomas A. Ringness⁷ made an intensive study on the relationships between teachers' motivations and their teaching efficiency in 1949. In this study, it was postulated that reasons given for choice teaching as a profession were at the level of Cattell's surface traits. It was believed that through factor analysis, "surface traits" information, collected through tests and questionnaire, could be reduced to the level of "source traits." Surface traits may be a combination of environmental and constitutional aspects of personality, and may be approached by observation of behavior and by testing. Source traits are deep, underlying traits,

⁷Thomas A. Ringness, "Relationships between Certain Attitudes toward Teaching and Teaching Success," Journal of Experimental Education, Vol. 21, 1952, 1-55.

and may be approached by factor analysis of surface traits. The 13 reasons for choice of teaching as a career were selected carefully from previous studies. It is noted that these reasons are based on the occupational values of teaching. The resulting factor analysis provided no useful data. In the order of rank, the reasons for choice obtained from the paired-comparison test are shown below. The sex differences in the value system of men and women were noted. Ringness also noted that during his study teachers' motivations changed radically.

MEN	WOMEN
<ol style="list-style-type: none"> 1. Opportunity to pursue favorite (subject matter) interest. 2. Opportunity to serve society. 3. Variety of activities, little monotony. 4. Security against layoffs, job loss. 5. Environment of interesting co-workers. 6. Prestige & respect of profession. 7. Clean, attractive physical surroundings. 8. Opportunity for professional advancement. 9. Short hours, frequent vacations. 10. Financial reward. 11. Ease of getting necessary education. 12. Ease of obtaining position. 13. Lack of physical strain. 	<ol style="list-style-type: none"> 1. Opportunity to serve society. 2. Opportunity to pursue favorite (subject matter) interest. 3. Environment of interesting co-workers. 4. Variety of activities, little monotony. 5. Prestige & respect of profession. 6. Security against job loss. 7. Clean, attractive physical surroundings. 8. Financial reward. 9. Short hours, frequent vacations. 10. Opportunity for professional advancement. 11. Ease of getting necessary education. 12. Ease of obtaining position. 13. Lack of physical strain.

In 1953, Isabel Willcox and Hugo G. Beigel⁸ asked 152 students in a state teachers college in New York and in the education department of a university in New York City the question, "What

⁸Isabel Willcox and Hugo G. Beigel, "Motivations in the Choice of Teaching, Journal of Teacher Education, Vol.4, 1953, 106-109.

particular happening, experience, or occasion first turned your thought toward teaching?" Their conclusion was that "It could be seen that teaching is chosen not merely because of intellectual interest but, more frequently, on the basis of emotional needs, and that the 'learned' reasons --- That is, the replies which students think are expected of them (i.e. "Teaching is essential work," "Desire to help society") --- should not be accepted at face value. At the same time, that motivations may have desirable and undesirable potentialities must be remembered." However, the question remains as to whether the "desirable" or "worthy" or "good" motivations can be determined.

In 1935, Clarence Fielstra⁹ administered a questionnaire to 230 students at University of California, Los Angeles, to discover and to analyze students' opinions concerning (1) opportunities they believed to exist and to be important in teaching, and (2) factors which influenced their decisions to become a teacher. His assumption was that the decision to become a teacher would be strongly influenced by beliefs concerning the opportunities in the profession. The 230 students were asked to rate the 14 statements "0" if they believed the opportunity described did not exist or was not at all important, and to rate it "10" if they believed the opportunity was great and was very important. For gradation of opinion in between these extremes, they were asked to use numbers from "1" to "9". There seems to be certain problems in this study. One is that the measure from 1 to 9 can be used great different degrees

⁹Clarence Fielstra, "Influencing the Decision to become a Teacher," Journal of Educational Research, Vol. 48, 1935, 659-667.

by the individual student. Another problem is that the questionnaire was not designed in accord with his basic assumption and therefore the data did not indicate the degree of the influence the beliefs had upon the decision. These two things were completely separated, but attention should be paid to his assumption.

In 1958, Gerhard Lang¹⁰ constructed a scale for use with female pre-service or in-service teachers to obtain a quantifiable measure of overt motivation (that is, reasons verbalized by subjects). It was designed to indicate the relative social acceptability of the stated reasons and to provide an index that could be related to other variables, such as measures of covert motivation (the personality needs, teaching effectiveness, and satisfaction with teaching). Thurstone's method of equal appearing intervals was in developing the scale. He presented 25 statements to the subjects and asked them to check three reasons which were least influential in their choice of teaching; three reasons which were most influential; five reasons which they regarded as slightly influential; nine reasons which they regarded as about half/half; five reasons which they regarded as much. In 1960, using the same instrument and the Edwards Personal Preference Schedule, he studied the differences between elementary and secondary school teachers' motives for choosing the teaching profession. Two hypotheses were tested: (a) elementary teachers will emphasize motives relating to the mothering aspects of teaching, (b) secondary teachers will emphasize motives relating to the academic and intellectual

¹⁰Gerhard Lang, "An Experimental Scale to Measure Motives for Teaching," Journal of Educational Research, Vol.51, 1958, 687-694. and "Motives in Selecting Elementary and Secondary School Teaching," Journal of Experimental Education, Vol.22, 1960, 101-104.

facets of teaching.

In 1959, J. Marc Jantzen¹¹ published interesting results of a comparative study of response to a check list in 1946, 1948 and 1956. The check list consisted of 16 statements regarding factors which might have influenced college students to choose teaching as a career. Students were asked to check each of the statements that might have influenced them in their choice of teaching. Significant shifts in the responses in 1956 were as follows: for women, checking the life long opportunity to learn and the possible service to mankind; for both men and women, the enthusiasm of a former teacher; and for men, a teacher retirement system. Women made their choice to become teachers at an earlier age than the men. More than half (54 per cent) of the women in 1956 study had reached this decision before they entered college, while only one fourth of the men (24 per cent) indicated doing so.

In 1960, Raymond B. Fox¹² administered a questionnaire to 170 prospective teachers at Northern Illinois University. The questionnaire consisted of the 25 most frequently mentioned factors which prospective teachers listed in their autobiographies as important in influencing them in their selection of teaching as a career. The respondents were asked to indicate the degree to which each of the factors influenced choosing teaching. He noted that the two factors which the respondents reported as influencing

¹¹J. Marc Jantzen, "An Opinionnaire on Why College Students Choose to Teach," Journal of Educational Research, Vol. 53, 1959, 13-17.

¹²Raymond B. Fox, "Factors Influencing the Career Choice of Prospective Teachers," Journal of Teacher Education, Vol. 12, 1961, 427-432.

them most were very altruistic ones: the desire to work with children or adolescents and the desire to impart knowledge. A majority of the respondents indicated that they were influenced to some degree by such practical factors as (1) the opportunity to continue their own education; (2) the opportunity to leave the teaching profession and return to it later; (3) the desire for security; and (4) the comparatively short school day, long summer vacation, and many other vacations. The male students were influenced significantly more than the female students by (1) their liking for a particular subject; (2) the trend toward increasing salaries of teachers; (3) the results of vocational interest inventories; (4) the opportunity to use teaching as a stepping-stone to another career. Also, in their survey, 82 percent of the women students decided to become a teacher before entering college, while 61 per cent of the men students did so after entering college.

An examination of the previous studies in the field reveals:

1. Studies have been conducted with three kinds of subjects: high school students, college students and experienced teachers.

2. Many investigators have elicited the "top-of-the-head" reasons for choosing a teaching profession. They asked the importance or strength of the reasons and influences upon motives to become a teacher, that is, they asked only the degree or intensity, but did not examine the direction of influence; negative or positive.

3. Interview, check-list questionnaire, and essay-type questionnaire have been the most prominent devices used.

4. Many motivations which each investigator listed may be categorized or evaluated as "desirable or undesirable," "good" or

"worthy" or "learned" motivations. But there is a question whether or not such categorization or evaluation is reliable. It should be noted that Ringness tried to categorize by factor analysis.

5. As Ringness found the persons' motives tend to change from year to year. A dimension of time must be added to the problem of motivation. Also the changes of socio-economic situations in society and the situations of the teaching profession must be considered.

6. A large proportion of the persons entering the teaching profession seems to do so without clear conceptions of why they have so chosen or else for seemingly irrelevant reasons. But it is not clear whether or not this general result is related to ⁱⁿcomplete measurements. In fact, the problem of measurement within this type of study is complex.

7. The reasons which were listed in all studies are definitely related to the occupational values of teaching.

8. The reasons some people enter teaching are almost the same as the reasons some people do not enter teaching. This means that the differences between two kinds of people are dependent upon the different degree of their evaluations of the occupational values of teaching and their needs or self concepts.

9. Another problem is likely related to the definitions of terms, such as motivation and motives. It could be said that all studies failed to make clear definitions of terms which they used.

CHAPTER II

HOW THE STUDY WAS CONDUCTED

"The proposed theory is structural in two different respects: its content and its statistical form. We first present a semantic framework within which to view the subuniverses, in terms of a facet design. From this is predicted a certain statistical structure for the matrix of correlation coefficients. The empirical data are then examined to see whether or not they reveal the statistical structure predicted from the semantic structure."¹³

1. The Questionnaire Phase

From previous studies in the United States, England, and Japan, about 200 statements concerning reasons for choosing teaching as a career were gathered. Examination of these statements revealed that they could be separated into two categories; one category included statements of the values associated with the teaching profession and the second category was composed of statements involving persons or things that influenced or motivated persons to choose the teaching profession. Following the assumption stated earlier, the statements about occupational values of teaching were examined. It was found that some statements indicated the economic or social rewards offered by teaching, others indicated the intellectual or ethical demands required by the teaching profession. Moreover, these rewards or demands were provided the persons in

¹³Guttman, L., "A Structural Theory for Intergroup Beliefs and Action," American Sociological Review, Vol. 24, 1959, p. 318.

the on-job or the post-job situations. As a result, the statements differ among themselves concerning three facets; A. rewards or demands, B. From which aspect of teaching rewards or demands are offered, and C. When rewards or demands are offered. The first task was to ascertain the facets which determine those differences. Each statement concerning the reasons for choosing the teaching profession can be indicated by three elements, one from each facet.

Thus, the elements of each of three facets were set up as follows:

- A. Demands and Rewards.
- B. Physical, Economic, Social, Interpersonal, Intellectual and Ethical conditions.
- C. Pre-job, On-job, and Post-job.

The terms used in the facet analysis must be defined here.

1. Two elements of the facet A, Demands and Rewards, can be expressed as Requirements and Satisfactions when they are considered in terms of a relation between a person and an occupation. Requirements are defined as something demanded of a person by an occupation. Satisfaction is defined as something offered by an occupation to a person. The facet A was named Job-Person Interaction.

2. The facet B was named Aspects of Job. Its element, Physical Condition is defined as the scope of an occupation, such as the number of positions, the time, place, and quantity of work. Economic Condition is defined as conditions related to salary, retirement system, and all that involves a person's financial situations. Social Condition is defined as conditions of the relationships between the occupation and society or other occupations.

Interpersonal Condition is defined as conditions of human interactions in the occupational situations. Intellectual Condition is defined as conditions in regard to the mental activity to carry out the job. Ethical Condition is defined as conditions in regard to moral duties and conducts to carry out the job.

3. The facet C was named Time. The element, Pre-Job is defined as while preparing for the job. On-Job is defined as while working in the job. Post-job is defined as after retiring or resigning from the job.

It is helpful to list facets and their elements in tabular form in the following table:

A = Job-Person Interaction	B = Aspects of Job	C = Time
a ₁ = Requirements	b ₁ = Physical Condition	c ₁ = Pre-Job
a ₂ = Satisfactions	b ₂ = Economic Condition	c ₂ = On-Job
	b ₃ = Social Condition	c ₃ = Post-Job
	b ₄ = Interpersonal "	
	b ₅ = Intellectual "	
	b ₆ = Ethical Condition	

The capital letters A, B, and C indicate the three facets, while the corresponding small letters with subscripts denote the elements of the respective facets.

The three facets yield 36 (2 x 6 x 3) possible combinations of three elements, one element from each facet. That is, the Cartesian product of the three facets, which may be denoted by ABC, is a set of 36 profiles, each profile having three components. Each profile defines a different subuniverse. The Cartesian pro-

		Pre-Job	On-Job	Post-Job
Physical	Requirements	$a_1b_1c_1$	$a_1b_1c_2$	$(a_1b_1c_3)$
	Satisfactions	$a_2b_1c_1$	$a_2b_1c_2$	$a_2b_1c_3$
Economic	Requirements	$a_1b_2c_1$	$a_1b_2c_2$	$(a_1b_2c_3)$
	Satisfactions	$a_2b_2c_1$	$a_2b_2c_2$	$a_2b_2c_3$
Social	Requirements	$a_1b_3c_1$	$a_1b_3c_2$	$(a_1b_3c_3)$
	Satisfactions	$a_2b_3c_1$	$a_2b_3c_2$	$a_2b_3c_3$
Interpersonal	Requirements	$a_1b_4c_1$	$a_1b_4c_2$	$(a_1b_4c_3)$
	Satisfactions	$a_2b_4c_1$	$a_2b_4c_2$	$a_2b_4c_3$
Intellectual	Requirements	$a_1b_5c_1$	$a_1b_5c_2$	$(a_1b_5c_3)$
	Satisfactions	$a_2b_5c_1$	$a_2b_5c_2$	$a_2b_5c_3$
Ethical	Requirements	$a_1b_6c_1$	$a_1b_6c_2$	$(a_1b_6c_3)$
	Satisfactions	$a_2b_6c_1$	$a_2b_6c_2$	$a_2b_6c_3$

Each of 36 profiles defines a different subuniverse. But it must be noted that the six profiles, $a_1b_1c_3$, $a_1b_2c_3$, $a_1b_3c_3$, $a_1b_6c_3$, do not exist, because there is nothing required by the occupation of persons who have left the occupation. In other words, the combination, a_1c_3 , is a contradictory combination. As a result, 30 profiles can define a real subuniverse.

The feature revealed by the tabulation of the Cartesian product is that the profile forms a scale, but not a perfect scale. In this semantic structure, the rank order $a_1 < a_2$, or Requirement < Satisfaction can be assumed. This order can be suggested that

"Requirements" is weaker than "Satisfactions" in terms of intensifying the motivations for choosing an occupation. But, it should be noted that "Requirements" \prec "Satisfactions" can not be applied to the evaluation of the occupational values. In other words, this semantic ordering is for the statistical prediction of the test on the motivation, not for the prediction of the test on the evaluation of the occupational values.

Then, we can say that $a_1b_1c_1 \prec a_2b_1c_1$, or $a_1b_2c_2 \prec a_2b_2c_2$ and so on. But, we cannot compare $a_1b_1c_1$ with $a_2b_3c_1$, because the elements, b_i and c_j , do not have rank order. This semantic order will be examined by the empirical research, and mentioned after in detail.

Now, in this study only 15 profiles from the above mentioned Cartesian product were defined, by examining and developing the items which were listed in the previous studies concerning reasons for choosing the teaching profession. The 15 profiles were as follows: $a_1b_1c_1$, $a_1b_1c_2$, $a_2b_1c_2$, $a_1b_2c_1$, $a_2b_2c_3$, $a_2b_2c_2$, $a_1b_3c_2$, $a_2b_3c_1$, $a_2b_3c_2$, $a_1b_4c_2$, $a_2b_4c_2$, $a_1b_5c_1$, $a_2b_5c_2$, $a_1b_6c_2$, $a_2b_1c_2$. That is, the following 26 subuniverses in the semantic structure concerning reasons for choosing the teaching profession were arranged in the semantic order:

1. $a_1b_1c_1$ It is easy to find a position in the teaching profession.
2. $a_1b_1c_2$ In general, teaching does not require much physical strain.
3. $a_2b_1c_2$ There is an attractive environment in a school.
4. $a_2b_1c_2$ There are long vacations and many holiday times.
-
5. $a_1b_2c_1$ Training for teaching does not require very much money.
6. $a_2b_2c_3$ The teaching profession has a good retirement system.
7. $a_2b_2c_2$ There is a good provision for sick leave.

8. $a_2b_2c_2$ There is security against job loss.
 9. $a_2b_2c_2$ The teaching profession provides a relatively good salary.

 10. $a_1b_3c_2$ Teachers are expected to participate in the community functions.
 11. $a_2b_3c_1$ Teaching training provides an opportunity for contact with and entrance into other occupations.
 12. $a_2b_3c_2$ Teaching experience provides an opportunity for the occupational advancement or entrance into other occupations.
 13. $a_2b_3c_2$ The teaching profession has relatively high prestige and respect.

 14. $a_1b_4c_2$ In the teaching profession there is less competition than in other professions.
 15. $a_2b_4c_2$ Teachers can enjoy friendship with younger generations.
 16. $a_2b_4c_2$ Teachers can enjoy fellowship with interesting co-workers.
 17. $a_2b_4c_2$ The teaching profession offers the satisfaction of being self-directive.

 18. $a_1b_5c_1$ The educational requirements for entering the teaching profession is easy.
 19. $a_1b_5c_2$ The intellectual demands of the teaching profession are not high.
 20. $a_1b_5c_2$ Teachers are required to engage in a variety of activities.
 21. $a_2b_5c_2$ Teachers have an opportunity to pursue their interest in a favorite subject.
 22. $a_2b_5c_2$ Teaching provides an opportunity for self-expression and utilization of capabilities.
 23. $a_2b_5c_2$ Teachers are able to improve themselves academically.

 24. $a_1b_6c_2$ Teachers are required to behave according to a code of ethics.
 25. $a_2b_6c_2$ Teacher can get satisfaction from the development and improvement of their students.
 26. $a_2b_6c_2$ Teaching is one of the highest kinds of human endeavor.
-

Again, in this semantic ordering the elements, b_i and c_j , were not ranked. Moreover, almost all items were composed with c_2 ,

and only one item contains c_3 , so that the facet C, Time, may be disregarded. That is, this Cartesian product may be denoted by AB. Then, the rank order, $a_1b_i < a_2b_i$ ($i = 1, 2, 3, 4, 5$, and 6), can be suggested.

According to the assumption that the motivation for choosing a particular occupation is based on a balance between the individual needs or self-concepts and his evaluation of the occupational values, the following original form of a question about the occupational values of teaching can be made:

How do you estimate the $\left\{ \begin{array}{l} a_1 \text{ Requirements} \\ a_2 \text{ Satisfaction} \end{array} \right\}$ of the teaching profession with respect to $\left\{ \begin{array}{l} c_1 \text{ Pre-} \\ c_2 \text{ On-} \\ c_3 \text{ Post-} \end{array} \right\}$ Job $\left\{ \begin{array}{l} b_1 \text{ Physical} \\ b_2 \text{ Economic} \\ b_3 \text{ Social} \\ b_4 \text{ Interpersonal} \\ b_5 \text{ Intellectual} \\ b_6 \text{ Ethical} \end{array} \right\}$ Condition?

Also, the following original form of a question about the motivation for becoming a teacher can be made:

How does the $\left\{ \begin{array}{l} a_1 \text{ Requirements} \\ a_2 \text{ Satisfaction} \end{array} \right\}$ of the teaching profession with respect

to $\left\{ \begin{array}{l} c_1 \text{ Pre-} \\ c_2 \text{ On-} \\ c_3 \text{ Post-} \end{array} \right\}$ Job $\left\{ \begin{array}{l} b_1 \text{ Physical} \\ b_2 \text{ Economic} \\ b_3 \text{ Social} \\ b_4 \text{ Interpersonal} \\ b_5 \text{ Intellectual} \\ b_6 \text{ Ethical} \end{array} \right\}$ Condition affect your desire to become a teacher?

By the assumption stated above, these two original questions must be paired. In the empirical research, the first question above was always arranged with four multiple choice answers, which were made into dichotomy. Then they were pre-coded from high to low, or favorable to unfavorable, according to the content of each item. For example, item No. 1 talks about the ease of finding a position in the teaching profession, therefore, four answers were coded as (4) for Very easy; (3) for Rather easy; (2) Not so easy; and (1) Very hard. The second question above was arranged with five multiple choice answers, which were coded from high to low intensity; (5) Very positively; (4) Somewhat positively; (3) No effect; (2) Somewhat negatively; (1) Very negatively.

According to the above mentioned 26 subuniverses, the following 26 pairs of questions to prospective teachers were brought to completion:

Item No. 1. Ease of Finding a position

(1) In your estimation, how easy is it to find a position in the teaching profession?

- 4. Very easy
- 3. Rather easy
- 2. Not so easy
- 1. Very hard

How does your evaluation in question (1) above affect your desire to become a teacher? **

- 5. Very positively
- 4. Somewhat positively
- 3. No effect
- 2. Somewhat negatively
- 1. Very negatively

**In the original questionnaire, each of 26 questions about the evaluation of the teaching occupational values was paired with this question. However, for this report, this question is omitted from this point on, in order to save space.

Item No. 2. Lack of Physical Strain

- (2) | In your estimation, how much physical strain is generally required by teaching?
- 4. Very little
 - 3. Some
 - 2. Much
 - 1. Very much

Item No. 3. Attractiveness of School Environment

- (3) | In your estimation, how attractive is the environment in the school?
- 4. Very attractive
 - 3. Rather attractive
 - 2. Not so attractive
 - 1. Very unattractive

Item No. 4. Holiday Time of Teachers

- (4) | In your estimation, how much vacation and holiday time do teachers have?
- 4. Very much
 - 3. Much
 - 2. Some
 - 1. Very little

Item No. 5. Cost for Teacher Training

- (5) | In your estimation, how much money does training for the teaching profession require?
- 4. Very little
 - 3. Some
 - 2. Much
 - 1. Very much

Item No. 6. Retirement System

- (6) | From what you know about it, how would you rate the retirement system in the teaching profession?
- 4. Very satisfactory
 - 3. Rather satisfactory
 - 2. Not so satisfactory
 - 1. Very unsatisfactory

Item No. 7. Provision for Sick Leave

- (7) | From what you know about it, how would you rate the provision for sick leave in the teaching profession?
4. Very satisfactory
 3. Rather satisfactory
 2. Not so satisfactory
 1. Very unsatisfactory

Item No. 8. Security of the Teaching Profession

- (8) | In your estimation, how much security against job loss is there in the teaching profession?
4. Very much
 3. Much
 2. Some
 1. Very little

Item No. 9. Salary of Teachers

- (9) | How would you rate teachers' salaries?
4. Very good
 3. Rather good
 2. Not so good
 1. Very poor

Item No. 10. Teacher's Social Participation

- (10) | From what you know about it, to what extent are teachers expected to participate in community functions?
4. Very often
 3. Often
 2. Some
 1. Very little

Item No. 11. Opportunity for Transferring to Other Jobs

- (11) | In your estimation, to what extent does teacher training provide opportunities for contact with and entrance into other occupations?
4. Good opportunities
 3. Fair opportunities
 2. Poor opportunities
 1. Very poor opportunities

Item No. 12. Occupational Advancement of Teaching Profession

- (12) | In your estimation, to what extent does teaching experience provide opportunities for occupational advancement or entrance into other occupations?
4. Good opportunities
 3. Fair opportunities
 2. Poor opportunities
 1. Very poor opportunities

Item No. 13. Social Prestige of the Teaching Profession

- (13) | In your judgment, to what extent is the teaching profession respected by society?
4. Very highly
 3. Rather highly
 2. Not so highly
 1. Very low

Item No. 14. Competition in the Teaching Profession

- (14) | How would you rate competition in the teaching profession, compared with other professions?
4. Very little competition
 3. Some competition
 2. Considerable competition
 1. Very great competition

Item No. 15. Relationship between Students and Teachers

- (15) | How would you rate the relationships between teachers and students?
4. Very friendly
 3. Rather friendly
 2. Not so friendly
 1. Very unfriendly

Item No. 16. Teachers as Co-workers

- (16) | In your estimation, how interesting are teachers as co-workers?
4. Very interesting
 3. Rather interesting
 2. Not so interesting
 1. Very dull

Item No. 17. Teachers' Self-directness

- (17) | In your estimation, to what extent are teachers able to be self-directive?
4. Very much
 3. Much
 2. Some
 1. Very little

Item No. 18. Ease of Teacher Training

- (18) | In your estimation, how easy are the educational requirements for entering the teaching profession?
4. Very easy
 3. Rather easy
 2. Not so easy
 1. Very difficult

Item No. 19. Intellectual Demands of Teaching

- (19) | In your estimation, how would you rate the intellectual demands of the teaching profession?
4. Very low demands
 3. Rather low demands
 2. Not so low demands
 1. Very high demands

Item No. 20. Variety of Teachers' Activities

- (20) | In your estimation, to what extent do teachers engage in a variety of activities?
4. Very great variety
 3. Much variety
 2. Some variety
 1. Very little variety

Item No. 21. Opportunity to Pursue Teachers' Interest

- (21) | In your estimation, to what extent do teachers have opportunities to pursue their interests in a favorite subject?
4. Good opportunities
 3. Fair opportunities
 2. Poor opportunities
 1. Very poor opportunities

Item No. 22. Opportunity for Self-expression

- (22) | In your estimation, to what extent does teaching provide opportunities for expression and utilization of one's capabilities?
4. Good opportunities
 3. Fair opportunities
 2. Poor opportunities
 1. Very poor opportunities

Item No. 23. Academical Improvements of Teachers

- (23) | In your estimation, to what extent are teachers interested in their academic improvements?
4. Very much
 3. Much
 2. Some
 1. Very little

Item No. 24. Ethical Behaviors of Teachers

- (24) | In your estimation, to what extent are teachers expected to behave according to a strict code of ethics?
4. Very much
 3. Much
 2. Some
 1. Very little

Item No. 25. Improvements of Students

- (25) | In your estimation, to what degree are teachers able to get satisfaction from the development and improvement of their students?
4. Very much
 3. Much
 2. Some
 1. Very little

Item No. 26. Highest Human Endeavor of Teaching

- (26) | Among all kinds of human endeavor, how would you rank teaching?
4. Very high
 3. Rather high
 2. Not so high
 1. Very low

Again, these questions were paired with the following question:

How does your evaluation in question (#) affect your desire to become a teacher?

5. Very positively
4. Somewhat positively
3. No effect
2. Somewhat negatively
1. Very negatively

The questionnaire consisted of two parts: one part included the 26 pairs of questions; another part was concerned with the identification of the respondents, such as age, sex, year, father's and mother's educational levels, father's occupation, and family income. In addition, the respondents were asked to give at what level they expected to teach, when they decided to become a teacher, the basis of the decision and the expected length of their stay in teaching. Almost all questions were pre-coded.

2. Description of The Sample

The questionnaire was administered to 556 students taking a course required for teacher preparation at Michigan State University in January, 1963. The composition of the sample with regard to several variables are shown by sex in Table I - XI.

1. Sex: Of the 556 students in sample, 188 students (33.8 per cent) were male and 368 students (66.2 per cent) were female. The ratio was almost exactly 1 to 2. It must be noted that there are significant differences by sex in all items discussed below.
2. Year: Two hundred and forty students (43 per cent) of the sample were sophomore, and 253 students (45.5 per cent) were junior. Sophomores were predominantly female, while juniors had a large proportion of males.

TABLE I
DESCRIPTION OF SAMPLE, BY YEAR IN COLLEGE

Year	Male	Female	Total
Freshman	1	11	12
Sophomore	51	189	240
Junior	104	149	253
Senior	21	16	37
Graduate student	11	3	14
TOTAL	188	368	556

3. Age: About 70 per cent of the sample were 20 years old and under. Median of age for the male students was 20.59; for the female students, 19.65.

TABLE II
DESCRIPTION OF SAMPLE, BY AGE

Age	Male	Female	Total
19 or under	22	162	184
20	68	150	218
21	48	32	80
22	15	12	27
23	10	3	13
24	8	0	8
25 or over	16	9	25
No answer	1	0	1
TOTAL	188	368	556

4. The expected level of teaching situation: About 60 per cent of the sample expected to become a teacher of senior high school. One hundred and forty of the 150 students who expected to become elementary school teachers were female.

TABLE III
THE EXPECTED LEVEL OF TEACHING SITUATION

Teaching level	Male	Female	Total
Elementary school (kindergarten - the 6th grade)	10	140	150
Junior high school (the 7th grade - the 9th grade)	8	15	23
Senior high school (the 10th - the 12th grade)	146	178	324
Other	24	35	59
TOTAL	188	368	556

5. Parents' education level: The fathers of about 32 per cent of the sample had completed high school, but had had no college and those of about 20 per cent had only education below high school level. Fathers of about 30 per cent had completed at least a four-year college program.

TABLE IV
FATHER'S EDUCATION LEVEL

Education Level	Male	Female	Total
Did not complete grade school	7	6	13
Completed grade school, but not high school	48	48	96

TABLE IV
(cont.)

Education Level	Male	Female	Total
Completed high school, but not college	70	108	178
Completed one, but less than four years of college	26	68	94
Completed a four-year college program	16	65	81
M.A., Ph.D. or a professional degree	19	73	92
No answer	2	0	2
TOTAL	188	368	556

On the other hand, the mothers of 42 per cent of the sample had completed high school, but had had no college, and 21 per cent had done less than four years of college training. Mothers of 23 per cent of the group had completed a four-year college or graduate school program.

TABLE V
MOTHER'S EDUCATION LEVEL

Education Level	Male	Female	Total
Did not complete grade school	2	2	4
Completed grade school, but not high school	37	32	69
Completed high school, but not college	84	152	236
Completed one, but less than four years college	37	80	117

TABLE V
(cont.)

Education Level	Male	Female	Total
Completed a four-year college program	22	75	97
M.A., Ph.D. or a professional degree	5	27	32
No answer	1	0	1
TOTAL	188	368	556

The correlation coefficient between father's and mother's education levels for the sample was 0.518. The educational backgrounds of the female students' parents are somewhat higher than the male students' parents.

6. Father's occupation: About 27 per cent of the fathers were in the management occupations (managers, officials, and proprietors); 20 per cent were professional men; 17 per cent were skilled workers. The students were asked about not only the category of father's occupation, but also what he does. According to Duncan's Socio-Economic Index¹⁴, the score value was given to father's occupation of each subject in this study. The average score for father's occupations was 45; the average score for fathers' occupations of the male students was 37, while for the female student group, 49. By examining both these average scores and classification of fathers' occupations,

¹⁴Albert J. Reiss, Jr., Occupations and Social Status, The Free Press of Glencoe, Inc., 1961.

it is clear that the level of fathers' occupations of the female students are higher than that of the male students.

TABLE VI
CLASSIFICATION OF FATHER'S OCCUPATION

Occupation	Male	Female	Total
Professional & Technical	22	88	110
Farmer & Farm Manager	14	15	29
Managers, Officials & Proprietors	44	106	150
Clerical	5	8	13
Sales	15	29	44
Skilled worker	33	59	92
Semi-skilled worker	25	18	43
Service worker	7	6	13
Unskilled worker	5	4	9
Retirement & Women's household	18	35	53
TOTAL	188	368	556

7. Family income: About 21 per cent of the sample checked their parents' incomes in each of the ranges, \$5,000 - \$7,499 and \$10,000 - \$14,999. Fifteen per cent checked the \$7,500 - \$9,999 range. The income of the female students' families seems to be higher than that of the male students' families.

TABLE VII
FAMILY INCOME

Income	Male	Female	Total
Under \$3,000	4	2	6

TABLE VII
(cont.)

Income	Male	Female	Total
\$3,000 - \$4,999	14	9	23
\$5,000 - \$7,499	52	69	121
\$7,500 - \$9,999	40	47	87
\$10,000 - \$14,999	47	74	121
\$15,000 - \$19,999	13	46	59
\$20,000 and over	7	35	42
I have no idea	11	86	97
TOTAL	188	368	556

8. Time of first thinking of teaching as a career: Forty-three per cent of the male students thought they might want to become a teacher only after entering college, contrasted with 26 per cent of the female students. About 34 per cent of the female students thought of becoming a teacher before completing the 9th grade, while only 8 per cent of the male students had done so by that time. In general, the female students thought about teaching as a career earlier than did the male students.

TABLE VIII
TIME OF THE FIRST THINKING OF TEACHING AS A CAREER

Time	Male	Female	Total
Before completing the 6th grade	4	70	74
During the 7th to the 9th grade	12	55	67

TABLE VIII
(cont.)

Time	Male	Female	Total
During the 10th to the 12th grade	63	109	172
After high school graduation, but before entering college	19	25	44
Since entering college	81	97	178
Other	9	12	21
TOTAL	188	368	556

9. Time of decision to become a teacher: Sixty-three per cent of the male students and 43 per cent of the female students decided to become a teacher after entering college. Again, the female students' decisions were earlier than the male students'. These data are similar to previous studies mentioned in Chapter one.

TABLE IX
TIME OF DECISION TO BECOME A TEACHER

Time	Male	Female	Total
Before completing the 6th grade	0	8	8
During the 7th to the 9th grade	1	18	19
During the 10th to the 12th grade	19	93	112
After high school graduation, but before entering college	8	43	51
Since entering college	119	158	277
Other	41	48	89
TOTAL	188	368	556

10. Basis of decision: Forty-eight per cent of the male students reported that they decided to become a teacher mainly through their own desires and judgments. About 40 per cent of the female students gave the same reason. On the other hand, 41 per cent of the female students decided based upon their desire and the advice or influence of others combined, as contrasted with 30 per cent of the male students.

TABLE X
BASIS OF DECISION TO BECOME A TEACHER

Basis	Male	Female	Total
Mainly through my own desire and judgment	90	145	235
My desire and other's advice or influence combined	57	152	209
My desire and the result of a vocational interest inventory	15	27	42
Mainly through the advice of someone else	3	15	18
Mainly through the result of a vocational interest inventory	8	4	12
Other	15	25	40
TOTAL	188	368	556

11. The expected length of staying in teaching: There is a great difference between male and female students. Forty-three per cent of the male students expected to stay in the teaching profession until retirement. More than half of the female students expected to teach until they start their own families. Only 9 per cent of the female students expected to stay in the

teaching profession until retirement.

TABLE XI
THE EXPECTED LENGTH OF STAYING IN TEACHING

Period	Male	Female	Total
Until marriage	0	19	19
Until I start my own family	1	192	193
Until I can get a better job	20	10	30
Until I save enough money to enter a graduate or professional school	24	9	33
Until no financial need to work	18	48	66
Until retirement	80	32	112
Other	45	58	103
TOTAL	188	368	556

3. Analysis of Data

The responses to each of the 26 pairs of questions concerned with the evaluation of the occupational values of teaching and its influence upon the motivations for becoming a teacher will be analyzed in this section.

Table 12 shows the percentage distribution in each sex group, based upon the 556 prospective teachers' evaluations of the occupational values of teaching and their influences upon the motivations for becoming a teacher. The responses to each pair of questions were analyzed by sex, because there is a great sex difference on many points.

Striking features revealed by this table are as follows:

1. In general, almost all occupational values of teaching were evaluated rather highly, and as influencing motivations somewhat positively. There is no value of teaching which a great number of the prospective teachers evaluated very highly, and no value of teaching which affected the desire to become a teacher very positively. The only values which approximately half of the sample evaluated very highly were only "Satisfaction from the development and improvement of students" (item No. 25), "Opportunity for self-expression and utilization of capabilities" (item No. 22) and "Opportunity to pursue teacher's interest in a favorite subject" (item No. 21). Also, the value which influenced very positively the motivations of more than half of the sample were only "Satisfaction from the development and improvement of students" (item No. 25). In the female sample, in addition to the item No. 25, the value, "Teaching is one of the highest kinds of human endeavor", influenced their motivations very positively. As a result, it can be said that the teaching profession is not a very highly attractive occupation to young people.

2. There were no significant differences by sex, concerning the responses to items which contain the Intellectual factor, b_5 .

3. Items containing the factor, Requirements or a_1 , showed no significant sex differences for both responses.

4. With regard to items which contain the factors, b_1 , b_2 , b_3 or Physical, Economic, and Social conditions, significant differences by sex were often shown, for the responses to both questions.

5. In comparison with the previous studies, it is recognized that the evaluation of the occupational values of teaching may

TABLE XII

PERCENTAGE DISTRIBUTION IN EACH SEX GROUP, BASED UPON
THE EVALUATION OF THE TEACHING OCCUPATIONAL VALUES
AND ITS INFLUENCE UPON THE MOTIVATION FOR
BECOMING A TEACHER

	Evaluation of Occupational Values		Influence upon Motivation		
		Male %	Female %		Male % Female %
No. 1 a ₁ b ₁ c ₁ Ease of Finding Positions	Very easy	12.2	17.1	Very positively	9.0 12.2
	Rather easy	69.2	67.1	Somewhat positively	51.1 49.2
	Not so easy	18.1	15.2	No effect	26.6 32.1
	Very hard	.5	.5	Somewhat negatively	11.2 5.7
				Very negatively	2.1 .8
No. 2 a ₁ b ₁ c ₂ Physical Strain in Teaching	Very little	8.0	4.9 *	Very positively	6.4 6.0
	Some	55.3	44.8	Somewhat positively	27.1 22.3
	Much	28.7	41.6	No effect	52.1 58.7
	Very much	7.5	8.7	Somewhat negatively	12.8 10.9
	No answer	.5	0	Very negatively	1.1 2.2
				No answer	.5 0
No. 3 a ₂ b ₁ c ₂ Attractiveness of School Environment	Very attractive	28.2	30.4	Very positively	20.2 19.3
	Rather attractive	61.2	52.3	Somewhat positively	53.7 50.3
	Not so attractive	9.6	15.8	No effect	18.6 18.5
	Very unattractive	.5	.3	Somewhat negatively	6.9 10.9
	No answer	.5	.3	Very negatively	0 .8
				No answer	.5 .3
No. 4 a ₂ b ₁ c ₂ Holiday Times of Teachers	Very much	30.3	31.8 **	Very positively	18.6 23.9 *
	Much	37.2	46.2	Somewhat positively	46.3 50.3
	Some	30.9	18.2	No effect	26.6 22.0
	Very little	1.6	3.8	Somewhat negatively	5.9 3.3
				Very negatively	2.7 .5
No. 5 a ₁ b ₂ c ₁ Cost for Teacher Training	Very little	2.7	3.0	Very positively	4.8 5.4
	Some	13.3	17.1	Somewhat positively	18.1 12.8
	Much	65.5	59.2	No effect	51.6 63.6
	Very much	18.1	20.7	Somewhat negatively	21.8 15.8
	No answer	.5	0	Very negatively	3.2 2.5
				No answer	.5 0

TABLE XII (continued)

	Evaluation of Occupational Values			Influence upon Motivation		
		Male %	Female %		Male %	Female %
No. 6 $a_2b_2c_3$ Retirement System of The Teaching Profession	Very satisfactory	9.6	13.0 **	Very positively	2.7	5.2 **
	Rather satisfactory	56.9	62.0	Somewhat positively	32.5	23.9
	Not so satisfactory	25.5	16.9	No effect	39.4	55.4
	Very unsatisfactory	4.3	.8	Somewhat negatively	18.6	7.1
	No answer	3.7	7.3	Very negatively	3.2	1.1
				No answer	3.7	7.3
No. 7 $a_2b_2c_2$ Provision for Sick Leave	Very satisfactory	15.4	21.2 **	Very positively	2.1	6.8 *
	Rather satisfactory	62.8	64.1	Somewhat positively	34.0	31.5
	Not so satisfactory	14.9	9.0	No effect	47.9	51.1
	Very unsatisfactory	3.7	.8	Somewhat negatively	11.2	5.2
	No answer	3.2	4.9	Very negatively	1.6	.5
				No answer	3.2	4.9
No. 8 $a_2b_2c_2$ Security of The Teaching Profession	Very much	35.1	40.2	Very positively	22.9	21.5 **
	Much	33.0	30.7	Somewhat positively	41.0	45.7
	Some	22.3	21.7	No effect	20.2	28.0
	Very little	9.0	7.1	Somewhat negatively	12.8	4.1
	No answer	.5	.3	Very negatively	2.7	.5
				No answer	.5	.3
No. 9 $a_2b_2c_2$ Salary of Teacher	Very good	.5	2.7 **	Very positively	.5	5.7 **
	Rather good	28.2	45.7	Somewhat positively	22.3	30.4
	Not so good	63.3	47.0	No effect	26.1	36.1
	Very poor	8.0	4.6	Somewhat negatively	40.4	23.9
				Very negatively	10.6	3.8
No. 10 $a_1b_3c_2$ Teacher's Social Participation	Very often	17.0	20.4	Very positively	11.2	9.2
	Often	55.9	50.0	Somewhat positively	34.0	33.7
	Some	26.1	27.7	No effect	36.7	40.5
	Very little	1.1	1.9	Somewhat negatively	16.5	16.3
				Very negatively	1.6	.3
No. 11 $a_2b_3c_1$ Opportunity for Transferring to Other Jobs	Good	38.8	29.6 *	Very positively	19.7	12.2 **
	Fair	48.4	50.5	Somewhat positively	41.5	30.2
	Poor	10.1	17.7	No effect	29.3	46.5
	Very poor	2.7	1.6	Somewhat negatively	8.5	9.0
	No answer	0	.6	Very negatively	1.1	1.6
				No answer	0	.6

TABLE XII (continued)

	Evaluation of Occupational Values		Influence upon Motivation		
		Male %	Female %		Male % Female %
No. 12 $a_2b_3c_2$ Opportunity for Occupational Advancement of Teaching Profession	Good	36.2	23.6 *	Very positively	16.0 9.8 **
	Fair	53.2	59.8	Somewhat positively	46.8 32.9
	Poor	9.0	13.9	No effect	28.7 44.6
	Very poor	1.6	1.6	Somewhat negatively	6.4 10.3
	No answer	0	1.1	Very negatively	2.1 1.4
				No answer	0 1.1
No. 13 $a_2b_3c_2$ Social Prestige of Teaching profession	Very highly	14.4	26.1 **	Very positively	13.3 13.9
	Rather highly	60.6	56.8	Somewhat positively	45.2 51.4
	Not so highly	23.9	16.9	No effect	25.5 26.1
	Very low	1.1	.3	Somewhat negatively	15.4 8.4
				Very negatively	.5 .3
No. 14 $a_1b_4c_2$ Competition in Teaching Profession	Very little	14.4	20.9	Very positively	5.3 5.2
	Some	63.3	57.1	Somewhat positively	41.0 35.9
	Considerable	20.2	19.8	No effect	39.9 49.5
	Very great	2.1	1.9	Somewhat negatively	10.6 8.4
	No answer	0	.3	Very negatively	3.2 .8
				No answer	0 .3
No. 15 $a_2b_4c_2$ Relationship between Students and Teachers	Very friendly	14.4	21.2	Very positively	20.7 32.1 *
	Rather friendly	80.3	72.3	Somewhat positively	59.6 47.8
	Not so friendly	4.8	4.9	No effect	15.4 13.6
	Very unfriendly	0	.3	Somewhat negatively	2.7 4.9
	No answer	.5	1.4	Very negatively	1.1 .3
				No answer	.5 1.4
No. 16 $a_2b_4c_2$ Teachers as Co-workers	Very interesting	32.5	42.1	Very positively	22.3 32.6 *
	Rather interesting	60.6	51.4	Somewhat positively	51.6 43.2
	Not so interesting	6.4	5.2	No effect	19.2 16.6
	Very dull	.5	1.4	Somewhat negatively	6.4 4.6
				Very negatively	.5 3.0
No. 17 $a_2b_4c_2$ Teacher's Self-directness	Very much	20.7	17.1	Very positively	23.4 16.6
	Much	46.8	53.0	Somewhat positively	39.4 47.8
	Some	28.2	26.9	No effect	17.6 19.0
	Very little	4.3	3.0	Somewhat negatively	16.5 13.9
				Very negatively	3.2 2.7

TABLE XII (continued)

	Evaluation of Occupational Values		Influence upon Motivation		
		Male %	Female %		Male % Female %
No. 18 $a_1b_5c_1$ Ease of Teacher Training	Very easy	3.2	3.0	Very positively	4.8 4.4
	Rather easy	33.0	31.3	Somewhat positively	30.3 32.6
	Not so easy	57.5	60.3	No effect	43.1 41.9
	Very difficult	6.4	5.4	Somewhat negatively	18.6 19.0
				Very negatively	3.2 2.2
No. 19 $a_1b_5c_2$ Intellectual Demands of Teaching	Very low	1.6	.8	Very positively	16.5 21.5
	Rather low	4.3	11.7	Somewhat positively	43.6 38.6
	Not so low	56.9	43.2	No effect	29.8 26.6
	Very high	36.7	44.3	Somewhat negatively	8.5 11.7
	No answer	.5	0	Very negatively	1.1 1.6
				No answer	.5 0
No. 20 $a_1b_5c_2$ Variety of Teachers' activities	Very great	13.3	14.7	Very positively	20.7 19.6
	Much	46.8	42.7	Somewhat positively	40.4 37.5
	Some	37.8	38.6	No effect	28.7 30.2
	Very little	2.1	4.1	Somewhat negatively	9.0 10.6
				Very negatively	1.1 2.2
No. 21 $a_2b_5c_2$ Opportunity to Pursue Teacher's Interest	Good	54.8	51.6	Very positively	36.7 35.1
	Fair	40.4	42.7	Somewhat positively	43.1 40.2
	Poor	3.7	5.2	No effect	12.2 15.8
	Very poor	1.1	.5	Somewhat negatively	6.4 7.6
				Very negatively	1.6 1.4
No. 22 $a_2b_5c_2$ Opportunity for Self-expression	Good	52.1	61.7	Very positively	36.7 44.3
	Fair	43.1	36.1	Somewhat positively	43.6 37.2
	Poor	3.7	1.4	No effect	9.6 11.4
	Very poor	1.1	.8	Somewhat negatively	9.6 6.0
				Very negatively	.5 1.1
No. 23 $a_2b_5c_2$ Academical Improvements of Teachers	Very much	23.4	24.5	Very positively	21.3 23.6
	Much	47.9	47.0	Somewhat positively	43.1 42.4
	Some	27.7	26.1	No effect	25.5 22.6
	Very little	1.1	2.5	Somewhat negatively	9.0 9.5
				Very negatively	1.1 1.9

TABLE XII (continued)

	Evaluation of Occupational Values		Influence upon Motivation		
		Male %	Female %		Male % Female %
No. 24 $a_1 b_6 c_2$ Ethical Behaviors of Teachers	Very much	39.9	40.5	Very positively	11.7 10.6
	Much	41.5	44.0	Somewhat positively	20.2 26.4
	Some	18.1	13.3	No effect	26.1 31.5
	Very little	.5	2.2	Somewhat negatively	33.0 27.2
				Very negatively	9.0 4.4
No. 25 $a_2 b_6 c_2$ Improvements of Students	Very much	54.8	67.7 *	Very positively	50.0 63.3 *
	Much	36.2	24.2	Somewhat positively	39.9 29.1
	Some	8.5	7.3	No effect	6.4 4.9
	Very little	0	.6	Somewhat negatively	2.7 2.5
	No answer	.5	.3	Very negatively	.5 0
				No answer	.5 .3
No. 26 $a_2 b_6 c_2$ Highest Human Endeavor of Teaching	Very high	35.6	49.5 *	Very positively	39.9 51.9 *
	Rather high	59.0	46.2	Somewhat positively	46.8 32.9
	Not so high	4.8	3.8	No effect	9.0 11.4
	Very low	.5	.6	Somewhat negatively	3.7 2.2
				Very negatively	.5 1.6

* χ^2 significant at .05 level** χ^2 significant at .01 level

change, with changes in salary schedules, licensing requirements, teacher training, teaching objectives, and society as a whole. For example, "The intellectual demands of the teaching profession are not high" is no longer true, and "The educational requirements for entering the teaching profession is easy" is not necessarily accurate today.

Next, the relations between the degree of evaluations of occupational values of teaching and the intensity of motivations for becoming a teacher were computed by the product-moment correlation coefficient -- that is, the correlation coefficient between two questions of one pair was computed. A coefficient of correlation is a single number that tells us to what extent two things are related, to what extent variations in the one go with variations in the other. Without the knowledge of how one thing varies with another, we should find predictions impossible.

In Table 13 the correlation coefficient for each of 26 pairs of questions was tabulated, according to the size of the coefficient.

TABLE XIII
CORRELATION COEFFICIENTS BETWEEN THE EVALUATION OF
TEACHING OCCUPATIONAL VALUES AND ITS INFLUENCE UPON
THE MOTIVATIONS FOR ENTERING TEACHING

Order	Semantic structure	Item	Correlation Coefficient		
			Total	Male	Female
1.	$a_2b_6c_2$	Teaching is one of the highest kinds of human endeavor.	.736	.747	.730
2.	$a_2b_4c_2$	Teachers can enjoy fellowship with interesting co-workers	.729	.789	.698
3.	$a_2b_1c_2$	There is an attractive			

TABLE XIII

(cont.)

Order	Semantic structure	Item	Correlation Coefficient		
			Total	Male	Female
		environment in a school.	.705	.725	.697
4.	$a_2b_6c_2$	Teachers can get satisfaction from the development of their students.	.690	.726	.665
5.	$a_2b_4c_2$	The teaching profession offers the satisfaction of being self-directive.	.687	.723	.664
6.	$a_2b_2c_2$	The teaching profession provides a relatively good salary.	.683	.715	.644
7.	$a_2b_5c_2$	Teachers have opportunity to pursue their interest in a favorite subject.	.662	.700	.641
8.	$a_2b_5c_2$	Teaching provides opportunity for self-expression & utilization of capabilities.	.657	.730	.609
9.	$a_2b_3c_1$	Teaching training provides opportunity for contact with and entrance into other occupations.	.635	.643	.628
10.	$a_2b_3c_2$	The teaching profession has relatively high prestige and respect.	.630	.674	.630
11.	$a_2b_5c_2$	Teachers are able to improve themselves academically.	.623	.654	.608
12.	$a_2b_3c_2$	Teaching experience provides opportunity for the occupational advancement or entrance into other occupations.	.614	.670	.572
13.	$a_1b_5c_2$	Teachers are required			

TABLE XIII

(cont.)

Order	Semantic structure	Item	Correlation Coefficient		
			Total	Male	Female
		to engage in a variety of activities.	.608	.616	.605
14.	$a_2b_4c_2$	Teachers can enjoy friendship with younger generations.	.560	.564	.556
15.	$a_2b_2c_3$	The teaching profession has a good retirement system.	.532	.653	.435
16.	$a_1b_5c_2$	The intellectual demands of the teaching profession are not high.	-.514	-.498	-.521
17.	$a_2b_2c_2$	There is a good provision for sick leave.	.500	.520	.477
18.	$a_2b_2c_2$	There is security against job loss.	.414	.415	.412
19.	$a_2b_1c_2$	There are long vacations and holiday times.	.406	.342	.441
20.	$a_1b_4c_2$	In the teaching profession there is less competition than in other professions.	-.260	-.352	-.210
21.	$a_1b_3c_2$	Teachers are expected to participate in the community functions.	.150	.198	.125
22.	$a_1b_1c_1$	It is easy to find a position in the teaching profession.	.149	.053	.199
23.	$a_1b_2c_1$	Training for teaching does not require very much money.	-.052	.054	-.108
24.	$a_1b_5c_1$	The educational requirements for entering the teaching profession is easy.	-.052	-.044	-.057
25.	$a_1b_6c_2$	Teachers are required to behave according to			

•

• • • •

•

• • • •

•

• • • •

•

• • • •

•

• • • •

•

• • • •

•

• • • •

•

• • • •

•

• • • •

•

• • • •

•

• • • •

•

• • • •

•

•

TABLE XIII
(cont.)

Order	Semantic structure	Item	Correlation Coefficient		
			Total	Male	Female
		a code of ethics.	.031	.053	.017
26.	$a_1b_1c_2$	In general, teaching does not require much physical strain.	-.003	-.183	.090

An examination of the sizes of correlation coefficients reveals several significant observations.

1. It should be noted that all items (except No. 13 ($a_1b_5c_2$) and No. 16 ($a_1b_5c_2$)) which contain the element, a_1 or Requirements, have the low correlation coefficients. The seven lowest correlations are for items containing a_1 . Moreover, the correlation on these items are decidedly lower than on the other items. For the prospective teachers the factor, a_2 or Satisfactions is probably more important than the factor, Requirements, a_1 .

2. In general, the correlation coefficients for female students are smaller than those for male students. It is possible to think that homogeneity of female sample in terms of the expected teaching situations is smaller than that of male sample. As mentioned above, almost all of the male sample expected to become senior high school teachers, while half of the female sample expected to become senior high school teachers and the other half expected to become elementary school teachers. According to the previous studies, there are many differences between secondary-education teachers and elementary-education teachers. This variable might effect their responses.

3. As to the five items which got negative correlation coefficients, "The intellectual demands of the teaching profession are not high" and "The educational requirements for entering the teaching profession is easy", both of which contain the factor, b_5 or Intellectual condition, discourage the prospective teachers. Also, "In the teaching profession there is less competition than other professions" discourages them. But it is interesting that "Training for teaching does not require very much money" affected the female prospective teachers negatively, but to the male prospective teachers positively, and also "In general, teaching does not require much physical strain" affected the male prospective teachers negatively, but to the female prospective teachers positively.

4. The items which contain the factor, c_1 or Pre-job, obtained low correlations. The element of Preparation, which might be indicated a_1c_1 (Requirements and Pre-job) in semantic structure, is not important for the prospective teachers. In comparison with the preparations for lawyer, doctor, etc., teacher training is relatively short. This reason might adequate.

5. By making a comparison with the rank order of the important reasons for entering teaching studied by Ringness¹⁵ in 1949, which is a recent intensive study and utilizing different methodology from this study, it seems that there are no large shifts. But in this study the values, "enjoying the fellowship with interesting co-workers" and "an attractive environment in a

¹⁵Ringness, T. A., op. cit., 1-55.

school" exceeded the finding of the previous study. This shift seems to show the changes in new buildings and recruits.

4. Examination of Facet

The semantic framework within which to view the subuniverse, in terms of a facet design, has been already presented. The Cartesian product of the three facets, $A = \text{Job-Person Interaction}$, $B = \text{Aspects of Job}$, and $C = \text{Time}$, is a set of 36 profiles, each profile having three components, one from each facet, and then 26 subuniverses were arranged in the semantic order. The semantic scale, the rank order, $a_1 < a_2$, or Requirements < Satisfactions, was assumed in case of the test on motivation for choosing an occupation. Then the rank order, $a_1 b_i < a_2 b_i$ ($i = 1, 2, 3, 4, 5$, and 6), was suggested. It could be remembered that the facet C , Time, was disregarded, because almost all 26 items were composed with c_2 (On-job). From this semantic order, a certain statistical structure for the matrix of correlation coefficients can be predicted.

In this section, the empirical data will be examined to see whether or not they reveal the statistical structure predicted from the semantic structure. The empirical product-moment correlations between the 26 subuniverses of ABC for population P may be calculated. "One cannot presume to predict the exact size of each correlation coefficient from knowledge only of the semantics of universe ABC, but we do propose to predict a pattern or structure for the relative sizes of the statistical coefficients from purely semantic considerations."¹⁶ The prediction is based on the Gutt-

¹⁶Guttman, L., op. cit., p. 324.

man's proposition as follows:

Contiguity Hypothesis. Subuniverses closer to each other in the semantic scale of their definitions will also be closer statistically.

For example, in this study $r(a_2b_2c_1)(a_2b_2c_2) > r(a_2b_2c_1)(a_1b_2c_2)$ should be had, because $a_2b_2c_1$ is closer to $a_2b_2c_2$ than $a_1b_2c_2$ in the semantic scale. As a result, according to the contiguity hypothesis, the simplex, the pattern of the correlation matrix, is predicted in this study.

The purpose of the present examination is that "It shows how the empirical structure can be predicted from the semantic structure through the use of a metatheory like the contiguity principle. The fact that the prediction proved to be accurate suggests that both the selection of facets and the metatheory were adequate. The results prove that the particular facets chosen are meaningful. Thus an empirical test becomes available for indicating whether a particular way of formalizing a set of variables is acceptable. The results also show that the contiguity principle is applicable to this particular set of data. On the other hand, if the prediction had proved wrong there would have been no way to know whether the selection of facets or the metatheory, or both were to blame."¹⁷

The actual correlation matrix is presented in Table 14.

¹⁷Uriel G. Foa, "The Scientific Development of the Israel Institute of Applied Social Research" This paper is to appear as a chapter in a book, to be published shortly, describing the growth and the projects of the Israel Institute of Applied Social Research during the first thirteen years of its activity.

It should be noted that this table can be separated into three Parts; the correlation matrix on the left side above is that for 26 questions about the evaluation of the occupational values of teaching, the correlation matrix on the right side below is that for 26 questions about the influence upon motivation for becoming a teacher, the square part between these two parts indicates the correlation coefficients between 26 questions and other 26 questions. According to the facets in this study and Guttman's Contiguity hypothesis, it is hoped that the simplex of the correlation structure for those subuniverses on the test of motivation which have the same element, b_i ($i = 1, 2, 3, 4, 5$, and 6), should be gained. But it must be noted that some of 26 subuniverses in this study have the same semantic structure, which might be the weakness of the Cartesian space in this study.

First, the correlation coefficients for the four subuniverses which have the same element, b_1 or Physical condition, were picked up from Table 14.

Item No.	$a_2b_1c_2$	$a_1b_1c_2$	$a_2b_1c_1$	$a_1b_1c_1$
	3	2	4	1
3	---	.29	.12	.09
2	.29	---	.08	.17
4	.12	.08	---	.19
1	.09	.17	.19	---

In this case, the predicted order of the items was $a_2b_1c_2 > a_1b_1c_2 > a_1b_1c_1$, because $a_2b_1c_2$ is closer to $a_1b_1c_2$ than $a_1b_1c_1$ was predicted. There are, however, two subuniverses in the same semantic structure. Those are item No. 3 and item No. 4. The structure of the correlation matrix above is a simplex, as pre-

dicted already, and the order is exactly the same as the predicted order, $a_2b_1c_2 > a_1b_1c_2 > a_1b_1c_1$, or item No. 3 or No. 4, next, item No. 2, and next item No. 1. Item No. 4, $a_2b_1c_2$, was arranged between item No. 2 and item No. 1. But the correlation coefficient ($=.08$) between item No. 2 and item No. 4 does not exceed r (item No. 3) (item No. 4) ($=.12$).

The correlation matrix for 5 subuniverses which have the same element, b_2 or Economic condition, is shown below.

Item No.	$a_{29}b_2c_2$	$a_{26}b_2c_3$	$a_{27}b_2c_2$	$a_{28}b_2c_2$	$a_{15}b_2c_1$
9	---	.21	.18	.06	.05
6	.21	---	.47	.22	.25
7	.18	.47	---	.26	.12
8	.06	.22	.26	---	.11
5	.05	.25	.12	.11	---

Again, this is a simplex, and the order is the same as the predicted order; $r(a_{29}b_2c_2)(a_{26}b_2c_3) > r(a_{27}b_2c_2)(a_{15}b_2c_1)$. But the exception to this empirical structure is that $r_{6.5}$ ($=.25$) exceeds $r_{6.8}$ ($=.22$) and $r_{8.5}$ ($=.11$) does not exceed $r_{7.5}$ ($=.12$).

The correlation matrix for 4 subuniverses which have the same element, b_3 or Social condition, is a pretty simplex, as shown below.

Item No.	$a_{23}b_3c_1$	$a_{23}b_3c_2$	$a_{23}b_3c_2$	$a_{13}b_3c_2$
	11	12	13	10
11	---	.63	.09	.08
12	.63	---	.19	.10
13	.09	.19	---	.23
10	.08	.10	.23	---

The largest correlations trend to be adjacent to the main diagonal, and they taper off to the northeast and southwest corners of the table.

The correlation structure for the four subuniverses which have the element, b_4 or Interpersonal condition, reveals a simplex, as shown below.

Item No.	$a_2b_4c_2$ 16	$a_2b_4c_2$ 15	$a_2b_4c_2$ 17	$a_1b_4c_2$ 14
16	---	.45	.31	.19
15	.45	---	.24	.13
17	.31	.24	---	.23
14	.19	.13	.23	---

In this matrix, there are exceptions that $r_{15 \cdot 17}$ ($=.24$) does not exceed $r_{16 \cdot 17}$ ($=.31$) and $r_{15 \cdot 14}$ ($=.13$) does not exceed $r_{16 \cdot 14}$ ($=.19$). But the semantic order $a_2b_4c_2$ $a_1b_4c_2$ is shown in the matrix.

The semantic structures for the subuniverses which have the element, b_5 or Intellectual condition, were $a_2b_5c_2$, $a_1b_5c_2$, and $a_1b_5c_1$. Therefore, $r(a_2b_5c_2) (a_1b_5c_2) > r(a_2b_5c_2) (a_1b_5c_1)$ was predicted. As shown below, the correlation matrix for six subuniverses is a simplex, with exception of $r_{20 \cdot 23} < r_{19 \cdot 23}$, $r_{22 \cdot 19} < r_{18 \cdot 22}$, $r_{18 \cdot 22} < r_{18 \cdot 23}$, $r_{18 \cdot 21} < r_{18 \cdot 22}$. The predicted order $a_2b_5c_2 > a_1b_5c_2 > a_1b_5c_1$ is shown in the matrix.

Item No.	$a_2b_5c_2$ 23	$a_2b_5c_2$ 22	$a_2b_5c_2$ 21	$a_1b_5c_2$ 20	$a_1b_5c_2$ 19	$a_1b_5c_1$ 18
23	---	.40	.29	.22	.25	.13
22	.40	---	.38	.32	.22	.06
21	.29	.38	---	.33	.26	.05
20	.22	.32	.33	---	.28	.16

19	.25	.22	.26	.28	---	.28
18	.13	.06	.05	.16	.28	---

The correlation structure for 3 subuniverses which have the element, b_6 or Ethical condition, was a simplex and revealed that the empirical order was same as the predicted order.

Item	$a_2b_6c_2$	$a_2b_6c_2$	$a_1b_6c_2$
No.	26	25	24
26	---	.32	.16
25	.32	---	.19
24	.16	.19	---

Each of these six correlation matrixes was a simplex. The empirical structure was very similar to the prediction from the semantic structure. It must be noted that the facet C, Time, is available, although it was ignored on the semantics scale. The facet analysis in this study is adequate. So, "It is possible to make more precise statistical hypotheses, based on the semantic structures of the subuniverses, in order to arrive at a more precise specification of the gradient among the empirical correlation coefficients. One way of doing this is to hypothesize a system of elementary statistical components----- or of common-factors, in the language of factor analysis----- that gives rise to the observed coefficients, associating the statistical components, however, directly with the semantic components."¹⁸

¹⁸Guttman, L., op. cit., p. 325.

INTERCORRELATIONS AMONG TWENTY-SIX PAIRS OF QUESTIONS ABOUT
THE EVALUATION OF THE TEACHING OCCUPATIONAL VALUES AND ITS
INFLUENCE UPON THE MOTIVATION FOR BECOMING A TEACHER

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26																											
1	---	12	-02	25	08	05	14	17	09	-02	-03	04	06	32	06	01	04	16	03	-02	06	05	-02	05	05	00	15	-04	-06	06	-07	-06	-01	09	02	-03	04	-01	01	-17	06	-04	-01	-04	-04	-04	01	-04	-06	-01	-02	01	1
2		---	-06	19	11	06	06	11	03	-01	-01	03	09	13	11	03	05	14	07	02	-01	-02	02	-03	01	-08	-01	-00	-04	10	-03	-01	00	07	-06	09	00	-01	10	-06	04	05	00	-01	-06	01	04	03	-06	02	-03	-06	2
3			---	02	-08	11	18	11	07	05	26	23	18	-20	30	31	24	-05	-23	26	17	31	23	-03	23	29	03	19	71	03	06	17	12	08	14	16	17	18	19	13	14	25	23	07	19	21	12	24	13	17	20	26	3
4				---	07	09	20	22	07	-04	-09	-02	14	11	03	01	02	20	03	02	10	06	-06	-01	01	-05	12	03	03	41	-06	11	11	10	-03	-02	-04	01	12	-02	01	-01	00	-00	-08	-00	11	-03	-08	-04	-09	02	4
5					---	-04	00	04	-03	-02	-03	-08	-13	05	-01	-02	-04	27	19	-02	-07	-03	-01	-01	05	-14	-01	-09	-08	-04	-05	-04	-07	03	01	-08	-02	-04	-10	-04	-02	-03	-04	06	-05	-05	-07	-05	-06	-12	-06	-09	5
6						---	35	13	22	-01	05	11	16	-08	09	03	08	-00	-04	07	09	12	04	-04	08	17	10	08	09	07	10	53	25	13	18	08	-03	04	17	13	04	07	05	11	05	00	11	11	06	10	10	11	6
7							---	24	18	-09	07	12	18	07	12	14	-02	05	-07	02	10	14	03	-04	11	13	02	07	15	09	05	26	50	17	17	02	03	09	19	04	09	14	-00	02	06	-02	09	11	02	07	02	10	7
8								---	03	05	07	09	10	15	10	13	06	12	08	05	01	11	02	01	04	01	05	-03	08	02	-00	10	12	41	04	08	-06	03	18	-05	07	09	05	-02	-10	-01	01	06	-03	01	00	06	8
9									---	00	07	08	14	-05	13	-02	09	-00	-11	-04	04	07	01	-06	12	07	08	09	08	16	04	16	15	06	68	08	06	08	22	08	08	02	08	02	01	04	01	10	01	17	07	06	9
10										---	09	08	11	-08	09	13	15	03	-10	32	-02	12	14	13	08	10	09	06	07	-01	01	08	01	-01	-00	15	07	08	22	05	07	15	13	06	09	19	03	13	11	06	11	10	10
11											---	64	17	-16	10	19	13	00	-25	24	24	19	16	-04	07	11	05	09	15	-05	05	08	04	09	02	08	64	43	23	15	07	20	16	09	15	18	21	16	11	06	06	09	11
12												---	16	-11	08	22	09	02	-16	18	17	13	09	-02	05	11	09	10	15	-02	02	12	09	10	05	12	44	61	09	09	01	21	14	03	12	17	20	08	08	-01	05	09	12
13													---	-08	16	27	11	-12	-24	17	10	12	22	06	17	23	01	06	17	05	08	14	13	12	16	12	10	18	19	13	14	25	10	09	10	14	12	10	11	17	07	18	13
14														---	-02	-06	-07	21	19	-10	-09	-06	-19	-04	-08	-17	03	-13	-12	-01	-06	-12	-01	08	-07	-15	-09	-09	-12	-26	-01	-12	-12	-09	-09	-11	-11	-10	-20	-06	-09	-14	14
15															---	23	20	-01	-10	21	18	26	21	00	24	16	07	16	26	-00	-02	04	04	10	14	08	09	03	26	06	56	29	20	05	08	16	12	21	10	18	18	09	15
16																---	25	-05	-22	31	19	29	22	02	20	30	09	08	23	-07	05	12	04	14	05	22	14	13	25	12	23	73	23	11	19	26	18	25	23	12	20	28	16
17																	---	-01	-18	24	15	25	15	-05	11	18	05	03	16	02	02	10	04	10	05	15	05	-02	14	20	14	24	69	13	16	19	14	27	09	20	11	12	17
18																		---	25	-02	-03	-03	-14	03	-08	-17	-00	-09	-06	12	-02	03	03	02	-05	-01	04	02	-06	-13	-03	-00	-03	-05	-10	-06	03	-02	-06	-04	-08	-13	18
19																			---	-20	-21	-20	-29	-07	-23	-30	-03	-06	-20	00	-07	-08	00	00	-04	-06	-17	-12	-18	-16	-16	-21	-16	-12	-51	-20	-17	-16	-24	-06	-19	-26	19
20																				---	19	22	27	04	09	17	03	12	21	01	01	09	04	06	01	13	17	06	15	15	22	29	23	12	20	61	25	22	16	06	06	09	20
21																					---	30	19	-04	12	17	09	09	18	05	01	05	-03	01	03	07	18	09	20	09	18	22	16	-01	16	14	66	27	20	07	16	16	21
22																						---	25	02	27	28	-05	-02	24	-01	03	09	04	04	11	09	11	01	10	05	18	27	23	05	13	15	15	66	26	12	22	24	22
23																							---	11	25	17	04	02	21	-02	06	08	06	00	05	12	12	10	21	22	17	22	18	13	19	14	16	29	62	17	18	13	23
24																								---	09	06	04	-05	-01	02	04	-04	-08	01	-04	03	-02	03	06	01	03	02	-04	03	03	-00	-01	04	03	03	05	02	24
25																									---	31	01	08	21	-06	-02	02	00	-02	13	15	-01	-01	16	08	28	17	12	-01	14	06	10	23	19	15	69	31	25
26																										---	03	08	27	-04	10	16	12	00	10	12	06	02	24	20	20	31	15	03	21	12	11	30	14	12	30	74	26
1																											---	17	09	19	15	22	15	19	02	09	07	09	07	12	08	10	10	19	10	08	13	-02	03	04	03	07	1
2																												---	29	08	14	17	15	11	08	18	08	13	14	23	18	16	08	12	13	19	10	09	04	15	08	12	2
3																													---	12	15	23	22	15	13	17	18	23	21	16	22	28	28	17	29	23	19	25	19	14	20	34	3
4																														---	08	21	18	07	08	01	-02	03	09	09	07	-01	06	01	06	09	11	02	01	05	01	04	4
5																															---	25	12	11	05	15	02	06	08	13	-02	13	09	14	12	05	03	06	05	10	-03	07	5
6																																---	47	22	21	14	07	13	19	24	04	14	09	19	15	07	13	09	06	05	05	17	6
7																																	---	26	18	12	07	14	18	18	07	15	06	14	12	09	04	10	05	15	03	12	7
8																																		---	06	13	08	15	22	13	13	16	17	07	07	11	08	10	05	12	02	07	8
9																																			---	13	03	08	22	16	09	06	04	05	-03	06	03	12	01	17	08	08	9
10																																				---	08	10	23	12	19	28	21	16	09	28	13	15	15	30	17	17	10
11																																					---	63	09	15	12	19	19	07	16	18	19	12	09	07	01	08	11
12																																						---	19														

CHAPTER III

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

1. Summary

The basic assumption in this study was that the motivation for choosing a particular occupation is the resultant force made by the vectors: the individual self concepts of his needs, and his evaluation of the occupational values. Human motivation influences behavior not only through initiation, but also through determining its direction, strength, and perseverance. Adequate instruments for measuring such motivation should recognize this assumption.

In developing an instrument, Guttman's Theory of Facet Analysis was employed. From previous studies in the United States, England, and Japan, about 200 statements concerning reasons for choosing teaching as a career were gathered. According to the above mentioned assumption, only statements which were related to the occupational values of teaching were chosen. It was recognized that the statements differed among themselves on three facets. The three facets were named, A. Job-Person Interaction, B. Aspects of Job, and C. Time. Each facet had the elements. The Cartesian product of these facets, which may be denoted by ABC , was a set of the 36 profiles, each profile having three components, one from each facet, and being denoted by $a_i b_j c_k$ ($i = 1$ or 2 . $j = 1$ to 6 . $k = 1$ to 3 .). Each statement concerning the reasons for choosing the teaching profession were indicated by three elements, one from each facet.

On the other hand, the scale $a_1 < a_2$ or Requirements <

Satisfactions were assumed. This order suggested that "Requirements" was weaker than "Satisfactions" in terms of intensifying the motivations for choosing an occupation. From this, a certain statistical structure for the matrix of correlation coefficients was predicted. The empirical data were then examined to see whether or not they reveal the statistical structure predicted from the semantic structure, and whether or not the selection of facets and the metatheory, the contiguity principle, used in this study were adequate.

2. Conclusions

The following conclusions were drawn from an analysis of the data:

1. A large proportion of the male prospective teachers expected to become a teacher of senior high school; nearly half of the female prospective teachers also planned to teach a secondary school, while the other half expected to become elementary teachers.
2. In general, the female prospective teachers' parents' educational levels, fathers' occupations, and incomes were higher than the male prospective teachers'.
3. The female prospective teachers thought of teaching as their careers earlier than did the male prospective teachers. Also the female prospective teachers decided to become a teacher earlier than the male prospective teachers. Slightly fewer than half of the female prospective teachers and more than half of the male prospective teachers decided to become a teacher since entering college.
4. About half of the male prospective teachers decided to

become a teacher on the basis of their own desires and judgments, and one third of them did according to their desires and other's advice or influences combined; on the other hand, among female prospective teachers those who decided to become teachers on the basis of their desires and other's advice or influences combined were more than those who decided it on the basis of their own desires.

5. About half of the male prospective teachers expected to stay in the teaching profession until retirement, but more than half of the female prospective teachers expected to stay in that profession only until starting their own families.

6. With regard to the prospective teachers' evaluations of the occupational values of teaching and their influences upon the motivations for becoming teachers:

- a. In general, almost all occupational values of teaching were evaluated rather highly, and influenced the motivations somewhat positively. There was no value of teaching which a great number of the prospective teachers evaluated very highly, and also no value of teaching which affected the desire to become teachers very positively.
- b. With regard to the values of teaching which contain the elements, b_5 and a_1 , or Intellectual condition and Requirement, there was no significant difference by sex on both evaluation of occupational values of teaching and its influences upon the motivations for becoming teachers.
- c. With regard to the values of teaching which contain the

elements, b_1 , b_2 , and b_3 , or Physical, Economic, and Social conditions, significant differences existed by sex on both evaluation of the occupational values and its influences upon the motivations.

- d. It was recognized that the evaluation of the occupational values of teaching was relatively changing, along with changes in teacher training, licensing requirements, society as a whole, and so on.

7. With regard to the relations between the degree of evaluations of the occupational values of teaching and the intensity of motivations for becoming teachers:

- a. The evaluations of the occupational values of teaching which contain the element, a_1 or Requirements, were not related to the motivations for desire to become a teacher. On the other hand, the evaluation of the values which contain the element, a_2 or Satisfactions, had an important relationship with the motivations for desire to become a teacher.
- b. When compared with a 1949 study, the values, "enjoying fellowship with interesting co-workers" and "an attractive environment in a school" have increased in the monograph. This shift might show the changes in new buildings and recruits.

8. The high or favorable evaluations of the occupational values of teaching do not always intensify the motivations of the prospective teachers positively.

9. The selection of facets and the metatheory, the con-

tiguity principle, were adequate. It is hoped that by further study the complete subuniverses may be made up, by using the present facets.

3. Recommendations

It is the opinion of the writer of this study that as a result of using this instrument, the intensive and extensive researches and studies in the following areas are urgently needed:

1. Determination of the patterns of the motivations for entering teaching.
2. Studies of the factors which are closely related with the patterns of the motivations.
3. Researches as to possible changes in the motivations, owing to the change of time, the results of teacher training and teaching experiences.
4. The extensive researches on the relationships between the motivations and teaching efficiency and length of staying power in the teaching profession.

BIBLIOGRAPHY

- Best, J. W. "A Study of Certain Selected Factors Underlying the Choice of Teaching as a Profession," Journal of Experimental Education, Vol. 17, 1948, 201-259.
- Brookover, W. B. A Sociology of Education, American Book Company, New York, 1955.
- California Teacher Association, Motivation for Entering Teaching Profession, Research Monograph No. 23, 1955.
- Eliassen, R. H. "Recruitment for Teacher Training," Review of Educational Research, Vol. 7, 1937, 247-252.
- Fielstra, C. "An Analysis of Factors Influencing the Decision to become a Teacher," Journal of Educational Research, Vol. 48, 1955, 659-667.
- Fones, E. L. and Holman, M. V. "Why People become Teachers," in Stiles, L. J. (ed.) The Teacher's Role in American Society, Yearbook of The John Dewey Society, New York, Harper, 1957, 235-246.
- Fox, R. B. "Factors Influencing the Career Choice of Prospective Teachers," Journal of Teacher Education, Vol. 12, 1961, 427-432.
- Gould, G. "Motives for Entering the Teaching Profession," The Elementary School Journal, Vol. 35, 1934, 95-102.
- Guttman, L. "The Structuring of Sociological Spaces," Technical Note No. 3, 1961, The Israel Institute of Applied Social Research.
- _____. "A Structural Theory for Intergroup Beliefs and Action," American Sociological Review, Vol. 24, 1959, 318-328.
- _____. "Notes on Terminology for Facet Theory," (distributed in class) Fall, 1962.
- _____. "What Lies Ahead for Factor Analysis," Educational and Psychological Measurement, 18 (Autumn, 1958), 497-515.
- _____. "The Principal Components of Scalable Attitudes," in P. F. Lazarsfeld (ed.), Mathematical Thinking in the Social Sciences, Clencoe, Ill., Free Press, 1954, 216-257.
- Hammond, M. "Motives Related to Vocational Choices of College Freshmen," Journal of Counseling Psychology, Vol. 3, 1956, 257-261.
- Haubrich, V. F. "Motives of Prospective Teachers," Journal of

Teacher Education, Vol. 11, 1960, 381-386.

Hollis, E. V. "Why They Teach," Educational Administration and Supervision, Vol. 15, 1925, 678-684.

Jatzen, J. M. "An Opinionare on Why College Students Choose to Teach," Journal of Educational Research, Vol. 53, 1959, 13-17.

Johnson, A. H. "The Responses of High School Seniors to a Set of Situations Concerning Teaching as a Career," Journal of Experimental Education, Vol. 26, 1958, 263-314.

LaBae, A. C. "Study of Motivation of 'Persistent' vs. 'Non-persistent' Students in Teacher Education," Journal of Teacher Education, Vol. 5, 1954, 242-243.

Lang, G. "An Experimental Scale to Measure Motives for Teaching," Journal of Educational Research, Vol. 51, 1958, 687-694.

———. "Motives in Selecting Elementary and Secondary School Teaching," Journal of Experimental Education, Vol. 29, 1960, 101-104.

Langston, R. G. "A Study of Attitudes toward Teaching as a Vocation," Journal of Teacher Education, Vol. 2, 1951, 83-87.

Lee, A. S. "Motives of High School Graduates for Entering the Profession of Teaching," School Review, Vol. 36, 1928, 16-24.

Lieberman, M. Education as a Profession, Englewood Cliffs, N. J., Prentice Hall, 1956.

Mason, W. S. The Beginning Teacher, U.S. Department of Health, education and Welfare, 1961.

Ostlie, S. "Motivation for Entering Teaching," Journal of Teacher Education, Vol. 7, 1956, 80-81.

Redl, F. and Wattenberg, W. M. Mental Hygiene in Teaching, Harcourt, Brace, 1951.

Reiss, A. J. Occupations and Social Status, The Free Press of Glence, inc., 1961.

Richards, R. "Prospective Students' Attitudes Toward Teaching," Journal of Teacher Education, Vol. 11, 1960, 375-380.

Richey, R. W. and Fox, W. H. "An Analysis of Various Factors Associated with Selection of Teaching as a Vocation," Indiana University School of Education Bulletin, 1948.

- Ringness, T. A. "Relationships between Certain Attitudes Toward Teaching and Teaching Success," Journal of Experimental Education, Vol. 21, 1952, 1-55.
- Roe, A. The Psychology of Occupations, New York, John Wiley and Sons, Inc., 1956.
- Roth, L. J. "Occupational Analysis and Teacher Morale," Journal of Educational Sociology, Vol. 32, 1958, 145-151.
- Stern, G. G. and Masling, J. M. Unconscious Factors in Career Motivation of Teaching, Syracuse University Research Institute, 1958.
- Tudhope, W. B. "Motives for the Choice of the Teaching Profession by Teachers College Students," British Journal of Educational Psychology, Vol. 14, 1944, 119-141.
- The Yearbook of Education 1953 --- Status and Position of Teachers ---
- Warner, W. L., Meeker, M. and Eells, K. Social Class in America, Chicago, Science Research Associates, 1949.
- Wellbaur, H. L. "Why Teach?" Journal of Educational Research, Vol. 48, 1955, 699-703.
- Willcox, I. and Beigel, H. G. "Motivations in the Choice of Teaching," Journal of Teacher Education, Vol. 4, 1953, 106-109.
- Yeager, T. An Analysis of Certain Traits of Selected High School Seniors Interested in Teaching, Teachers College, Columbia University, Contributions to Education, No. 660, Teachers College, Columbia University, 1953.

Appendix
Questionnaire

(A) PLEASE CIRCLE THE NUMBER IN FRONT OF THE APPROPRIATE ANSWER.

- (1) Sex: 1. Male
 2. Female
- (2) Year: 1. Freshman
 2. Sophomore
 3. Junior
 4. Senior
 5. Graduate student
- (3) Age: 1. 19 or under
 2. 20
 3. 21
 4. 22
 5. 23
 6. 24
 7. 25 or over
- (4) In what kind of school do you expect to become a teacher?
Circle one.
1. Elementary school (kindergarten - the 6th grade)
 2. Junior high school (the 7th grade - the 9th grade)
 3. Senior high school (the 10th grade - the 12th grade)
 4. Other (please specify) _____

(5,6) What was the highest level of education completed by your parents? Please circle one in each column: One for your father and one for your mother.

(5) <u>Father</u>	(6) <u>Mother</u>	
1.	1.	1. Did not complete grade school.
2.	2.	2. Completed grade school but not high school.
3.	3.	3. Completed high school, but not college.
4.	4.	4. Completed one, but less than four years of college.
5.	5.	5. Completed a four-year college program.
6.	6.	6. M.A., Ph.D. or a professional degree.

(7) What is the usual occupation of the head of the household in your parental family? Please circle one and specify what he does.

1. Professional _____

2. Technical _____
3. Farmer & Farm Manager _____
4. Managers, Officials, & Proprietors (exc. Farm) _____
5. Clerical _____
6. Sales (exc. Sales Manager or Administrator) _____
7. Skilled worker _____
8. Semi-skilled worker _____
9. Service worker _____
10. Unskilled worker (either farm or non-farm) _____

If the head of the household is a woman, circle here. . . 11.

If the head of the household is retired, circle here. . . 12.

- (8) What is your parental family's approximate annual income from all sources before taxes? Circle one.

1. Under \$3,000
2. \$3,000 - \$4,999
3. \$5,000 - \$7,499
4. \$7,500 - \$9,999
5. \$10,000 - \$14,999
6. \$15,000 - \$19,999
7. \$20,000 and over
8. I have no idea

- (9) At about what period in your life did you first think you might want to become a teacher? Circle one.

1. Before completing the 6th grade
2. During the 7th to the 9th grade
3. During the 10th to the 12th grade
4. After high school graduation, but before entering college
5. Since entering college
6. Other (please specify) _____

- (10) When did you definitely decide to become a teacher? Circle one.

1. Before completing the 6th grade
2. During the 7th to the 9th grade
3. During the 10th to the 12th grade
4. After high school graduation, but before entering college
5. Since entering college
6. Other (please specify) _____

(11) On what basis did you decide to become a teacher? Circle one.

1. Mainly through my own desire and judgment
2. Mainly through the advice of someone else
3. Mainly through the result of a vocational interest inventory
4. My desire and other's advice or influence combined
5. My desire and the result of a vocational interest inventory
6. Other (please specify) _____

(12) How long do you expect to stay in the teaching profession?

1. Until marriage
2. Until I start my own family
3. Until I can get a better job
4. Until I save enough money to enter a graduate or professional school
5. Until no financial need to work
6. Until retirement
7. Other (please specify) _____

(B) THE FOLLOWING SECTION IS COMPOSED OF 26 PAIRS OF QUESTIONS CONCERNED WITH YOUR EVALUATION OF THE OCCUPATIONAL VALUES IN THE TEACHING PROFESSION AND THE MOTIVATIONS FOR YOUR CHOOSING THIS PROFESSION.
PLEASE CIRCLE THE NUMBER IN FRONT OF ONE RESPONSE TO EACH QUESTION WHICH MOST NEARLY INDICATES YOUR ANSWER TO THE QUESTION.

(1) In your estimation, how easy is it to find a position in the teaching profession?

4. Very easy
3. Rather easy
2. Not so easy
1. Very hard

(2) How does your evaluation in question (1) above affect your desire to become a teacher?

5. Very positively
4. Somewhat positively
3. No effect
2. Somewhat negatively
1. Very negatively

(3) In your estimation, how much physical strain is generally required by teaching?

4. Very little
3. Some
2. Much
1. Very much

(4) How does your evaluation in question (3) above affect your desire to become a teacher?

5. Very positively

- 4. Somewhat positively
- 3. No effect
- 2. Somewhat negatively
- 1. Very negatively

(5) | In your estimation, how attractive is the environment in the school?

- 4. Very attractive
- 3. Rather attractive
- 2. Not so attractive
- 1. Very unattractive

(6) | How does your evaluation in question (5) above affect your desire to become a teacher?

- 5. Very positively
- 4. Somewhat positively
- 3. No effect
- 2. Somewhat negatively
- 1. Very negatively

(7) | In your estimation, how much vacation and holiday time do teachers have?

- 4. Very much
- 3. Much
- 2. Some
- 1. Very little

(8) | How does your evaluation in question (7) above affect your desire to become a teacher?

- 5. Very positively
- 4. Somewhat positively
- 3. No effect
- 2. Somewhat negatively
- 1. Very negatively

(9) | In your estimation, how much money does training for the teaching profession require?

- 4. Very little
- 3. Some
- 2. Much
- 1. Very much

(10) | How does your evaluation in question (9) above affect your desire to become a teacher?

- 5. Very positively
- 4. Somewhat positively
- 3. No effect
- 2. Somewhat negatively
- 1. Very negatively

- (11) From what you know about it, how would you rate the retirement system in the teaching profession?
4. Very satisfactory
 3. Rather satisfactory
 2. Not so satisfactory
 1. Very unsatisfactory
- (12) How does your evaluation in question (11) above affect your desire to become a teacher?
5. Very positively
 4. Somewhat positively
 3. No effect
 2. Somewhat negatively
 1. Very negatively
- (13) From what you know about it, how would you rate the provision for sick leave in the teaching profession?
4. Very satisfactory
 3. Rather satisfactory
 2. Not so satisfactory
 1. Very unsatisfactory
- (14) How does your evaluation in question (13) above affect your desire to become a teacher?
5. Very positively
 4. Somewhat positively
 3. No effect
 2. Somewhat negatively
 1. Very negatively
- (15) In your estimation, how much security against job loss is there in the teaching profession?
4. Very much
 3. Much
 2. Some
 1. Very little
- (16) How does your evaluation in question (15) above affect your desire to become a teacher?
5. Very positively
 4. Somewhat positively
 3. No effect
 2. Somewhat negatively
 1. Very negatively
- (17) How would you rate teachers' salaries?
4. Very good
 3. Rather good
 2. Not so good
 1. Very poor
- (18) How does your evaluation in question (17) above affect your desire to become a teacher?
5. Very positively

4. Somewhat positively
 3. No effect
 2. Somewhat negatively
 1. Very negatively
- (19) From what you know about it, to what extent are teachers expected to participate in community functions?
4. Very often
 3. Often
 2. Some
 1. Very little
- (20) How does your evaluation in question (19) above affect your desire to become a teacher?
5. Very positively
 4. Somewhat positively
 3. No effect
 2. Somewhat negatively
 1. Very negatively
- (21) In your estimation, to what extent does teacher training provide opportunities for contact with and entrance into other occupations?
4. Good opportunities
 3. Fair opportunities
 2. Poor opportunities
 1. Very poor opportunities
- (22) How does your evaluation in question (21) above affect your desire to become a teacher?
5. Very positively
 4. Somewhat positively
 3. No effect
 2. Somewhat negatively
 1. Very negatively
- (23) In your estimation, to what extent does teaching experience provide opportunities for occupational advancement or entrance into other occupations?
4. Good opportunities
 3. Fair opportunities
 2. Poor opportunities
 1. Very poor opportunities
- (24) How does your evaluation in question (23) above affect your desire to become a teacher?
5. Very positively
 4. Somewhat positively
 3. No effect
 2. Somewhat negatively
 1. Very negatively

- (25) | In your judgment, to what extent is the teaching profession respected by society?
4. Very highly
 3. Rather highly
 2. Not so highly
 1. Very low
- (26) | How does your evaluation in question (25) above affect your desire to become a teacher?
5. Very positively
 4. Somewhat positively
 3. No effect
 2. Somewhat negatively
 1. Very negatively
- (27) | How would you rate competition in the teaching profession, compared with other professions?
4. Very little competition
 3. Some competition
 2. Considerable competition
 1. Very great competition
- (28) | How does your evaluation in question (27) above affect your desire to become a teacher?
5. Very positively
 4. Somewhat positively
 3. No effect
 2. Somewhat negatively
 1. Very negatively
- (29) | How would you rate the relationships between teachers and students?
4. Very friendly
 3. Rather friendly
 2. Not so friendly
 1. Very unfriendly
- (30) | How does your evaluation in question (29) above affect your desire to become a teacher?
5. Very positively
 4. Somewhat positively
 3. No effect
 2. Somewhat negatively
 1. Very negatively
- (31) | In your estimation, how interesting are teachers as co-workers?
4. Very interesting
 3. Rather interesting
 2. Not so interesting
 1. Very dull
- (32) | How does your evaluation in question (31) above affect your desire to become a teacher?
5. Very positively

4. Somewhat positively
 3. No effect
 2. Somewhat negatively
 1. Very negatively
- (33) | In your estimation, to what extent are teachers able to be self-directive?
 4. Very much
 3. Much
 2. Some
 1. Very little
- (34) | How does your evaluation in question (33) above affect your desire to become a teacher?
 5. Very positively
 4. Somewhat positively
 3. No effect
 2. Somewhat negatively
 1. Very negatively
- (35) | In your estimation, how easy are the educational requirements for entering the teaching profession?
 4. Very easy
 3. Rather easy
 2. Not so easy
 1. Very difficult
- (36) | How does your evaluation in question (35) above affect your desire to become a teacher?
 5. Very positively
 4. Somewhat positively
 3. No effect
 2. Somewhat negatively
 1. Very negatively
- (37) | In your judgment, how would you rate the intellectual demands of the teaching profession?
 4. Very low demands
 3. Rather low demands
 2. Not so low demands
 1. Very high demands
- (38) | How does your evaluation in question (37) above affect your desire to become a teacher?
 5. Very positively
 4. Somewhat positively
 3. No effect
 2. Somewhat negatively
 1. Very negatively

- (39) In your estimation, to what extent do teachers engage in a variety of activities?
4. Very great variety
 3. Much variety
 2. Some variety
 1. Very little variety
- (40) How does your evaluation in question (39) above affect your desire to become a teacher?
5. Very positively
 4. Somewhat positively
 3. No effect
 2. Somewhat negatively
 1. Very negatively
- (41) In your estimation, to what extent do teachers have opportunities to pursue their interests in a favorite subject?
4. Good opportunities
 3. Fair opportunities
 2. Poor opportunities
 1. Very poor opportunities
- (42) How does your evaluation in question (41) above affect your desire to become a teacher?
5. Very positively
 4. Somewhat positively
 3. No effect
 2. Somewhat negatively
 1. Very negatively
- (43) In your estimation, to what extent does teaching provide opportunities for expression and utilization of one's capabilities?
4. Good opportunities
 3. Fair opportunities
 2. Poor opportunities
 1. Very poor opportunities
- (44) How does your evaluation in question (43) above affect your desire to become a teacher?
5. Very positively
 4. Somewhat positively
 3. No effect
 2. Somewhat negatively
 1. Very negatively
- (45) In your estimation, to what extent are teachers interested in their own academic improvements?
4. Very much
 3. Much
 2. Some
 1. Very little
- (46) How does your evaluation in question (45) above affect your desire to become a teacher?

- 5. Very positively
- 4. Somewhat positively
- 3. No effect
- 2. Somewhat negatively
- 1. Very negatively

(47) | In your estimation, to what extent are teachers expected to behave according to a strict code of ethics?

- 4. Very much
- 3. Much
- 2. Some
- 1. Very little

(48) | How does your evaluation in question (47) above affect your desire to become a teacher?

- 5. Very positively
- 4. Somewhat positively
- 3. No effect
- 2. Somewhat negatively
- 1. Very negatively

(49) | In your estimation, to what degree are teachers able to get satisfaction from the development and improvement of their students?

- 4. Very much
- 3. Much
- 2. Some
- 1. Very little

(50) | How does your evaluation in question (49) above effect your desire to become a teacher?

- 5. Very positively
- 4. Somewhat positively
- 3. No effect
- 2. Somewhat negatively
- 1. Very negatively

(51) | Among all kinds of human endeavor, how would you rank teaching?

- 4. Very high
- 3. Rather high
- 2. Not so high
- 1. Very low

(52) | How does your evaluation in question (51) above affect your desire to become a teacher?

- 5. Very positively
- 4. Somewhat positively
- 3. No effect
- 2. Somewhat negatively
- 1. Very negatively

(Thank you very much for your help)

MICHIGAN STATE UNIVERSITY LIBRARIES



3 1293 03142 8919