

A STUDY OF CERTAIN PERSONALITY AND  
VALUE DIFFERENCES IN TEACHER EDUCATION  
MAJORS PREFERRING EARLY AND LATER  
ELEMENTARY TEACHING LEVELS

Thesis for the Degree of Ed. D.  
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Horton Coe Southworth  
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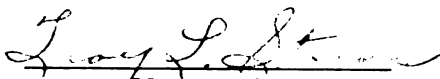
A STUDY OF CERTAIN PERSONALITY AND VALUE  
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 PREFERRING EARLY AND LATER ELEMENTARY  
 TEACHING LEVELS

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AN ABSTRACT OF A THESIS

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## ABSTRACT

### A STUDY OF CERTAIN PERSONALITY AND VALUE DIFFERENCES IN TEACHER EDUCATION MAJORS PREFERRING EARLY AND LATER ELEMENTARY TEACHING LEVELS

by Horton Coe Southworth

#### Statement of the Problem

This study was designed to search for certain personality and value differences existing between elementary teaching majors stating a preference for early-elementary-teaching-grade levels (kindergarten through grade three) and those students stating a preference for later-elementary-teaching-grade levels (grade four through grade eight).

The personality characteristics considered were the fifteen manifest needs as contained in the Edwards Personal Preference Schedule. The value interests considered were the six contained in the Allport, Vernon, Lindzey Study of Values.

Grade-level preference was determined by a direct question contained in the Student Teacher Experimental Program Student Personnel Inventory.

### Procedure

Eighty-eight students forming Group I of the Michigan State University Student Teacher Experimental Program were tested in the spring of 1961 at a two day orientation and testing session on the East Lansing campus. All eighty-eight students were transferring to the University from six out-state junior and community colleges.

By preference the eighty-eight sub-divided into forty-three early-elementary-preference women, twenty-seven later-elementary-preference women, and eighteen later-elementary-preference men. The variance of each of the three groups from the population mean was determined for twenty-two characteristics of personality and value. Sixteen characteristics were significant and warranted treatment of the group means by use of the student "t" test. Each group was shown to be homogeneous by using the Cochran Test for homogeneity.

### Findings

Two major hypotheses were formulated to aid the investigation.

Hypothesis I stated that there would be differences between the personality traits of elementary majors who initially preferred early-elementary grades and the traits of

those who initially preferred later-elementary grades. Seven Edwards characteristics were found to indicate significant differences between preference groups. Early-elementary-preference students revealed more manifest need for "Abasement," "Affiliation," "Succorance," and "Nurturance" when compared with later-elementary-preference students. Later-elementary-preference students conversely revealed higher manifest need for "Achievement," "Aggression," and "Exhibition" when compared with early-elementary-preference students.

Hypothesis II stated that no differences would be found in "Theoretical," "Economic," "Aesthetic," "Social," "Political," and "Religious" value motives between the early-elementary-preference group and the later-elementary-preference group. The hypothesis was supported for the preference factor but significant differences were discovered between men and women. The men-women differences were similar to those established in the normative group.

### Conclusions and Implications

Personality-related descriptions were developed for the early-elementary-preference group and for the later-elementary-preference group. Each descriptive list was evolved from the Edwards personality characteristics revealed to be significant manifestations for the particular preference group.

Implications were based upon two feasible alternative assumptions. A series of professionally useful implications related to each of the assumptions was presented.

The first assumption stated that to the degree the identified personality-related characteristics are consistent with the expectations commonly held for teachers of a particular grade level, the characteristics can be interpreted as being predictive of a person's relative suitability for teaching at the particular level. The alternative assumption stated that since certain traits are more characteristic of those preferring one level than of those preferring another level, the traits, and hence the common needs and interests, can be inferred from the stated grade-level preference.

Concluding recommendations were based upon the various uses of personal data files, which would include personality data and other grade-level-preference related data. Applications of such data to decisions and guidance during teacher education in the college and into the employed teaching experience were cited.

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## CHAPTER ONE

### INTRODUCTION

Career choice is an important life decision. Each college student is faced with choices as he plans a program of studies. Although research has explained many factors in a person's career choice, there are no known studies which attempt to explain the specific factors that influence a person to prepare for a particular position within a career field.

The student who selects teaching as his career also must make a decision about the educational level he wishes to teach. He can prepare for college-level instruction, high school teaching, or elementary school teaching. If a student chooses elementary teaching he usually makes a further choice of the grade level.

Elementary grade levels have been commonly denoted as "early" or "later." These terms have been used many years by public schools, colleges, and education students. "Early" ordinarily denotes kindergarten, first, second, and third grades, while "later" applies to fourth, fifth, and sixth grades (sometimes seventh and eighth).

Students preparing for elementary teaching at one time or another indicate their teaching-grade preference. Various inventory and placement forms require the student to state an initial preference; the activities within a course sometimes are designed to allow for such preference; certainly the grade preference is a factor in seeking a first teaching position. Grade-level preference for teaching is an important decision.

### The Problem

Why do certain students select the early elementary and other students the later-elementary-teaching level? Are there differences among students who state various grade-level preferences? The writer believes there are measurable personality differences.

Other researchers are also concerned about exploring the influence of personality on career choice, as well as the importance of personality in the very act of teaching.

Gerhard Lang<sup>1</sup> related personality to the person's choice of teaching as a career. The purpose of his work was to determine to what extent differences in the psychological needs of elementary and secondary teachers are reflected in

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<sup>1</sup>Gerhard Lang, "Teachers' Motives for Teaching," Clearing House, XXXIII (May, 1959).

their motives for choosing teaching. Lang used the Edwards Personal Preference Schedule and a questionnaire for background data. He found that secondary women teachers manifest greater need for "Achievement"<sup>2</sup> and less need for "Nurturance" than women elementary teachers.

Percival Symonds states:

If teaching is primarily a function of the teacher's personality, then the emphasis in securing good teaching should be placed on the selection of those who are to teach, and on the direction and modification of personality trends during the period of preparation and later during actual teaching service.<sup>3</sup>

In editorial comment accompanying the Symonds article, Douglas Scates said:

. . . leading teacher education institutions have been giving increasing attention to the importance of personality factors and have been shifting their emphasis from intellectual courses to developmental experiences.<sup>4</sup>

Further inquiry in the field of personality is needed. Nevitt Sanford, Department of Psychology, University of California, Berkeley, California, affirms ". . . the promise

<sup>2</sup>Quotation marks are used around the personality and value characteristics wherever they are used in the study to remind the reader they are representative words and not full explanations. Complete descriptions can be found in Appendix A.

<sup>3</sup>Percival M. Symonds, "Teaching as a Function of Teacher Personality," The Journal of Teacher Education, V (March, 1954), p. 79.

<sup>4</sup>Ibid.

of research is great. We are approaching territory that is virtually unexplored by the discipline of personality research." He was referring particularly to the exploration of personality development during the college years.<sup>5</sup>

The study presented here of personality differences between students grouped according to grade-level preference is but one phase of a larger research now being conducted by the College of Education, Michigan State University, and financed from teacher education research funds granted by the Ford Foundation. The Student Teacher Experimental Program (STEP) has provided extensive data concerning career choice, occupational commitment, and student background from which this study has drawn data.

#### Population of the Study

Group I of the STEP research population was composed of eighty-eight students. In the Spring of 1961, they matriculated in the College of Education from six junior and community colleges located in various parts of Michigan. The students had completed approximately 60 semester hours of course work, generally parallel to the freshman and sophomore

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<sup>5</sup> Nevitt Sanford, "Personality Development During the College Years," Personnel and Guidance Journal, XXXV (October, 1956), p. 79.

programs at the University, prior to transfer to Michigan State University for the completion of a degree program and teacher certification.

### Obtaining the Data

Prior to their enrollment on campus for summer school the study sample was invited to a special admission, orientation, and testing session. This was arranged in the Spring of 1961. The data were collected at that time. The personality characteristics were measured by the Edwards Personal Preference Schedule, and student values were measured by the Allport-Vernon-Lindzey Study of Values test. Each student also completed the Student Personnel Inventory (SPI) which included questions about teaching-grade preference, teaching experiences with children, descriptions of the person's favorite teacher, and general information about the student's home, parents, and community.

Personal experiences of the writer in the elementary field provided the motive for investigation. Several hypotheses were developed for the study from an examination of scores of the STEP pilot group. These students entered the program from Grand Rapids and Port Huron in the Summer of 1960.

### Statement of Hypotheses

Hypotheses I through I-D, as a whole, stated that there would be differences in personality traits of elementary education majors who initially preferred early-elementary grades and the traits of those who initially preferred later-elementary grades.

Hypothesis I-A stated that early-elementary-preference students would manifest "more" need for "Abasement," "Affiliation," "Succorance," and "Nurturance" than would later-elementary-preference students.

Hypothesis I-B stated that early-elementary-preference students would manifest "less" need for the personality characteristics of "Achievement," "Dominance," and "Aggression" than would the later-elementary-preference students.

Hypothesis I-C stated that no difference would be found between the early-elementary-preference students and the later-elementary-preference students on the manifest need for "Deference," "Order," "Exhibition," "Autonomy," "Change," "Endurance," "Intraception," and "Heterosexuality."

Hypothesis I-D predicted that women early-elementary-preference students would have "less tendency toward masculinity" than the women electing later-elementary grades.

Hypothesis II stated that no differences would be found in "Theoretical," "Economic," "Aesthetic," "Social,"



"Political," and "Religious" value motives between the early-elementary-preference group and the later-elementary-preference groups.

The hypotheses together provide a structure for the investigation of possible personality and value factors related to the teaching-level decision. The literature on values suggested that little difference would be found, since college students are commonly found to be generally homogeneous in regard to values. Personality research, on the other hand, has indicated a relationship of certain factors to gross teaching-level choice. The hypotheses of the study allow a further testing for relationships of values to teaching-level choices while refining and specifying the knowledge about personality factors in relation to teaching-level choices.

#### Implications of the Findings

Should the hypotheses in this study prove to be correct, it is incumbent upon teacher educators to take into account the differences which distinguish early-elementary-preference students from later-elementary-preference students. Curricula, planned experiences, and advisement would be affected. Teacher educators may be able to derive additional meaning from personality tests and personal inventories, discovering

ways to make these more helpful in advising students. If personality is a factor in the initial preference of teaching level, information about personality would prove particularly useful in guiding the elementary major in planning experiences that will enlarge his personal horizons and assist him in understanding himself.

Since grade-level preferences are also a factor in teacher assignment or reassignment, elementary principals and supervisors might well benefit from knowledge gained about personality differences characteristic of those who hold particular grade-level preferences.

### Organization of the Study

Chapter I has attempted to develop a brief rationale for the study, to introduce the study design, and to describe the study population. In Chapter II the literature relating to the study will be reviewed. Chapter III will describe more fully the development, the scope and the limitations of the study. Chapter IV will present and analyze the data. Chapter V contains an interpretation of the data and implications for teacher education.

## CHAPTER TWO

### REVIEW OF LITERATURE

The purpose of this chapter is to review the literature relating to occupational choice in teaching. Included in this review will be several studies dealing with specific factors of personality, value, and personal background contributing to career preference.

A career preference may be studied according to its internal and external aspects. Internally the career reflects the individual's picture of his life, involving whatever commitment to goals he may have developed, his understanding of his relations to various social institutions, his values, and his needs. Externally the same career encompasses the succession of roles that the individual plays during his life. Since the roles are interwoven within some institutional matrix (the family, the school, the factory, or the office), the career may be viewed as the means by which individual and collective lives are articulated.<sup>1</sup>

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<sup>1</sup>Egon Guba, Phillip Jackson, Charles Bidwell, "Occupational Choice and the Teaching Career," Educational Research Bulletin, XXXVIII, No. 1 (January 14, 1959), p. 1.

Career choice presents a problem to the individual. He must develop some commitment to one career. His commitment will provide a goal toward which he strives.<sup>2</sup>

### Theories of Career Choice

An investigation of the literature leads to examination of the general theory of occupational choice. Although not primarily a study of career choice, the study is concerned with certain factors and characteristics commonly considered influential in career decision. Among recent studies dealing with career choices are those by William Knight<sup>3</sup> and Robert Kittredge.<sup>4</sup> These studies offer a comprehensive treatment concerning the general theory of occupational choice.

It is relevant at this point to list the generalizations about factors influencing career choice formulated by Donald Super and contained in Vocational Interest Measurement: Theory and Practice by John Darley and Theda Hagenah.

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<sup>2</sup>Ibid.

<sup>3</sup>William Knight, "Factors Associated with Vocational Choices of High School Students of Vocational Agriculture" (unpublished Ph.D. dissertation, Michigan State University, 1958).

<sup>4</sup>Robert Kittredge, "Investigation of Differences in Occupational Preferences, Stereotypic Thinking, and Psychological Needs Among Undergraduate Women Students in Selected Curricular Areas" (unpublished Ph.D. dissertation, Michigan State University, 1960).

1. People differ in their abilities, interests, and personalities.
2. Each person is qualified, by virtue of several characteristics, for a number of occupations.
3. Each of these occupations requires a characteristic pattern of abilities, interests, and personality traits, with tolerances wide enough, however, to allow both some variety of occupations for each individual and some variety of individuals in each occupation.
4. Vocational preferences and competencies, the situations in which people live and work, and hence their self-concepts, change with time and experience (although self-concepts are generally fairly stable from late adolescence until late maturity), making choice and adjustment a continuous process.
5. The process of career choice may be characterized as a series of life stages exemplified by growth, exploration, establishment, maintenance, and decline, and these stages may in turn be subdivided into (a) fantasy, tentative, and realistic, all part of the exploratory stage, (b) the trial and stable phases of the establishment stage.
6. The nature of the career pattern (that is, the occupational level attained and the sequence, frequency and duration of trial and stable jobs) is determined by the individual's parental socio-economic level, mental ability, and personality characteristics, and by the opportunities to which he is exposed.
7. Development through the life stages can be guided, partly by facilitating the process of maturation of abilities and interests and partly by aiding in reality testing and in the development of self-concept.
8. The process of vocational development is essentially that of developing and implementing a self-concept: it is a compromise process in which the self-concept is a product of the interaction of inherited aptitudes, neural and endocrine make-up, opportunity to play various roles, and evaluation of the extent to which the results of role playing meet with approval of superiors and fellows.

9. The process of compromise between individual and social factors, between self-concept and reality, is one of role playing, whether the role is played in fantasy, in the counseling interview, or in real life activities such as school classes, clubs, part-time work and entry jobs.

10. Work satisfactions and life satisfactions depend upon the extent to which the individual finds adequate outlets for his abilities, interests, personality traits and values; they depend upon his establishment in a type of work, a work situation, and a way of life in which he can play the kind of role which his growth and exploratory experiences have led him to consider congenial and appropriate.<sup>5</sup>

Investigation by Ginzberg and associates<sup>6</sup> postulated a general theory in 1951 which describes occupational choice as a process that takes place over a period of six to ten years or more. Each decision is related to experiences up to that point, the process is irreversible and the choice is inevitably a compromise. This theory has drawn criticism from both Darley and Hagenah as well as Super and Small. Super scores Ginzberg's neglect of research literature and his failure to adequately describe the compromise process. Small found no supporting evidence for the developmental theory:

. . . a theory of vocational choice must take account of ego strength. With this factor as nearly constant

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<sup>5</sup> John Darley and Theda Hagenah, Vocational Interest Measurement: Theory and Practice (Minneapolis, Minnesota: University of Minnesota Press, 1955), pp. 160-61.

<sup>6</sup> Eli Ginzberg et al., Occupational Choice: An Approach to a General Theory (New York: Columbia University Press, 1951), p. 198.

as possible rather than an unknown variable, it would be possible to test the relative importance of developmental factors, interests, aptitudes, and family traditions and pressures, environmental opportunities, and the host of other factors recognized as individual determinants but not yet integrated into a sound theory.<sup>7</sup>

However, Darley and Hagenah feel it is unlikely that we can produce, for some time to come, any complete theory regarding the origin and development of occupational interests.<sup>8</sup>

An earlier work of Miller and Form<sup>9</sup> suggests that a variety of "career patterns" exists. Later, Tiedeman, in the Harvard Studies in Career Development, indicates that the central focus on research in career development must be on the perceptions a person has of himself in relation to work. Tiedeman points out that most of the studies of vocational choice have consisted of reconstruction of the career process by an outsider. It is his contention that a better predictive system can be developed through the use of a person's reconstruction of his own career process. Thus he contends

. . . that the kind, duration, and sequence of educational and vocational choices can be predicted with greater fidelity if a person's perceptions of

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<sup>7</sup> Leonard Small, "A Theory of Vocational Choice - Recent Developments," Vocational Guidance Quarterly, I (Autumn, 1952), pp. 16-17.

<sup>8</sup> Darley and Hagenah, op. cit., p. 190.

<sup>9</sup> D. O. Miller and W. H. Form, Industrial Sociology (New York: Harper and Brothers, 1951), pp. 741-48.

himself in relation to work are taken as the organizing theme directing career decisions or their absence.<sup>10</sup>

### Importance of Personality in Teaching

Many studies consistently reveal the importance of personality in teaching. In reporting a research, Sister Mary Amatora states,

The prominence of personality as the number one quality of the teacher is no longer a disputed topic. That the personality of the pupil is influenced by the personality of the teacher is . . . maintained by many educators.<sup>11</sup>

A treatise by Percival Symonds also concludes

. . . that teaching is essentially an expression of personality. The teacher adapts himself to teaching in a manner that is harmonious with his expressions toward life situations in general. Methods and procedures learned during college preparation may influence teaching superficially but they do not determine the nature of the relation of a teacher to his pupils or the basic attitude toward teaching.<sup>12</sup>

Application of this theory is evident in Lang's<sup>13</sup> study using the Edwards Personal Preference Schedule with 101

<sup>10</sup>D. V. Tiedeman and R. P. O'Hara; with assistance of Esther Mathews, Position Choices and Careers: Elements of a Theory (Harvard Studies in Career Development), No. 8 (1958). (Mimeographed.)

<sup>11</sup>Sister Mary Amatora, "Similarity in Teachers' Personality," Journal of Psychology, XXXVII (January, 1954), pp. 45-50.

<sup>12</sup>Percival M. Symonds, "Teaching as a Function of Teacher Personality," The Journal of Teacher Education, V (March, 1954), pp. 79-83.

<sup>13</sup>Gerhard Lang, "Teachers' Motives for Teaching," Clearing House, XXXIII (May, 1959), pp. 542-44.



female elementary and eighty-seven female secondary teachers. The secondary women teachers manifested greater need for "Achievement" and less need for "Nurturance" than elementary women teachers.

### Studies of Personality Differences

Further studies concerned with personality differences between teachers and other student occupational groups found insignificant statistical evidence of difference between education, law, medical, journalism, and engineering student personality traits. Blum,<sup>14</sup> for example, used The Minnesota Multiphasic Personality Inventory (MMPI) in such a comparison. A study by Lough comparing elementary teachers and teachers of music on the MMPI revealed no significant differences. Lough cites a need for additional research on the personality characteristics of prospective teachers.<sup>15</sup>

Research by Morey<sup>16</sup> revealed many resemblances and

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<sup>14</sup>L. P. Blum, "Comparative Study of Students Preparing for Five Selected Professions Including Teaching," Journal of Experimental Education, XVI (September, 1947), pp. 31-65.

<sup>15</sup>Orpha M. Lough, "Teachers College Students and the MMPI," Journal of Applied Psychology, XXX, No. 3 (June, 1946), pp. 241-47.

<sup>16</sup>E. Morey, "Vocational Interests and Personality Characteristics of Women Teachers," Australian Journal of Psychology, I (June, 1949), pp. 26-37.

few differences between detailed likes and dislikes of American women teachers in the elementary, junior high, and senior high schools. The first group was the most feminine, artistic, and interested in domestic and social affairs; the second was more practical and active, interested in efficient organization and in reform; the third group had greater intellectual and abstract interests and greater desire for independence.

Sternberg<sup>17</sup> in testing 270 male students, thirty each in pre-medical, chemistry, economics, English, history, math, music, political science, and psychology with the MMPI, the Kuder Preference Test, and the Allport-Vernon-Lindzey Study of Values, found the sharpest differences separating the English and music majors from the chemistry and math majors. The English and music majors were more aesthetically inclined than chemistry and math majors.

The frequent inclusion of personality in a discussion of teacher characteristics emphasizes its assumed importance. To date research conducted on teacher personality traits has compared elementary and secondary levels or teachers and other occupational groups. (The work of Sister Mary Amatora

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<sup>17</sup> Carl Sternberg, "Personality Trait Patterns of College Students Majoring in Different Fields," Psychological Monographs: General and Applied, LXIX, No. 403 (April, 1955), p. 2.

is exceptional in that she attempted to measure differences among elementary teachers.)

### Studies of Value Difference

Research in personality traits commonly includes a study of values. Values are considered motives of personality and have been included in Hypothesis II, Chapter I. Hypothesis II stated that no difference would be found in "Theoretical," "Economic," "Aesthetic," "Social," "Political," and "Religious" value motives between the early-elementary-preference group and the later-elementary-preference group.

In examining the value image of American college students it is found to be

. . . . remarkably homogeneous, considering the variety of their social, economic, ethnic, racial, and religious backgrounds, and the relatively unrestricted opportunities they have had for freedom of thought and personal development.<sup>18</sup>

Jacob further states that the American student is gloriously contented with the present, assured that his destiny rests within his control, and he is unabashedly self-centered. He aspires to material gratifications for himself and his family. He looks out for himself and expects others to do likewise. The traditional values of sincerity, honesty,

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<sup>18</sup> Philip E. Jacob, Changing Values in College (New Haven, Connecticut: Hazen Foundation, 1956), p. 3.

loyalty, are respected, but there is no inclination to censure those who depart from the group norm in practice. He expresses a normal need for religion, but this does not carry over into his secular decisions. Jacob states,

There is a dutiful response to government without an expression of enthusiasm. Vocational preparation, and skill and experience in social adjustment head the rewards which students crave from higher education.<sup>19</sup>

As Jacob's description fits seventy-five to eighty percent of the American students, it is possible these students are forerunners of a major cultural and ethical revolution. Self-interest, social acceptance, friendship, and moral principles are their values in that order.

In another overview of the American college student Rose Goldsen has written,

American students, it is clear, are primarily family-centered: for their career takes second place, but they see work and career to mean much more than a way to earn a living.<sup>20</sup>

Rosenberg believes something quite different to be true,

Whatever the individual's particular hierarchy of values - whether he be chiefly concerned with making money, or using his talents, or having good interpersonal relations, or having freedom or adventure - he believes that he can satisfy it in some kind of work. Unlike a caste society, in which the individual's occupation is marked out at birth, the American occupational structure provides a good opportunity for

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<sup>19</sup> Ibid.

<sup>20</sup> Rose Goldsen et al., What College Students Think (Princeton, New Jersey: D. Van Nostrand Co., 1960), p. 23.

the individual to find that occupation which suits his special values and needs.<sup>21</sup>

Rosenberg also found when scaling values held by eighteen different occupational groups that students selecting teaching as a career ranked eighth in self-expression values, third in people-oriented values, third in faith-in-people values, and seventeenth in extrinsic-reward values among the various occupational groups.<sup>22</sup>

In a study of 256 freshman-sophomore students at Ohio State University, Dilley found that teacher education sophomores had a "desire for contacts with children and adolescents and secondly, a desire for the opportunity to help other people."<sup>23</sup> These were the only distinguishing personal values characteristic of teacher education students.

Richard Centers found that the higher occupational groups characteristically and consistently manifest a preference for situations providing opportunities for self-expression, leadership, and interesting experiences. The lower occupational groups strongly emphasize their craving for security

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<sup>21</sup> Morris Rosenberg, Occupations and Values (Glencoe, Illinois: Free Press, 1957), Chap. xx, p. 126.

<sup>22</sup> Ibid., Chap. ii, iii.

<sup>23</sup> N. E. Dilley, "Personal Values Held by College Students Who Enter Teacher Education Programs," Journal Teacher Education, VII (September, 1957), pp. 289-94.

and a desire for independence, autonomy, or freedom. Centers states that these differences are distinct for the various occupational strata.<sup>24</sup>

The literature reveals few studies that treat value differences within an occupational field. Most studies compare different career fields preparing students for assorted occupations. There is support for Jacob's contention that American college students have a "remarkably homogeneous" value image.<sup>25</sup>

Related to personality and value factors is a consideration of individual background experiences as they influence his career choice. Value beliefs and attitudes are given considerable attention in the literature dealing with the subject.

#### Studies of Teaching Career Motivations

In an intensive study of twenty highly selected elementary women teachers, Gowan<sup>26</sup> used interviews and tests:

<sup>24</sup>Richard Centers, "Motivational Aspects of Occupational Stratification," Journal of Social Psychology, XXVIII (November, 1948), pp. 187-217.

<sup>25</sup>Jacobs, op. cit., p. 3.

<sup>26</sup>J. C. Gowan, "A Summary of the Intensive Study of Twenty Highly Selected Elementary Women Teachers," Journal of Experimental Education, XXVI (December, 1957), pp. 115-24.

the Guilford-Zimmerman Temperament Scale, the California Psychological Inventory, the Study of Values, and the Kuder Preference Test. The twenty were selected from an original sample of 300 involved in David Ryans'<sup>27</sup> work.

Half of Gowan's group were church members. Twelve of the twenty had positive father identification and eleven admitted a "tom-boy" stage. Fourteen were active group members when younger. Scholastically, twelve had superior academic records, five had average records, and three were below average. Thirteen thought themselves more scholarly in high school. Strong teaching traditions were found in eleven of the group, although only nine had any early teaching-type experience. There seemed to be little relationship between experience and present effectiveness.

Gowan's report also shows that the group evidenced better personal relations, emotional stability, lower clerical or computational skills and were less aesthetic than other groups. Orientation toward money and power was lacking. Distinct personality and interest differences were noticeable. Members of the group demonstrated a love for children as well as a degree of permissiveness.

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<sup>27</sup> David G. Ryans, Characteristics of Teachers (Washington, D. C.: American Council on Education, 1960).

Birkinshaw,<sup>28</sup> in a study of 583 teachers in England, found that happy teachers tended to have a happy home environment in childhood. They also enjoyed their school life. Extroversion and an interest in other people, a good sense of humor, good health, and a certain ability to adapt and to organize were reported. Patience and the ability to face endless tasks with little return were attributes of the group.

In Best's study<sup>29</sup> of reasons for teaching, which included 214 senior men and women at the University of Wisconsin preparing to teach in Wisconsin secondary schools, a large percentage of the group had close association with teaching and the life of the teacher. Seventy-eight percent of these students stated that close friends or relatives were teachers, while thirty-six percent were children of teachers. Sixty percent of the students indicated a personal ideal that influenced their life plans. First in frequency was a senior-high-school teacher, and second a college teacher. Seventy-five percent said they had been advised that they were potentially good teachers. This group also reported tryout

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<sup>28</sup> M. Birkinshaw, The Successful Teacher (London: Hogarth Press, 1935).

<sup>29</sup> John W. Best, "A Study of Certain Selected Factors Underlying the Choice of Teaching as a Profession," Journal of Experimental Education, XVII (September, 1948), pp. 201-59.



experiences in teaching. Only fifty percent of the men and twenty-five percent of the women had discussed career plans with a faculty member.

The Best group ranked teaching second to medicine in value to society. In answer to the question, "Why did you choose teaching as a career?," a frequency rank order was established: a genuine interest in children, an opportunity to work in the field of major interest, life opportunity to learn, desire to work with people rather than things, security, and service to society.<sup>30</sup>

Based on preceding studies, happy childhood, good home environment, and early experiences with children and young people in situations similar to teaching, exist as common background elements for students electing a teaching career. A degree of extroversion, interests in other people, and family backgrounds in teaching were manifest.

Other studies of interest were those by Mildred Hoyt<sup>31</sup> and Byron Nelson.<sup>32</sup> Hoyt, in a study of factors that influence

<sup>30</sup> Ibid., p. 226.

<sup>31</sup> Mildred D. Hoyt, "Factors Which Influence Pre-Service Teachers' Choices of Elementary or Secondary Division," (unpublished Ph.D. dissertation, Stanford University, 1955).

<sup>32</sup> Byron B. Nelson, "The Reasons for Choice of Teaching Level by Prospective Teachers," (unpublished Ph.D. dissertation, George Peabody College for Teachers, 1952).

pre-service teachers' level choices, found that social prestige and social contacts were minor factors. Desire to teach children of specific age levels was primal, followed by democracy, guidance, social contribution, and job satisfaction.<sup>33</sup>

Nelson's study involving 9,340 education seniors supports Hoyt's study. Nelson further indicated that previous experience with children is a major factor in choosing elementary teaching.<sup>34</sup>

### Summary

In summary, the study of differences between people choosing early and later elementary teaching leads to articles and books dealing with the following topics: elementary teachers, general theories of occupational choice, differences in personality occurring between occupational groups, differences in value preferences of various occupational groups, characteristics of teachers, and teacher efficiency.

Writers who have formulated general theories of occupational choice agree that no one factor is the sole determinant; multiple factors influence career preference. They also agree that an individual develops a career choice

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<sup>33</sup>Hoyt, op. cit., pp. 133-38.

<sup>34</sup>Nelson, op. cit.

in stages as maturation is achieved. Furthermore, it is commonly held that final career choice stems from compromise and personal identification of self; including traits of personality, value preferences, consideration of past experiences, and clarification of life goals and individual needs.

One study was located that directly compared the personality differences of elementary teachers. Sister Mary Amatora<sup>35</sup> found slight differences in traits where teachers rated each other using a non-standardized personality instrument.

In general, the literature reveals several studies reporting personality and value differences occurring between various occupational groups. Few studies focus directly upon differences within an occupational field. No studies dealing specifically with one position level within a career field were discovered.

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<sup>35</sup>Sister Mary Amatora, op. cit.

## CHAPTER THREE

### PATTERN OF DEVELOPMENT, THE SCOPE, AND LIMITATIONS OF THE STUDY

Interest in studying certain personality differences among elementary teaching majors developed from nine years' administrative experience in the elementary schools of Michigan, and from participation in the Student Teacher Experimental Program at Michigan State University.

#### Rationale for the Study

Traits of personality influence a teacher's grade-level preference. There is some agreement among elementary principals that certain qualities are often found in an individual that best equip him for early or later elementary teaching levels. Abundance of patience, "mother love," and understanding are often used to identify the early-elementary teacher.

The school administrator is continually confronted with the responsibility of assigning new staff members or reassigning experienced individuals to accommodate changes in enrollment. Teachers are asked to move up one grade with

the children, to take an altogether different grade level, or to accept a combination of grades as the administrator deems necessary. A teacher may refuse reassignment, preferring to work with a specific age level; such resistance may arise from interest in the subject content of a particular grade level, or from the teacher's more appropriate preparation for a specific grade level.

The dilemma of teacher grade assignment prompts this study of personality differences in persons stating specific level preferences.

#### Basis for Hypotheses

Several hypotheses formulated from professional experience were given direction from an examination of the thirty-eight cases of the STEP pilot group<sup>1</sup> using scores from the Edwards Personal Preference Schedule and data from the Student Personnel Inventory.

Hypothesis I stated that there would be differences

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<sup>1</sup>The Student Teacher Experimental Program, a research in teacher education, incorporated instrumentation that facilitated data collection for this study. The pilot group of thirty-eight students entered the STEP program in the summer of 1960, from the Grand Rapids and Port Huron Centers. The STEP research has established that the off-campus students, as a whole, were less advantaged "socio-economically" than the thirty-three students from the campus. The fathers of over half the off-campus students had not completed high school; the students frequently were the eldest in the family and were native to Michigan.

in personality traits of elementary education majors who initially preferred early-elementary grades and the traits of those who initially preferred later-elementary grades.

Hypothesis I-A stated that early-elementary-preference students would manifest "more" need for "Abasement," "Affiliation," "Succorance," and "Nurturance" than would later-elementary-preference students. These characteristics were measured on the Edwards Personal Preference Schedule. Examination of pilot group scores supported this statement. The eighty-eight students of Group I in the study offered an opportunity to test statistically the direction.

Hypothesis I-B stated that early-elementary-preference students would manifest "less" need for the personality characteristics of "Achievement," "Dominance," and "Aggression" than would later-elementary-preference students. The direction for this hypothesis was based on the pilot group scores as well as professional observations.

Hypothesis I-C stated that no differences would be found between the early-elementary-preference students and later-elementary-preference students on the manifest need for "Deference," "Order," "Exhibition," "Autonomy," "Change," "Endurance," "Intrasection," and "Heterosexuality."

Hypothesis I-D predicted that women early-elementary-preference students would have "less tendency toward

masculinity" than the women electing later elementary grades. The tendency was determined by measuring deviation of individual women's scores for twelve Edwards characteristics from the grand mean for men and women of the Edwards normative group. A more detailed explanation of the index developed will accompany the presentation of Hypothesis I-D in Chapter IV.

Hypothesis II stated that no differences would be found in "Theoretical," "Economic," "Aesthetic," "Social," "Political," and "Religious" value motives between the early-elementary-preference group and the later-elementary-preference group. The direction for value differences stemmed from an acquaintance with literature reporting the generally homogeneous nature of the American college population.

The study is based upon eighty-eight students, or the total number of students comprising Group I of the STEP program. Thirteen students were from the Alpena Center, ten from Battle Creek, sixteen from Bay City, twenty-four from Grand Rapids, twelve from Port Huron, and thirteen were from the South Macomb Center.

The STEP students were invited to the East Lansing campus of Michigan State University in May of 1961, for a two-day orientation and testing session. Administration of the several instruments necessitated the special testing sessions.

### Determining Grade-Level Preference

Grade preference was determined for each student by including question fifteen in the Student Personnel Inventory. Of the eighty-eight students, forty-three women stated initial preference for early-elementary grades (kindergarden through grade three), twenty-seven women stated initial preference for later-elementary grades (grade four through grade eight), and eighteen men stated initial preference for later-elementary grades. Preference in the study should be regarded as initial; inasmuch as the respondents were completing the sophomore year when tested.

### Procedure for Data Analysis

Analysis of data occurred from January, 1962, through March, 1962. The data were first placed on mechanically sorted punched cards. Scores from the Edwards Personal Preference Schedule and six scores from the Study of Values were taken from the processed cards and arranged by groups according to initial teaching-level preference. Three groups of cases existed: forty-three women preferring early elementary, twenty-seven women preferring later elementary and eighteen men preferring later elementary. The data derived from the three groups were tested for significant differences of variance from the total population for each of the twenty-two



measures. The "F" test was used for analysis of variance. The three groups in the study population revealed significant variance for sixteen of the measures, warranting further treatment. The groups were then analyzed for differences between group means, using the student "t" test.

The homogeneous nature of each group was established for each measure by applying the Cochran Test for homogeneity. Test results for the twenty-two measures revealed that the spread of scores was unusually similar from group to group, with the conclusion that each group was a homogeneous group.

The problems of a small sample size forces the researcher to establish careful, specific limits, eliminating chance error. Selection of a particular rejection region is dependent on "practical" aspects of the experiment in question, and circumstances of the effect of a particular level of significance. The level of significance fixes the relative number of chance outcomes the researcher is willing to interpret mistakenly as real effects in the study. The reason five percent (.05) was chosen for this study as the amount of error to be allowed was due to the small sample size. The groups were forty-three, twenty-seven, and eighteen. For example, where "n" equals no more than forty-three, only two errors can be allowed for correct interpretation.

The nature of the STEP population demands an explanation of socio-economic background: the father's occupation is generally accepted by sociologists as the most important indicator of an individual's social origin. Four items were utilized in the study to obtain some measure for each student: the father's occupation, the father's formal education, the mother's employment history, and the mother's formal education. Each of the four items has an inner correlation. For example, a "yes" response on whether the mother was employed correlated with the mother's level of education. This correlation matrix was factor analyzed and the first principal factor extracted. A high score indicated higher formal education of the parent. The groups did not differ on this factor. Socio-economic background was excluded as an influencing factor in the study.

## CHAPTER FOUR

### PRESENTATION AND ANALYSIS OF DATA

Chapter IV features the presentation and analysis of the data. The data are arranged in three types of tables: (1) means and standard deviations for each characteristic for the three groups, (2) the analysis of variance of group means from the study population for each characteristic, (3) a comparison of groups showing the difference in means and the resulting "t" score and its significance.

#### Hypothesis I-A

Hypotheses I-A through I-D, as a whole, proposed that there would be differences in the personality traits of elementary education majors who initially preferred early-elementary grades and the traits of those who initially preferred later-elementary grades. Hypothesis I-A specifically predicted that the early-elementary-preference student would manifest more need for "Abasement," "Affiliation," "Succorance," and "Nurturance" than would later-elementary-preference students. The direction for the hypothesis was postulated on the basis of a previous examination of

thirty-eight subjects in the STEP pilot sample. Table 4.1 presents the means and standard deviations of the three groups for the four characteristics.

TABLE 4.1

MEANS AND STANDARD DEVIATIONS FOR EDWARDS CHARACTERISTICS  
OF "ABASEMENT," "AFFILIATION," "SUCCORANCE,"  
AND "NURTURANCE"

Variable	Early Elementary Women n=43	Later Elementary Women n=27	Later Elementary Men n=18
Abasement			
Means	18.19	14.81	14.61
S.D.	4.85	5.33	5.43
Affiliation			
Means	16.91	15.22	13.22
S.D.	3.54	4.48	4.12
Succorance			
Means	12.51	10.41	9.17
S.D.	4.27	4.92	4.72
Nurturance			
Means	18.37	14.30	13.33
S.D.	4.48	5.48	3.46

"Abasement" is described in the Edwards' Manual as the quality of feeling guilt, "giving in" instead of fighting, feeling timid in the presence of superiors, or to accept blame when things do not go right. Table 4.2 summarizes the essential components for arriving at an "F" test for each of the characteristics of Hypothesis I-A. For "Abasement" the

TABLE 4.2

THE ANALYSIS OF VARIANCE OF GROUP MEANS FOR EDWARDS  
CHARACTERISTICS OF "ABASEMENT," "AFFILIATION,"  
"SUCCORANCE," AND "NURTURANCE"

Source of Variation	Sum of Squares	d.f.	Mean Squares	"F"	Probability
<u>Between Groups</u>					
Abasement	263.56	2	131.78	4.91	> .01
Affiliation	179.47	2	89.74	5.72	> .01
Succorance	164.83	2	82.42	3.95	> .05
Nurturance	447.18	2	223.59	10.40	> .01
<u>Within Groups</u>					
Abasement	2279.88	85	26.82		
Affiliation	1334.89	85	15.70		
Succorance	1772.18	85	20.85		
Nurturance	1826.09	85	21.48		
<u>Total</u>					
Abasement	2543.44	87			
Affiliation	1514.36	87			
Succorance	1937.10	87			
Nurturance	2273.27	87			

"F" statistic obtained is one which would have occurred less than 1-in-100 times if only chance explained the difference in the three means compared. The "t" scores are significant to the .01 level for the differences between women groups and the later-elementary men and the early-elementary women. No significant difference was found between the later-elementary women and men on "Abasement." Both the women and men preferring the later-elementary grades exhibited less need for "Abasement" than did the early-elementary women, but the later-elementary

men and women did not differ from each other. With respect to "Abasement," therefore, Hypothesis I-A was confirmed.

On "Affiliation" (defined as being loyal to friends, participation in friendly groups, and in sharing things with friends) the relationship among the three groups was identical as with that for "Abasement." The obtained "F" indicates that the three groups represent different populations. As with "Abasement," the later-elementary men and women showed significantly less "affiliative" need than did the early-elementary women, but did not differ significantly between themselves. Here again, the Hypothesis I-A was sustained. Table 4.3 shows the "t" to be significant at the .05 level for the difference between early-elementary women and later-elementary women, and for the difference between men and early-elementary women at the .01 level. Table 4.2 shows the "F" to be significant at the .01 level for this trait.

"Succorance," (the need to have others provide help when in trouble, to have others be kindly, to have others be sympathetic and understanding about personal problems) was also found to be more characteristic of the early-elementary preference group. Table 4.2 shows the "F" test for the means of Table 4.1. Here again, it is possible to conclude that the three groups are samples from different populations. As can

TABLE 4.3

COMPARISON OF GROUP MEANS FOR EDWARDS CHARACTERISTICS  
OF "ABASEMENT," "AFFILIATION," "SUCCORANCE,"  
AND "NURTURANCE"

Early Elementary Women ( $X_1$ )- Later Elementary Women ( $X_2$ )	Difference in $X_1 - X_2$	"t"
Abasement	+2.98	+2.83 **
Affiliation	+1.69	+1.67 *
Succorance	+2.10	+1.83 *
Nurturance	+4.07	+3.26 **
Later Elementary Women ( $X_1$ )- Later Elementary Men ( $X_2$ )		
Abasement	+ .20	+ .12 n.s.
Affiliation	+2.00	+1.55 n.s.
Succorance	+1.24	+ .85 n.s.
Nurturance	+ .97	+ .73 n.s.
Early Elementary Women ( $X_1$ )- Later Elementary Men ( $X_2$ )		
Abasement	+3.58	+2.44 **
Affiliation	+3.69	+3.32 **
Succorance	+3.34	+2.59 **
Nurturance	+5.04	+4.73 **

\*Denotes .05 level of significance.

\*\*Denotes .01 level of significance.

n.s. Denotes no significance.

For Hypotheses I-A, I-B, and I-D a one-tailed test was used for the student "t."

be seen in Table 4.3 the direction of the differences in

"Succorance" is consistent with that found for "Abasement" and

"Affiliation." Once again Hypothesis I-A was supported.

Higher "Nurturance" scores (the need to help others in trouble, to treat others with kindness, to be generous with others, to sympathize with others, to show outward affection) were also found to be a characteristic of those preferring the early-elementary grades. Table 4.1 shows an "F" of 10.4 for the three "Nurturance" means which is significant at the .01 level when the three pairs of means were compared. It was found that the later-elementary-preference men and women exhibited a lesser need for "Nurturance" than early-elementary women, but the later-elementary-preference men and women did not differ from each other.

In summary, on all four measures Hypothesis I-A was confirmed. It can be said that those students with an initial preference for the early-elementary grades manifested more need for "Abasement," "Affiliation," "Succorance," and "Nurturance" than did those choosing the later-elementary-teaching levels. On all four measures the later-elementary women also exhibited a greater need for the cited factors than did the men, but considering the small number of students studied these differences could not be said to be reliable.

#### Hypothesis I-B

Hypothesis I-B stated that early-elementary-preference students would manifest "less" need for "Achievement,"



"Dominance," and "Aggression." The direction specified in this hypothesis was also based upon prior examination of the thirty-eight cases of the pilot group. Table 4.4 presents the means and standard deviations for the three groups measured on these three characteristics. As can be seen by the "F's" reported in Table 4.5, it was possible to reject in each case the hypothesis that each set of three means constituted random samples from the same population and to justify a further test of the differences between all possible pairs of means on each measure.

TABLE 4.4

MEANS AND STANDARD DEVIATIONS FOR EDWARDS  
CHARACTERISTICS OF "ACHIEVEMENT, "  
"DOMINANCE," AND "AGGRESSION"

Variable	Early Elementary Women n=43	Later Elementary Women n=27	Later Elementary Men n=18
Achievement			
Means	11.54	14.52	14.33
S.D.	3.43	4.75	4.65
Dominance			
Means	11.54	13.00	16.67
S.D.	4.54	4.27	3.91
Aggression			
Means	7.91	10.44	12.00
S.D.	3.99	3.53	4.78

TABLE 4.5

THE ANALYSIS OF VARIANCE OF GROUP MEANS FOR EDWARDS  
CHARACTERISTICS OF "ACHIEVEMENT," "DOMINANCE,"  
AND "AGGRESSION"

Source of Variation	Sum of Squares	d.f.	Mean Squares	"F"	Probability
<u>Between Groups</u>					
Achievement	185.88	2	92.94	5.34	> .01
Dominance	270.93	2	135.47	6.93	> .01
Aggression	244.92	2	122.46	7.46	> .01
<u>Within Groups</u>					
Achievement	1478.12	85	17.39		
Dominance	1661.97	85	19.55		
Aggression	1395.04	85	16.41		
<u>Total</u>					
Achievement	1664.00	87			
Dominance	1932.90	87			
Aggression	1639.96	87			

Table 4.6 examines these group comparisons. "Achievement," as described by Edwards, is to do one's best, to be successful, to accomplish tasks requiring skill and effort, and to solve problems. On "Achievement" both the men and women with a preference for later-elementary grades exhibited a greater need for "Achievement" than did the women choosing early elementary, but the two later-elementary groups did not differ significantly. It can be concluded that Hypothesis I-B was supported.

The characteristic of "Aggression" (to attack contrary points of view, to tell others what one thinks about them, to

TABLE 4.6

COMPARISON OF GROUP MEANS FOR EDWARDS CHARACTERISTICS  
OF "ACHIEVEMENT," "DOMINANCE," AND "AGGRESSION"

Early Elementary Women ( $X_1$ )- Later Elementary Women ( $X_2$ )	Difference in $X_1 - X_2$	"t"
Achievement	-2.98	-2.83 **
Dominance	-1.46	-1.36 n.s.
Aggression	-2.53	-8.75 **
Later Elementary Women ( $X_1$ )- Later Elementary Men ( $X_2$ )		
Achievement	+ .19	+ .13 n.s.
Dominance	-3.67	-2.96 **
Aggression	-1.66	-1.19 n.s.
Early Elementary Women ( $X_1$ )- Later Elementary Men ( $X_2$ )		
Achievement	-2.79	-2.30 *
Dominance	-5.13	-4.46 **
Aggression	-4.09	-3.19 **

\*Denotes .05 level of significance

\*\*Denotes .01 level of significance

n.s. Denotes no significance

criticize others publicly, to get revenge for insults), was found to be more manifest for both the men and women with a preference for later-elementary grades than for the women preferring early-elementary grades. The later-elementary-preference group of men did not differ significantly from the later-elementary-preference group of women. It was concluded that Hypothesis I-B was supported for the characteristic "Aggression."

"Dominance" is defined as arguing one's point of view, desiring the leadership of groups and the like. On "Dominance" the means for both groups of women were less than the mean for men, and reliably so. The mean for the later-elementary-preference women was in the direction predicted by the hypothesis, but for the samples of this study it was not possible to conclude that the difference was statistically significant. With respect to this part of the Hypothesis I-B, therefore, the original prediction was not warranted.

In summary, Hypothesis I-B was only partially supported. "Achievement" and "Aggression" were manifested to a greater degree by the later-elementary-preference groups than the early-elementary initial preferences. The hypothesis was not supported with reference to "Dominance."

#### Hypothesis I-C

Hypothesis I-C stated that no differences would be found between early-elementary-preference students and later-elementary-preference students on the manifest need for "Deference," "Order," "Exhibition," "Autonomy," "Change," "Endurance," "Intracception," and "Heterosexuality."<sup>1</sup> The lack of a directional hypothesis for these Edwards

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<sup>1</sup>Complete description of the Edwards characteristics can be found in Appendix A.

characteristics followed from the examination of the STEP pilot sample. The means and standard deviations for the three groups on the above characteristics are shown in Table 4.7.

TABLE 4.7

MEANS AND STANDARD DEVIATIONS FOR EDWARDS  
CHARACTERISTICS OF "DEFERENCE," "ORDER,"  
"EXHIBITION," "AUTONOMY," "CHANGE,"  
"ENDURANCE," "INTRACEPTION," AND  
"HETEROSEXUALITY"

Variable	Early Elementary Women n=43	Later Elementary Women n=27	Later Elementary Men n=18
Deference			
Means	14.84	13.59	13.17
S.D.	3.36	4.25	2.66
Order			
Means	10.12	14.26	11.00
S.D.	8.30	9.07	5.50
Exhibition			
Means	13.12	15.26	15.00
S.D.	3.86	4.57	2.35
Autonomy			
Means	9.84	10.96	14.44
S.D.	4.11	4.30	5.02
Change			
Means	18.23	18.56	15.39
S.D.	3.72	3.79	4.89
Endurance			
Means	14.74	14.67	12.56
S.D.	5.12	5.21	6.14
Intracception			
Means	19.12	18.81	19.56
S.D.	3.65	4.15	3.79
Heterosexuality			
Means	10.72	12.81	16.33
S.D.	5.80	5.94	6.65

The variance of the three means for each of the eight measures was analyzed with results summarized in Table 4.8. It can be seen that the hypothesis of no difference was sustained only for the three measures of "Deference," "Intraception," and "Endurance." It is important to note that the means of these were generally among the highest made on the fifteen Edwards characteristics. These measures would appear to be distinguishing marks of those going into elementary teaching whatever the grade level initially preferred.

On the remaining five characteristics the obtained "F's" warranted further analysis of the different group means. These comparisons are given as Table 4.9. On "Order," (to have written work neat and organized, to make plans before starting on a difficult task, to have things organized) the later-elementary women had a higher manifest need than early-elementary women. The difference in women's means was -4.14. The "t" is not significant but approached .05.<sup>2</sup> The later-elementary groups did not differ significantly on the measure "Order."

For the characteristic "Exhibition" (to say witty and clever things, to have others notice and comment upon one's

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<sup>2</sup>For Hypothesis I-C and Hypothesis II a two-tailed test was used for the student "t".

TABLE 4.8

THE ANALYSIS OF VARIANCE OF GROUP MEANS FOR EDWARDS  
 CHARACTERISTICS OF "DEFERENCE, " "ORDER, "  
 "EXHIBITION, " "AUTONOMY, " "CHANGE, "  
 "ENDURANCE, " "INTRACEPTION, " AND  
 "HETEROSEXUALITY"

Source of Variation	Sum of Squares	d.f.	Mean Squares	"F"	Probability
<u>Between Groups</u>					
Deference	46.11	2	23.06	1.84	n.s.
Order	291.63	2	145.82	7.99	> .01
Exhibition	91.81	2	45.90	3.08	> .05
Autonomy	269.44	2	124.72	7.08	> .01
Change	130.22	2	65.11	4.07	> .05
Endurance	65.38	2	32.70	1.13	n.s.
Intraception	6.08	2	3.04	.2	n.s.
Heterosexuality	402.81	2	201.40	5.56	> .01
<u>Within Groups</u>					
Deference	1062.76	85	12.50		
Order	1549.97	85	18.23		
Exhibition	1265.97	85	14.89		
Autonomy	1618.18	85	19.04		
Change	1356.28	85	15.96		
Endurance	2450.07	85	28.82		
Intraception	1250.78	85	14.72		
Heterosexuality	3081.18	85	36.25		
<u>Total</u>					
Deference	1108.87	87			
Order	1841.60	87			
Exhibition	1357.78	87			
Autonomy	1887.62	87			
Change	1486.50	87			
Endurance	2515.45	87			
Intraception	1256.86	87			
Heterosexuality	3483.99	87			

appearance, to ask questions others cannot answer) both of  
 the later-elementary groups had higher elementary needs than the

TABLE 4.9

COMPARISON OF GROUP MEANS FOR EDWARDS CHARACTERISTICS  
 "ORDER, " "EXHIBITION, " "AUTONOMY, " "CHANGE, " AND  
 "HETEROSEXUALITY"

Early Elementary Women ( $X_1$ )- Later Elementary Women ( $X_2$ )	Difference in $X_1 - X_2$	"t"
Order	-4.14	-1.91 n.s.
Exhibition	-2.14	-2.04 *
Autonomy	-1.12	-1.08 n.s.
Change	- .33	-1.14 n.s.
Heterosexuality	-2.09	-1.45 n.s.
Later Elementary Women ( $X_1$ )- Later Elementary Men ( $X_2$ )		
Order	+3.26	+1.50 n.s.
Exhibition	+ .26	+ .25 n.s.
Autonomy	-3.48	-2.40 *
Change	+3.17	+2.33 *
Heterosexuality	-3.52	-1.81 n.s.
Early Elementary Women ( $X_1$ )- Later Elementary Men ( $X_2$ )		
Order	- .88	- .49 n.s.
Exhibition	-1.88	-7.37 **
Autonomy	-4.60	-3.43 **
Change	+2.84	+2.22 *
Heterosexuality	-5.61	-3.12 **

\*Denotes .05 level of significance

\*\*Denotes .01 level of significance

n.s. Denotes no significance

early-elementary-preference group. The later-elementary-preference groups did not differ significantly. The "t" is significant at the .05 level for the difference between



women and at the .01 level between men and early-elementary women.

"Autonomy" (to avoid responsibilities, to come and go as desired, to be independent of others in making decisions) revealed a marked difference between men and women. The "t" is not significant for the difference between the groups of women. The "t" was significant at the .05 level for the later-elementary-preference groups, and at the .01 level for the difference between later-preference men and early-preference women.

"Change" (to do new and different things, to try new and different jobs, to participate in new fads and fashions) showed a significant difference between men and women. The "t" is significant at the .05 level for the difference between men and each of the groups of women. The groups of women did not differ from each other on either characteristic.

The characteristic "Heterosexuality" (the need for social activities with the opposite sex, to be in love with someone of the opposite sex, to participate in discussions about sex) was manifest more by later-elementary-preference men than by women preferring early elementary. The "t" was significant at the .01 level. The groups of women did not differ from one another nor did the two later-elementary-preference groups differ.

In summary, Hypothesis I-C must be rejected because differences were found for five characteristics. The women differed on "Exhibition" and the men differed from early-elementary women on this measure. The later-elementary groups differed on "Autonomy" and "Change." The later-elementary men differed from the early-elementary women on the latter two measures as well as "Heterosexuality."

#### Hypothesis I-D

Hypothesis I-D stated that women initially choosing early-elementary grades would have "less tendency toward masculinity" than would the women choosing later-elementary grades. A masculinity-femininity index was developed in the following manner. The college norms for the Edwards battery report significant sex differences on twelve of the fifteen measures (all but "Order," "Endurance," and "Exhibition"). These norms are based on the responses of 749 women and 760 men.

For every measure of each individual in the study the deviation of the actual score from the grand mean for men and women in the normative sample was calculated. Each deviation score on a given test was corrected to take account of the spread of scores on that test. The resulting score was then weighted by multiplying Edwards' estimate of the reliability

coefficient for that measure so as to give greater weight in the index to the measures with greatest reliability. The sign of the corrected deviation score was changed where necessary so that the higher score on any measure the greater the "masculinity." Each individual's twelve scores were then summed to arrive at the individual's M-F (Male-Female) score. It should be noted that this index allows a kind of summary of the data already reported in some detail in Hypotheses I-A, I-B, and I-C and does not deal with a new source of data.

These M-F scores were analyzed in a manner similar to the previous analysis of the individual Edwards scores. The means and standard deviations are shown in Table 4.10. The obtained "F" in Table 4.11 indicates that the three groups represent different populations. Each group differed significantly from the other at the .01 level for the student "t" test shown on Table 4.12

TABLE 4.10

MEANS AND STANDARD DEVIATIONS FOR DERIVED EDWARDS  
MALE-FEMALE INDEX

Variable	Early Elementary Women n=43	Later Elementary Women n=27	Later Elementary Men n=18
Male-Female			
Means	14.02	17.88	20.92
S.D.	3.13	3.11	3.93

TABLE 4.11

THE ANALYSIS OF VARIANCE OF GROUP MEANS FOR DERIVED  
EDWARDS MALE-FEMALE INDEX

Source of Variation	Sum of Squares	d.f.	Mean Squares	"F"	Probability
<u>Between Groups</u>	666.43	2	333.22	29.51	> .01
<u>Within Groups</u>	959.83	85	11.29		
<u>Total</u>	1626.26	87			

TABLE 4.12

COMPARISON OF GROUP MEANS FOR EDWARDS  
MALE-FEMALE INDEX

Early Elementary Women ( $X_1$ ) - Later Elementary Women ( $X_2$ )	Difference in $X_1 - X_2$	"t"
Male-Female	-3.86	-5.04 **
Later Elementary Women ( $X_1$ ) - Later Elementary Men ( $X_2$ )		
Male-Female	-3.04	-3.04 **
Early Elementary Women ( $X_1$ ) - Later Elementary Men ( $X_2$ )		
Male-Female	-6.90	-7.40 **

\*\*Denotes .01 level of significance.

In summary, Hypothesis I-D was sustained at a significant level. The data reveals that the early-elementary-preference women tend to be characterized by femininity more

than do the later-elementary-preference women.

### Hypothesis II

The next hypothesis in the study was concerned with values. The Study of Values by Allport, Vernon, and Lindzey is an instrument aiming to measure the relative prominence of six basic interests or motives in personality; the "Theoretical," "Economic," "Aesthetic," "Social," "Political," and "Religious." The scale is designed primarily for use with college students, or with adults who have had some college work. The test consists of a number of questions based upon a variety of familiar situations to which two alternative answers in Part I and four alternative answers in Part II are provided; 120 items in all, twenty of which refer to each of the six values described in Appendix A.

Hypothesis II stated that no difference would be found in "Theoretical," "Economic," "Aesthetic," "Social," "Political," and "Religious" value motives among those students stating different level preferences. The means and standard deviations for the three groups on The Study of Values are presented in Table 4.13.

The variance of the three means for each of the six measures was analyzed; results are summarized in Table 4.14. It can be seen there that the hypothesis of no difference was

TABLE 4.13

MEANS AND STANDARD DEVIATIONS FOR ALLPORT, VERNON,  
LINDZEY MEASURES OF "THEORETICAL," "ECONOMIC,"  
"AESTHETIC," "SOCIAL," "POLITICAL," AND  
"RELIGIOUS" VALUE MOTIVES

Variable	Early Elementary Women n=43	Later Elementary Women n=27	Later Elementary Men n=18
Theoretical			
Means	37.83	39.81	40.11
S.D.	5.77	6.33	6.79
Economic			
Means	37.40	35.41	41.11
S.D.	7.08	8.03	6.94
Aesthetic			
Means	40.30	43.07	34.44
S.D.	6.76	8.59	5.65
Social			
Means	41.56	39.93	37.44
S.D.	6.34	7.13	7.33
Political			
Means	36.79	37.22	43.39
S.D.	6.78	7.69	5.28
Religious			
Means	46.16	44.41	42.89
S.D.	8.81	7.44	6.22

sustained only for the three measures of "Theoretical,"  
"Social," and "Religious" values.

On the remaining three characteristics the obtained  
"F's" allowed further analysis of the different group means.  
The measure of economic motives is explained by the manual for

TABLE 4.14

THE ANALYSIS OF VARIANCE OF GROUP MEANS FOR ALLPORT,  
 VERNON, LINDZEY MEASURES OF "THEORETICAL, "  
 "ECONOMIC, " "AESTHETIC, " "SOCIAL, "  
 "POLITICAL, " AND "RELIGIOUS"  
 VALUE MOTIVES

Source of Variation	Sum of Squares	d.f.	Mean Squares	"F"	Probability
<u>Between Groups</u>					
Theoretical	98.10	2	49.05	1.29	n.s.
Economic	352.69	2	176.35	3.42	> .05
Aesthetic	1035.80	2	517.35	10.57	> .01
Social	218.38	2	109.19	2.37	n.s.
Political	595.65	2	297.83	6.42	> .01
Religious	146.97	2	73.49	1.09	n.s.
<u>Within Groups</u>					
Theoretical	3223.17	85	37.91		
Economic	4385.13	85	51.59		
Aesthetic	4164.02	85	48.99		
Social	3922.52	85	46.14		
Political	3945.80	85	46.42		
Religious	5704.85	85	67.12		
<u>Total</u>					
Theoretical	3321.27	87			
Economic	4737.82	87			
Aesthetic	5199.90	87			
Social	4140.90	87			
Political	4541.45	87			
Religious	5851.82	87			

the Study of Values as interest in what is useful. A person with a high "Economic" score is thoroughly practical and is likely to confuse luxury with beauty. Table 4.15 shows no significant difference in the means for the two groups of women,

but the difference between later-elementary-preference men and later-elementary-preference women was -5.71, significant at the .05 level for the "t" test. The men in this study did not differ significantly from the early-elementary-preference women.

TABLE 4.15

COMPARISON OF GROUP MEANS FOR ALLPORT, VERNON,  
LINDZEY "ECONOMIC," "AESTHETIC," AND  
"POLITICAL" VALUE MOTIVES

Early Elementary Women ( $X_1$ )- Later Elementary Women ( $X_2$ )	Difference in $X_1-X_2$	"t"
Economic	+1.99	+1.05 n.s.
Aesthetic	-2.77	-1.42 n.s.
Political	- .57	- .25 n.s.
Later Elementary Women ( $X_1$ )- Later Elementary Men ( $X_2$ )		
Economic	-5.70	-2.53 *
Aesthetic	+8.63	+4.06 **
Political	-6.17	-3.19 **
Early Elementary Women ( $X_1$ )- Later Elementary Men ( $X_2$ )		
Economic	-3.71	-1.89 n.s.
Aesthetic	+5.86	+3.48 **
Political	-6.60	-4.08 **

\*Denotes .05 level of significance.

\*\*Denotes .01 level of significance.

n.s. Denotes no significance.



On the "aesthetic" value measure (seeing high value in form and harmony), the groups of women did not differ from each other, but they each significantly differed from men at the .01 level for "t." The women as a whole made higher scores than did the men.

The interest in power, as revealed in the "Political" measure, found men significantly higher than women. The "t" found on Table 4.15 is significant at the .01 level. The groups of women were not significantly different.

In summary, Hypothesis II was supported; no differences were found between the grade-level-preference groups for any of the six value measures. Women scored higher on the "Aesthetic" measure and men higher on "Economic" and "Political" measures. The sex differences for all six measures were similar in direction to the norms for college students.

## CHAPTER FIVE

### CONCLUSIONS AND IMPLICATIONS

Chapter V is organized in three sections. First is a series of descriptions of the study population in terms of common characteristics, differences between men and women, and differences between early-elementary-preference students and later-elementary-preference students. These descriptions of common characteristics and differences summarize the data from Chapter IV, establishing a base from which to draw implications.

The second section of the chapter cites two feasible alternative assumptions utilized in the development of particular implications from the data. A series of professionally useful implications related to each of the assumptions is presented. Selection among the sets of implications must be made in terms of greater applicability of one of the alternative assumptions to the educational problem to which the reader is relating the findings of this study.

The final section is a recapitulation of the plan, procedure, and conclusions of the study.

### Common Characteristics: All Groups

The study has established that common distinguishing personality characteristics of those going into elementary teaching, regardless of the level preferred, are the desire to follow leadership, the tendency to take suggestions from others, the inclination to conform to custom, the capability of understanding how others feel about problems, and the tendency to keep at a job until it is finished. This generalized description was similarly applicable to all three groups.

### Differences: Men-Women

The Allport, Vernon, Lindzey Study of Values revealed no statistically significant differences with relation to teaching level preferences. What differences were found were attributed to differences normally occurring between men and women. The study population appeared similar to the homogeneous nature of the normative sample in this respect. Women had a higher mean score for the "Aesthetic" value than men. The mean score for men was higher than for women on the measures of "Economic" and "Political" values. The later-elementary-preference women differed significantly from the men on the measure of "Economic" values.

Specific and significant differences in regard to certain personality traits were found to exist between men

women without regard to teaching-grade preference. The women had lower manifest need for "Dominance" than did the men. The men also manifested more need for "Autonomy" and "Heterosexuality."

On "Order" the later-elementary women exhibited more need for advanced planning and routine than the later-elementary-preference men or the early-elementary-preference women. For this characteristic the group did not conform to sex or grade-level-preference categories.

"Change" (the desire to try new things, to attempt new ways, to vary routine) was a measure on which women scored higher than men. On "Autonomy" the group of men had higher mean scores than did either the college-male or general-male-adult normative samples. Men enrolled in the STEP program tended toward greater independence than "typical" college men. Interest in the opposite sex and other matters related to this trait revealed nothing atypical.

Table 5.1 offers a composite summary of the sixteen significant personality and value characteristics revealed in the study. The dotted lines might be considered ties, indicating pairs of groups statistically similar on certain characteristics. On six measures the early-elementary-preference women were like the later-elementary-preference women but unlike the later-elementary-preference men. On

seven measures the later-elementary-preference women were like the later-elementary-preference men but unlike the early-elementary-preference women.

TABLE 5.1

A COMPREHENSIVE PERSONALITY AND VALUE PORTRAIT FOR  
THE EARLY AND LATER ELEMENTARY PREFERENCE GROUPS

Characteristic	Early- Elementary- Preference- Women	Later- Elementary- Preference- Women	Later- Elementary- Preference- Men	Related Hypothesis
Abasement	H	L . . . . .	L*	I-A
Affiliation	H	L . . . . .	L*	I-A
Succorance	H	L . . . . .	L*	I-A
Nurturance	H	L . . . . .	L*	I-A
Achievement	L	H . . . . .	H*	I-B
Aggression	L	H . . . . .	H*	I-B
Dominance	L . . . . .	L**	H	I-B
Order	L	H	L	I-C
Exhibition	L	H . . . . .	H*	I-C
Autonomy	L . . . . .	L**	H	I-C
Change	H . . . . .	H**	L	I-C
Heterosexuality	L . . . . .	L**	H	I-C
Male-Female Index	L	H	H	I-D
Economic	H	L	H	II
Aesthetic	H . . . . .	H**	L	II
Political	L . . . . .	L**	H	II

Symbols

H Indicates significantly higher mean score.

L Indicates significantly lower mean score.

\* Ties indicate no significant differences between later-elementary-preference men and women.

\*\* Ties indicate no significant difference between early and later elementary women.

## Differences: Early-Later

The data indicates that the early-elementary-preference students were oriented toward "other people" to a significantly greater degree than later-elementary-preference students. Early-elementary-preference women were more inclined toward establishing strong friendships and more desirous of opportunities for sharing experiences with others. The "Affiliation" measure, which indicates the preceding conclusion, is represented in Table 5.1; the early-elementary-preference women had a higher mean score (statistically significant) than the later-elementary-preference women and the later-elementary-preference men. The quest for help, encouragement, or sympathy ("Succorance") was more strongly manifested by the early-elementary-preference students.<sup>1</sup>

Women preferring the early-elementary level tended to be more timid, less self-assured, and accept blame when things go wrong ("Abasement") than those preferring the later elementary level. The early-elementary-preference group was a sensitive group of personalities, dependent upon each other for support, less apt to battle an issue to a fair conclusion in their favor, and quite likely to back down on demands before the issue is clearly identified.

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<sup>1</sup>It is interesting to note that "Succorance" indicates need for some of the very supports which a teacher of early grades must provide in great abundance to her students.

Desire to show affection toward others ("Nurturance"), to have others confide in one about personal problems was a characteristic manifested by the early-elementary-preference student to a significantly higher degree than the later-elementary-preference student. ("Nurturance" can be described as similar to qualities of "mother love.")

On the basis of contrast with the description of the early-elementary-preference student, the later-elementary-preference student was expected to possess definite other manifestations. Instead of being timid and condescending, the later-elementary-preference group tended to be more witty, exhibitionistic, and assertive.

"Achievement" (to surpass others, to do difficult tasks better than others) showed a higher manifestation for the later-elementary-preference student than for the early-elementary-preference students. Persons preferring later teaching grade levels tended to be more aggressive, critical, argumentative ("Aggression"), and prone to anger when upset by an idea than the early-elementary-teacher candidate.

Interestingly, the study revealed later-elementary-preference women tended to be "more male" than early-elementary women. The male-female index summarizes twelve Edwards characteristics, excluding "Order," "Endurance," and "Exhibition." The implication would appear to be that

early-elementary-preference women are prone to maximize their feminine nature. Morey<sup>2</sup> found a trend toward femininity when examining differences between secondary women teachers and elementary women teachers. The present study has sustained the direction of "femaleness."

The significant differences between early-elementary-preference students and later-elementary-preference students are summarized in the following lists of characteristics. Developed from the Edwards Personal Preference Schedule scores which were found to be significant as discriminators between the two preference levels, the contrasts are most clearly presented as representative descriptions:

PERSONALITY-RELATED CHARACTERISTICS COMMON TO  
EARLY-ELEMENTARY-PREFERENCE STUDENTS

Desire for strong friendship	Inclination to share experience
Need for encouragement	Inclination to help others
Desire for help from others	Inclination to offer sympathy
Readiness to accept blame	Tendency to be thoughtful
Dependence upon others	Inclination to be kindly
Tendency to avoid controversy	Inclination to show affection for others

PERSONALITY-RELATED CHARACTERISTICS COMMON TO  
LATER-ELEMENTARY-PREFERENCE STUDENTS

Inclination to be witty	Aspiration to success
Tendency to manifest exhibition	Drive to surpass others
Inclination to be self- assertive	Tendency to become angry
	Tendency to be self-assured
	Inclination to be critical
Inclination to be argumentative	Inclination to be loquacious

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<sup>2</sup>Morey, op. cit.



### Assumptions Underlying Implications

A basic difficulty in drawing appropriate implications from the conclusions lies in the existence of several feasible interpretative assumptions. On the one hand it can be assumed that since early-elementary-preference students possess one set of characteristics and later-elementary-preference students possess another, a prospective teacher who is found more characterized by the former set should go into early elementary teaching. Such a recommendation is based upon the assumption that since most people who have elected to do a certain thing have certain traits in common, these traits have an aptitude or suitability relationship to the thing elected to be done. On the other hand it could be said that although those who elect to do a certain thing have common traits there is the possibility that the very traits which may have caused the decision are not the most suitable traits for the actual doing of the thing.

Furthermore, it is more defensible to discount any possible predictive assumptions and to confine the drawing of implications to the new insights the data contribute to the understanding of homogeneous tendencies of the students of each preference group.

Nevertheless, although the need is recognized for further research into the question of appropriateness of each

of the traits to the actual behaviors and attitudes demanded in teaching at the several levels, for purposes of developing professionally logical implications from the research, assumptions must be made:

Assumption I. The first series of implications is based upon the assumption that to the degree the identified personality-related characteristics are consistent with the expectations commonly held<sup>3</sup> for teachers of a particular grade level, the characteristics can be interpreted as being predictive of a person's relative suitability for teaching at the particular level.

Assumption II. The second series of implications is based upon the assumption that whether or not the common personality characteristics have any predictive relationship to relative success in teaching a particular grade level, the fact that certain traits are more characteristic of those preferring one level than of those preferring another level indicates that the traits, and hence the common needs and interests, can be inferred from the stated grade-level preference.

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<sup>3</sup>Reference is made to the sociological concept of role expectations as held for the teacher by the significant others who are role determiners.

Implications: Based upon Assumption I

The first interpretative assumption (stated above) is predictive, suggesting that the common traits among those who elect to do a certain thing have an aptitude relationship to the thing elected to be done. A sample application of this assumption would be the implication that since later-elementary-preference students manifest "Achievement," "Aggression," and "Exhibition," all students entering a teacher education institution having these traits should be counseled to state a preference for later-elementary teaching grade levels.

Implication 1. Teacher education institutions should identify personality and value characteristics for each student. Counseling should be directed toward preparation for the particular level indicated by the pattern of personality and value traits.

Implication 2. Programs in teacher education can be differentiated for early-elementary and later-elementary preparation, dichotomizing the student population in terms of the common trait patterns of the students.

Implication 3. Inasmuch as the problems of adjustment to the teaching role would increase in proportion to the new teacher's lack of traits held as expectations by significant others, placement in teaching positions (grade level) should

be made in terms of the pattern of traits identified in the candidate. (The problems of adjustment to the teaching role are particularly acute for the large percentage of new teachers who are attempting to adjust to the role of a part-time housewife at the same time that they are adjusting to the role of a teacher.)

Implication 4. The approach to in-service improvement of teaching and the questions of teacher reassignment to a different grade level should take into consideration the appropriateness of the teacher's pattern of personality traits to the particular grade level. School administrators could provide experiences which assist a teacher in making needed adjustments where the personality traits are less than appropriate, or could base a decision for reassignment upon the personality trait indications which point to a more appropriate level.

**Implications: Based upon Assumption II**

The second interpretative assumption (stated above) is related to grade-level preference only inasmuch as indications of grade preference are correlated with certain personality and value traits. This assumption leads to suggestions based upon the possibility that grade-preference decisions tell something about the characteristic traits of persons making

the decisions.

Implication 5. Inferences about the likelihood of persons' of similar trait and value patterns electing a particular teaching level as their initial choice are more meaningful than inferences about success in teaching being related to choosing a particular level which is ordinarily selected by persons of similar personality and value pattern. No causal relationship was established between personality manifestations and grade-level preferences. It may be unwise to counsel students toward specific levels with any assurance that they would be more effective until research establishes relationships of patterns of characteristics to aptitudes or predictions of success.

Implication 6. Based upon the development of comprehensive personal data records, a continuous advisement relationship between advisor and teacher education student could develop and maintain skills in the process of self-analysis that would be needed throughout the professional career. Understanding one's personality is a part of self-analysis. The student should learn to relate his manifest personality traits to the interests and needs of children with whom he will work at a particular grade level.

Implication 7. Self-evaluation should be a part of the person's decision-making with reference to his grade-level

preference. Simultaneous learnings about himself and about the characteristics of children at particular grade levels should be a functional basis for his preference decision. A significant element in the development of these understandings would be laboratory experiences in which the student could relate himself (as a teacher) to children of various grade levels.

Implication 8. A personal data inventory for each student admitted to the teacher education institution would assist the instructor. An understanding of the learner is basic to planning instruction. Specifically, a clear view of personality manifestations would assist the instructor in planning supportive guidance for those individuals manifesting greater need for support. An instructor may be inclined to assume that his student is unable to comprehend, while the real problem might be an acute need for encouragement and support.

Implication 9. It may be poor practice to assign persons of similar personality to a given level of teaching. Noted on page sixty was the existence of the need for "Succorance" (support by others) of the early-elementary-preference student who, in turn, must be able to offer the same to less mature others. There is even the possibility that children during their elementary years should be in

contact with several different types of teachers.

Implication 10. There is need for development of certain traits which are relatively weak in particular level-preference groups. For example, the early-elementary-preference students' characteristic tendency to form close relationships with others is a quality needed similarly by later-elementary-preference students. Conversely, the later-elementary-preference students' higher manifestations of "Achievement," "Aggression," and "Exhibition" are similarly needed by the early-elementary-preference students. It presents a real challenge to students, advisors, instructors, and program planners to determine ways to modify the degree of manifestation so the qualities of one preference group can also become the qualities of the other. A fully developed teaching personality should be the goal for each candidate.

#### Recommendations

1. Instruments measuring personality should be incorporated into the admission process of the teacher education institution. Measures of personality would be valuable information in counseling teacher candidates toward specific teaching grade levels and useful in appropriately diversifying professional experiences, courses, and instruction in relation to common trait patterns.

2. A comprehensive personal data record is an essential item in a teacher candidate's professional file; such a file would follow the individual through the preparation period and into employment as a teacher. The file would be open only to inspection by the candidate, his instructors, advisors, and selected school administrators. The file would be similar to the development of a "medical history."

3. It would be helpful to school administrators to be given and to collect information about personality characteristics of each teacher candidate so that suitable placements might be made. If one accepts the concept of teacher education's being a continuous and never-ending process, the argument for sharing with the school administrator the file of personal data is of even more validity. Personal data would include such things as personality test results, descriptions of student teaching experiences, listings of special talents and skills, and pertinent comments by college faculty members about the candidate's classroom responses, attitudes, and attributes.

#### Needed Research

It remains to be established whether personality manifestations are causal factors in grade-level-preference decisions.



Research is also needed to determine the influence of personality, advisement, laboratory experience, and other sources of information upon grade-level-preference decisions of elementary education majors.

The deliberate modification of personality manifestations by provision of educative experiences should be researched.

The apparent lack of correlation between value differences and grade-level preferences needs further investigation.

The causal factors in personality manifestations are worthy of further study. Common causation of the traits and of their correlated grade-level-teaching-preference decisions could be identified.

The question of the appropriateness of each of the traits to the actual behaviors and attitudes demanded in teaching at the several levels needs to be investigated.

Use of data about the candidate's personality traits by school administrators and resultant effects on the grade-level placement decision should be investigated.

#### Summary of the Study

This study was designed as a means of measuring certain personality and value differences occurring between elementary teaching majors stating a preference for early-

elementary-teaching-grade levels, (kindergarten through grade three) and those students stating a preference for later elementary-teaching-grade levels (grade four through grade eight).

The personality characteristics considered were the fifteen manifest needs as contained in the Edwards Personal Preference Schedule. The value interests considered were the six contained in the Allport, Vernon, Lindzey Study of Values.

Grade level preference was determined by a direct question contained in the Student Teacher Experimental Program Student Personnel Inventory.

Eighty-eight students who were transferring to the University from six out-state junior and community colleges were tested. On the criteria of grade-level preference and sex the eighty-eight were subdivided into forty-three early elementary women, twenty-seven later elementary women, and eighteen later elementary men. The variance of each of the three groups from the population mean was determined for twenty-two characteristics of personality and value. Sixteen characteristics were significant and warranted treatment of the group means by use of the student "t" test. Each group was shown to be homogeneous by using the Cochran Test for homogeneity.

Hypotheses I-A through I-D, as a whole, stated that there would be differences in personality traits between early-elementary-preference students and later-elementary-preference students. Seven Edwards characteristics were found to indicate significant differences between preference groups. Early-elementary-preference students revealed more manifest need for "Abasement," "Affiliation," "Succorance," and "Nurturance" when compared with later-elementary-preference students. Later-elementary-preference students conversely revealed higher manifest need for "Achievement," "Aggression," and "Exhibition" when compared with early-elementary-preference students.

Hypothesis II stated that no differences would be found in "Theoretical," "Economic," "Aesthetic," "Social," "Political," and "Religious" value motives among the groups of students. The hypothesis was supported for the preference factor, but significant differences were discovered between men and women.

Personality-related descriptions were developed for the early-elementary-preference group and for the later-elementary-preference group. Each descriptive list was evolved from the Edwards personality characteristics revealed to be significant manifestations for the particular preference group.

Implications were based upon two feasible alternative assumptions. A series of professionally useful implications related to each of the assumptions was presented. The first assumption stated that to the degree the identified personality-related characteristics are consistent with the expectations held for teachers of a particular grade level, the characteristics can be interpreted as being predictive of a person's relative suitability for teaching at the particular level. The alternative assumption stated that since certain traits are more characteristic of those preferring one level than of those preferring another level, the traits, and hence the common needs and interests, can be inferred from the stated grade-level preference.

Concluding recommendations were based upon the various uses of personal data files, which would include personality data and other grade-level-preference related data. Applications of such data to decisions and guidance during teacher education in the college and into the employed teaching experience were cited.

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## **APPENDICES**

**APPENDIX A**

**DESCRIPTION AND SUGGESTED USES OF  
EDWARDS PERSONAL PREFERENCE SCHEDULE**

## EDWARDS PERSONAL PREFERENCE SCHEDULE

The major personality instrument utilized in the study was the Edwards Personal Preference Schedule, a paired-comparison type questionnaire which purports to measure a number of normal personality variables based upon the list of manifest needs proposed by H. A. Murray. Briefly, these needs may be summarized as follows:

"ACHIEVEMENT": To do one's best, to be successful, to accomplish tasks requiring skill and effort, to be a recognized authority, to accomplish something of great significance, to do a difficult job well, to solve difficult problems and puzzles, to be able to do things better than others, to write a great novel or play.

"DEFERENCE": To get suggestions from others, to find out what others think, to follow instructions and do what is expected, to praise others, to tell others that they have done a good job, to accept the leadership of others, to read about great men, to conform to custom and avoid the unconventional, to let others make decisions.

"ORDER": To have written work neat and organized, to make plans before starting on a difficult task, to have things organized, to keep things neat and orderly, to make advance plans when taking a trip, to organize details of work, to keep letters and files according to some system, to have meals organized and a definite time for eating, to have things arranged so that they run smoothly without change.

"EXHIBITION": To say witty and clever things, to tell amusing jokes and stories, to talk about personal adventures and experiences, to have others notice and comment upon one's appearance, to say things just to see what effect it will have on others, to talk about personal achievements, to be the

center of attention, to use words that others do not know the meaning of, to ask questions others cannot answer.

"AUTONOMY": To be able to come and go as desired, to say what one thinks about things, to be independent of others in making decisions, to feel free to do what one wants, to do things that are unconventional, to avoid situations where one is expected to conform, to do things without regard to what others may think, to criticize those in positions of authority, to avoid responsibilities and obligations.

"AFFILIATION": To be loyal to friends, to participate in friendly groups, to do things for friends, to form new friendships, to make as many friends as possible, to share things with friends rather than alone, to form strong attachments, to write letters to friends.

"INTRACEPTION": To analyze one's motives and feelings, to observe others, to understand how others feel about problems, to put one's self in another's place, to judge people by why they do things rather than by what they do, to analyze the behavior of others, to analyze the motives of others, to analyze how others will act.

"SUCCORANCE": To have others provide help when in trouble, to seek encouragement from others, to have others be kindly, to have others be sympathetic and understanding about personal problems, to receive a great deal of affection from others, to have others do favors cheerfully, to be helped by others when depressed, to have others feel sorry when one is sick, to have a fuss made over one when hurt.

"DOMINANCE": To argue for one's point of view, to be a leader in groups to which one belongs, to be regarded by others as a leader, to be elected or appointed chairman of committees, to make group decisions, to settle arguments and disputes between others, to persuade and influence others to do what one wants, to supervise and direct the action of others, to tell others to do their jobs.

"ABASEMENT": To feel guilty when one does something wrong, to accept blame when things do not go right, to feel that personal pain and misery suffered does more good than harm, to feel the need for punishment for wrong doing, to feel better when giving in and avoiding a fight than when having one's own way, to feel the need for confession of

errors, to feel depressed by inability to handle situations, to feel timid in the presence of superiors, to feel inferior to others in most respects.

"NURTURANCE": To help others when they are in trouble, to assist others less fortunate, to treat others with kindness and sympathy, to forgive others, to do small favors for others, to be generous with others, to sympathize with others who are hurt or sick, to show a great deal of affection toward others, to have others confide in one about personal problems.

"CHANGE": To do new and different things, to travel, to meet new people, to experience novelty and change in daily routine, to experiment and try new things, to eat in new and different places, to try new and different jobs, to move about the country and live in different places, to participate in new fads and fashions.

"ENDURANCE": To keep at a job until it is finished, to complete any job undertaken, to work hard at a task, to keep at a puzzle or problem until it is solved, to work at a single job before taking others, to stay up late in order to get a job done, to put in long hours or work without distraction, to stick at a problem even though it may seem as if no progress is being made, to avoid being interrupted while at work.

"HETEROSEXUALITY": To go out with members of the opposite sex, to engage in social activities with the opposite sex, to be in love with someone of the opposite sex, to kiss those of the opposite sex, to be regarded as physically attractive by those of the opposite sex, to participate in discussions about sex, to read books and plays involving sex, to listen to or tell jokes involving sex, to become sexually excited.

"AGGRESSION": To attack contrary points of view, to tell others what one thinks about them, to criticize others publicly, to make fun of others, to tell others off when disagreeing with them, to get revenge for insults, to become angry, to blame others when things go wrong, to read newspaper accounts of violence.<sup>1</sup>

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<sup>1</sup>Allen L. Edwards, Manual Edwards Personal Preference Schedule (New York: The Psychological Corporation, 1959), p. 11.

Using the Edwards' Schedule in Counseling

Dr. Louise Heathers offers specific ways of using the Edwards Schedule with students advisees:

. . . in practice it has been found useful to discuss the present relative strength of the variable, first in relation to the counselee himself by using a rank ordering of the raw scores, and then in relation to his own sex by using the percentile scores. Such a procedure tends to reduce the counselee's defensiveness about his scores and to stimulate discussion regarding the probable psychological satisfyingness of various educational or vocational goals. It is the atypical student who reacts with defensiveness to the variable names, particularly when rank orderings alone are used. The variables are generally accepted as being fairly nonevaluative, fairly "normal" in connotation.

It is suggested that during the discussion of the scores, the counselee be provided with a copy of the descriptions of the variable given in the Edwards Manual, since many of the names are relatively meaningless to counselees. . . . As with any test the score for the given individual becomes more meaningful if the counselor can take time to note the actual items contributing to the score. During the interview it is very important to discuss the relationships suggested by the patterning of the scores rather than to place emphasis on extreme scores only.<sup>2</sup>

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<sup>2</sup>Ibid., p. 18.

## APPENDIX B

DESCRIPTION OF ALLPORT, VERNON, LINDZEY

STUDY OF VALUES

## ALLPORT-VERNON-LINDZEY STUDY OF VALUES

The Study of Values aims to measure the relative prominence of six basic interests or motives in personality. The scale, designed primarily for use with college students, consists of questions based upon a variety of familiar situations to which two alternative answers in Part I and four alternative answers in Part II are provided. In all there are 120 answers, twenty of which refer to each of the six values. These values evolve from Eduard Spranger's Types of Men and may be described as follows:

The Theoretical. "The dominant interest of the theoretical man is the discovery of truth. In the pursuit of this goal he characteristically takes a 'cognitive' attitude, one that looks for identities and differences; one that divests itself of judgments regarding the beauty or utility of objects, and seeks only to observe and to reason. Since the interests of the theoretical man are empirical, critical, and rational, he is necessarily an intellectualist, frequently a scientist or philosopher. His chief aim in life is to order and systematize his knowledge.

The Economic. "The economic man is characteristically interested in what is useful. Based originally upon the satisfaction of bodily needs (self-preservation), the interest in utilities develops to embrace the practical affairs of the business world - the production, marketing, and consumption of goods, the elaboration of credit, and the accumulation of tangible wealth. This type is thoroughly 'practical' and conforms well to the prevailing stereotype of the average American businessman.



The Aesthetic. "The aesthetic man sees his highest value in form and harmony. Each single experience is judged from the standpoint of grace, symmetry, or fitness. He regards life a procession of events: each single impression is enjoyed for its own sake. He need not be a creative artist, nor need he be effete; he is aesthetic if he but finds his chief interest in the artistic episodes of life.

The Social. "The highest value for this type is love of people . . . it is the altruistic or philanthropic aspect of love that is measured. The social man prizes other persons as ends, and is therefore himself kind, sympathetic, and unselfish. He is likely to find the theoretical, economic, and aesthetic attitudes cold and inhuman. In contrast to the political type, the social man regards love as itself the only suitable form of human relationships . . . in its purest form the social interest is selfless and tends to approach very closely to the religious attitude.

The Political. "The political man is interested primarily in power. His activities are not necessarily within the narrow field of politics; but whatever his vocation, he betrays himself as a Machtmensch. Leaders in any field generally have high power value. Since competition and struggle play a large part in all life, many philosophers have seen power as the most universal and most fundamental of motives. There are, however, certain personalities in whom the desire for a direct expression of this motive is uppermost, who wish above all else for personal power, influence, and renown.

The Religious. "The highest value of the religious man may be called unity. He is mystical, and seeks to comprehend the cosmos as a whole, to relate himself to its embracing totality . . . the religious man . . . (is) one 'whose mental structure is permanently directed to the creation of the highest and absolutely satisfying value experience.' Some men of this type . . . find their religious experience in the affirmation of life and in active participation therein . . . (others) seek to unite himself with a higher reality by withdrawing from life . . . (and) finds the experience of unity through self-denial and meditation.<sup>1</sup>

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<sup>1</sup>Gordon W. Allport, Philip E. Vernon, and Gardner Lindzey, Manual Study of Values (Boston: Houghton Mifflin Co., 1960), pp. 4-5.

**APPENDIX C**

**STUDENT TEACHER EXPERIMENTAL PROGRAM**

**STUDENT PERSONNEL INVENTORY**

STUDENT PERSONNEL INVENTORY

Applicants for the STEP program are requested to respond to all items included in the Student Personnel Inventory. It is important that all items be completed, as STEP is an experimental program upon which research will be done. It may not be possible to know the exact answers to some questions. If this is the case, please make an estimate.

The items in Section I of the inventory are for use in the selection and counseling of students and for use by the supervising teachers during the third year of the program.

The items in Section II of the inventory are for research purposes only. The applicant's response to these items will in no way affect the candidate's entry into or progress in the STEP program.

NAME \_\_\_\_\_  
(last) (first) (middle)

DATE \_\_\_\_\_

## SECTION I

1. PRESENT ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_

2. HOME ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_

3. SEX: MALE \_\_\_\_\_ FEMALE \_\_\_\_\_

4. AGE LAST BIRTHDAY \_\_\_\_\_

5. Where were you born? \_\_\_\_\_  
(city)

\_\_\_\_\_  
(State or Country)

6. If foreign born, are you a U.S. citizen? Yes \_\_\_\_\_ No \_\_\_\_\_

7. What is your marital status?

8. If not single, do you have children?

\_\_\_\_\_ Single

Yes \_\_\_\_\_ No \_\_\_\_\_

\_\_\_\_\_ Married

If yes, how many? \_\_\_\_\_

\_\_\_\_\_ Separated

Their ages? \_\_\_\_\_

\_\_\_\_\_ Divorced

\_\_\_\_\_ Widowed

9. List all of the schools you have attended from the time you first entered school to present.

Name of School	City	Grades Attended	Type of School	
			Parochial or Private	Public

10. In which extra curricular school activity, if any, did you spend the most time in high school? \_\_\_\_\_
11. In what year did you graduate from high school? \_\_\_\_\_
12. What was the size of your high school graduating class?
- \_\_\_\_ Under 25
- \_\_\_\_ 25-99
- \_\_\_\_ 100-199
- \_\_\_\_ 200-399
- \_\_\_\_ 400-999
- \_\_\_\_ Over 1000
13. In what year did you first enter college? \_\_\_\_\_
14. In which extra curricular school activity, if any, did you spend the most time in college? \_\_\_\_\_
15. What is your present college grade point average? \_\_\_\_\_
16. Why are you personally interested in becoming a teacher?
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

1. The first step in the process of the scientific method is to ask a question. This question should be based on observation and should be specific and measurable.

2. The second step is to form a hypothesis. A hypothesis is a statement that can be tested. It should be based on the question and should be a prediction of what will happen.

3. The third step is to design an experiment. The experiment should be designed to test the hypothesis. It should include a control group and an experimental group.

4. The fourth step is to collect data. Data is the information that is gathered during the experiment. It should be recorded in a table or graph.

5. The fifth step is to analyze the data. This involves looking at the data and seeing if it supports the hypothesis. It may involve using statistical tests.

6. The sixth step is to draw a conclusion. This is a statement about whether the hypothesis was supported or not. It should be based on the analysis of the data.

7. The seventh step is to communicate the results. This involves sharing the results of the experiment with others. It can be done through a report or presentation.

8. The eighth step is to repeat the experiment. This is done to see if the results are consistent. It helps to confirm the findings.

9. The ninth step is to apply the results. This involves using the findings of the experiment to solve a problem or answer a question.

10. The tenth step is to evaluate the process. This involves looking at the experiment and seeing if it was done correctly. It helps to improve the process for the future.

11. The eleventh step is to share the results. This involves sharing the findings of the experiment with others. It can be done through a report or presentation.

12. The twelfth step is to repeat the experiment. This is done to see if the results are consistent. It helps to confirm the findings.

13. The thirteenth step is to apply the results. This involves using the findings of the experiment to solve a problem or answer a question.

14. The fourteenth step is to evaluate the process. This involves looking at the experiment and seeing if it was done correctly. It helps to improve the process for the future.

15. The fifteenth step is to share the results. This involves sharing the findings of the experiment with others. It can be done through a report or presentation.

16. The sixteenth step is to repeat the experiment. This is done to see if the results are consistent. It helps to confirm the findings.

17. The seventeenth step is to apply the results. This involves using the findings of the experiment to solve a problem or answer a question.

18. The eighteenth step is to evaluate the process. This involves looking at the experiment and seeing if it was done correctly. It helps to improve the process for the future.

19. The nineteenth step is to share the results. This involves sharing the findings of the experiment with others. It can be done through a report or presentation.

20. The twentieth step is to repeat the experiment. This is done to see if the results are consistent. It helps to confirm the findings.

21. The twenty-first step is to apply the results. This involves using the findings of the experiment to solve a problem or answer a question.

22. The twenty-second step is to evaluate the process. This involves looking at the experiment and seeing if it was done correctly. It helps to improve the process for the future.

23. The twenty-third step is to share the results. This involves sharing the findings of the experiment with others. It can be done through a report or presentation.

24. The twenty-fourth step is to repeat the experiment. This is done to see if the results are consistent. It helps to confirm the findings.

25. The twenty-fifth step is to apply the results. This involves using the findings of the experiment to solve a problem or answer a question.

17. What are your principle hobbies? (list)

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18. What, if any, traveling have you done?

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19. What do you consider to be your specific strengths as a prospective teacher?

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20. What do you consider to be your specific weaknesses as a prospective teacher?

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1. The first part of the document is a list of the names of the members of the committee.

2. The second part of the document is a list of the names of the members of the committee.

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27. The twenty-seventh part of the document is a list of the names of the members of the committee.

28. The twenty-eighth part of the document is a list of the names of the members of the committee.

THE ITEMS IN THIS SECTION OF THE INVENTORY ARE FOR RESEARCH PURPOSES ONLY. THE RESPONSES TO THESE ITEMS WILL NOT BE GIVEN TO YOUR SUPERVISING TEACHER.

1. Other than teaching, what occupations have you considered? (Begin with the occupation you considered just prior to that of teaching and end with the occupation you first considered.)

A. Occupation \_\_\_\_\_

What age or grade were you when you considered this occupation? \_\_\_\_\_

How seriously did you consider this choice?

\_\_\_\_\_ very seriously  
\_\_\_\_\_ somewhat seriously  
\_\_\_\_\_ not very seriously

What, if any, experiences have you had relevant to this occupation?

\_\_\_\_\_  
\_\_\_\_\_

B. Occupation \_\_\_\_\_

What age or grade were you when you considered this occupation? \_\_\_\_\_

How seriously did you consider this choice?

\_\_\_\_\_ very seriously  
\_\_\_\_\_ somewhat seriously  
\_\_\_\_\_ not very seriously

What, if any, experiences have you had relevant to this occupation?

\_\_\_\_\_  
\_\_\_\_\_

C. Occupation \_\_\_\_\_

What age or grade were you when you considered this occupation? \_\_\_\_\_

How seriously did you consider this occupation?

\_\_\_\_\_ very seriously  
\_\_\_\_\_ somewhat seriously  
\_\_\_\_\_ not very seriously

What, if any, experiences have you had relevant to this occupation?

\_\_\_\_\_  
\_\_\_\_\_

(Item 1 is continued on the next page)



1. The first step in the process of identifying a problem is to define the problem. This involves identifying the symptoms and the underlying causes of the problem.

2. The second step is to gather information about the problem. This involves collecting data and identifying the stakeholders who are affected by the problem.

3. The third step is to analyze the information. This involves identifying the key issues and the potential solutions to the problem.

4. The fourth step is to develop a plan of action. This involves identifying the steps that need to be taken to solve the problem.

5. The fifth step is to implement the plan. This involves putting the plan into action and monitoring the progress.

6. The sixth step is to evaluate the results. This involves assessing the effectiveness of the solution and identifying any areas for improvement.

7. The seventh step is to communicate the results. This involves sharing the findings with the stakeholders and the public.

8. The eighth step is to develop a long-term strategy. This involves identifying the steps that need to be taken to prevent the problem from recurring.

9. The ninth step is to monitor the progress. This involves tracking the progress of the solution and identifying any areas for improvement.

10. The tenth step is to report the results. This involves providing a final report on the progress of the solution and the long-term strategy.

11. The eleventh step is to evaluate the results. This involves assessing the effectiveness of the solution and identifying any areas for improvement.

12. The twelfth step is to communicate the results. This involves sharing the findings with the stakeholders and the public.

13. The thirteenth step is to develop a long-term strategy. This involves identifying the steps that need to be taken to prevent the problem from recurring.

14. The fourteenth step is to monitor the progress. This involves tracking the progress of the solution and identifying any areas for improvement.

15. The fifteenth step is to report the results. This involves providing a final report on the progress of the solution and the long-term strategy.

D. Occupation \_\_\_\_\_

What age or grade were you when you considered this occupation? \_\_\_\_\_

How seriously did you consider this choice?

\_\_\_\_\_ very seriously  
\_\_\_\_\_ somewhat seriously  
\_\_\_\_\_ not very seriously

What, if any, experiences have you had relevant to this occupation?

\_\_\_\_\_  
\_\_\_\_\_

E. Occupation \_\_\_\_\_

What age or grade were you when you considered this occupation? \_\_\_\_\_

How seriously did you consider this choice?

\_\_\_\_\_ very seriously  
\_\_\_\_\_ somewhat seriously  
\_\_\_\_\_ not very seriously

What, if any, experiences have you had relevant to this occupation?

\_\_\_\_\_  
\_\_\_\_\_

F. Occupation \_\_\_\_\_

What age or grade were you when you considered this occupation? \_\_\_\_\_

How seriously did you consider this choice?

\_\_\_\_\_ very seriously  
\_\_\_\_\_ somewhat seriously  
\_\_\_\_\_ not very seriously

What, if any, experiences have you had relevant to this occupation?

\_\_\_\_\_  
\_\_\_\_\_

2. At what age did you first think of becoming a teacher?

\_\_\_\_\_ Before the age of 10.  
\_\_\_\_\_ Between 10 and 13 years of age.  
\_\_\_\_\_ Between 14 and 15 years of age.  
\_\_\_\_\_ Between 16 and 17 years of age.  
\_\_\_\_\_ Since the age of 17.



3. At what age did you definitely decide to become a teacher?

- ☐ Before the age of 14.  
☐ At 14 or 15 years of age.  
☐ At 16 or 17 years of age.  
☐ Between 18 and 20 years of age.  
☐ Since the age of 21.

4. Which one of the following statements best describes the way you feel about a career in teaching? (check only one)

- ☐ I don't know enough about teaching to know how satisfying I will find it.  
☐ It's not the most satisfying career I can think of, but is very practical for me.  
☐ It's one of several careers which I could find almost equally satisfying.  
☐ It's the only career that could really satisfy me.

5. Since you decided to become a teacher, have you ever had any doubts that this was the right decision for you? (check only one)

- ☐ yes, serious doubts.  
☐ yes, some doubts, but not serious.  
☐ no, no doubts at all.

6. How important was each of the following in your decision to enter the teaching profession? (check only one for each item a. through i.)

	Very Important	Fairly Important	Not very Important	Not at all Important
a. Mother	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Father	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Spouse (If single, skip item)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Other relatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Elementary or high school teachers you know personally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Friends who are not in teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Speakers you have heard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. College teachers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Books, movies, or plays	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Other, (What?) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Which two of the above were of greatest importance in your decision to become a teacher? (List the appropriate letters.) \_\_\_\_\_, \_\_\_\_\_.

7. Since you made the decision to enter teaching, how much have the following members of your family encouraged or discouraged you. (check only one for each item, a. through e.)

	Strong encourage- ment	Slight encourage- ment	Expressed no opinion	Slight discourage- ment	Strong discourage- ment	Doesn't Apply
a. Mother	_____	_____	_____	_____	_____	_____
b. Father	_____	_____	_____	_____	_____	_____
c. Spouse	_____	_____	_____	_____	_____	_____
d. Brother or Sister	_____	_____	_____	_____	_____	_____
e. Other relatives	_____	_____	_____	_____	_____	_____

8. Do you have any relatives who are or were in teaching? (check all that apply)

At what level did they teach?  
(elementary, secondary, or college)

Mother	_____	_____
Father	_____	_____
Grandmother	_____	_____
Grandfather	_____	_____
Brothers	_____	_____
Sisters	_____	_____
Others, write relationship	_____	_____

9. In our talks with college students we find that some of them choose a certain career although they would really prefer some other one. If you had the chance would you really rather stay with teaching or would you choose another career? (check only one)

☐ a. I would stay with teaching.  
☐ b. I would choose another career.  
☐ c. I don't really know.

10. If you check either b. or c. in Question 9, what would it take for you to get into the career activity you really desire. (check all that apply)

☐ a. Financial aid.  
☐ b. Better grades.  
☐ c. The moral support of my parents or husband or wife.  
☐ d. The encouragement of someone already in that field.  
☐ e. More information about other fields.  
☐ f. Change in the attitudes of a close boy friend or girl friend.  
☐ g. Less involvement in social activities.  
☐ h. Other (Explain) \_\_\_\_\_

11. If you answer Question 19, which of the factors you checked would be the single most important factor in helping you get into the field you really prefer? (Write the letter here) \_\_\_\_\_

12. What would you estimate the average yearly family income in the United States to have been last year? \_\_\_\_\_
13. What would you estimate as the average yearly income of elementary teachers in Michigan? \_\_\_\_\_
14. What would you estimate as the average yearly income of high school teachers in Michigan? \_\_\_\_\_
15. At what level of the elementary school would you like to begin teaching? (check only one)

\_\_\_\_\_ Kindergarten.

\_\_\_\_\_ Grades 1 through 3.

\_\_\_\_\_ Grades 4 through 6.

\_\_\_\_\_ Grades 7 or 8.

\_\_\_\_\_ Don't know.

\_\_\_\_\_ Other (Explain) \_\_\_\_\_

16. How important to you is it to begin teaching at the level you indicated in answering Question 15 above? (check only one)

\_\_\_\_\_ It is very important; I would not teach at any other level.

\_\_\_\_\_ It is important; I would strongly prefer this but would teach at another level if this was all that was possible.

\_\_\_\_\_ I would want to teach at this level but would not mind too much if

\_\_\_\_\_ I had to start at some other level.

\_\_\_\_\_ It is not very important at all.

17. How old are the majority of pupils at the level checked in Question 15? \_\_\_\_\_
18. Have you had any experience working with children of this age? Yes \_\_\_\_\_ No \_\_\_\_\_
19. If yes, describe the experience. \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

20. Here are three different jobs. If you had your choice, which would you take?

\_\_\_\_\_ A job which pays a moderate income but which you were sure of keeping.

\_\_\_\_\_ A job which pays a good income but which you have only a 50-50 chance of keeping.

\_\_\_\_\_ A job which pays extremely well if you succeed, but one in which most people don't succeed.

21. Suppose you had an extra three hours each week and could choose to take either some extra course of your own choosing, some added social activities, or recreational event, or use it for added study--which do you think you would choose? (check only one)

\_\_\_\_\_ I'd take the added course.

\_\_\_\_\_ I'd take the added social activity or recreational event.

\_\_\_\_\_ I'd take the study time.



22. There are many reasons why people choose a particular job. Please rate each of the following job characteristics in terms of its importance to you in your choice of teaching as an occupation. (check only one for each item a. through u.)

Job Characteristics	Extremely Important	Very Important	Somewhat Important	Not Important
Work that:				
a. provides opportunity to use my special aptitudes and abilities....	_____	_____	_____	_____
b. offers freedom from pressure to conform in my personal life.....	_____	_____	_____	_____
c. absorbs my interests and holds my attention.....	_____	_____	_____	_____
d. necessitates keeping up with new and better ways of doing the job...	_____	_____	_____	_____
e. offers an opportunity to be helpful to others.....	_____	_____	_____	_____
f. affords a chance to exercise leadership.....	_____	_____	_____	_____
g. offers me social standing and prestige in my community.....	_____	_____	_____	_____
h. offers freedom from additional training requirements after graduation.....	_____	_____	_____	_____
i. provides opportunity to work with people.....	_____	_____	_____	_____
j. provides a chance to earn enough money to live comfortably.....	_____	_____	_____	_____
k. provides opportunity to be creative and original	_____	_____	_____	_____
l. provides a chance to achieve recognition from others in my profession.	_____	_____	_____	_____
m. provides opportunity to control my own working conditions.....	_____	_____	_____	_____
n. offers freedom from close supervision.....	_____	_____	_____	_____
o. provides opportunity to have interesting and intelligent people for colleagues.....	_____	_____	_____	_____
p. provides opportunity to help an individual child.....	_____	_____	_____	_____
q. provides opportunity to help in the social development of children.....	_____	_____	_____	_____
r. allows me long summer vacations....	_____	_____	_____	_____
s. offers working hours the same as the hours my children are away from home	_____	_____	_____	_____
t. provides a chance to "go back to it," good insurance.....	_____	_____	_____	_____
u. provides opportunity to work in a pleasant environment.....	_____	_____	_____	_____

Which two of the above were the most important factors in your choice of teaching? (list the appropriate letters.) \_\_\_\_\_, \_\_\_\_\_.





23. What would you like to be doing three years after graduation?

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24. When do you expect that you will first come to think of yourself as a teacher rather than as a student?

- I do now.
- During my assistant teaching.
- During my 4th year internship.
- During my 5th year internship.
- After I am through the program.

25. Think of your favorite elementary school teacher. Now think of some specific incident in which this person was involved which illustrates the reason why you consider this person your favorite elementary school teacher. Describe the specific incident.

[illegible]

the  $\mathcal{H}_\infty$  norm of the closed-loop system is bounded by  $\gamma$ .

Let  $\mathcal{H}_\infty$  norm of the closed-loop system be denoted by  $\gamma_{\text{cl}}$ . Then

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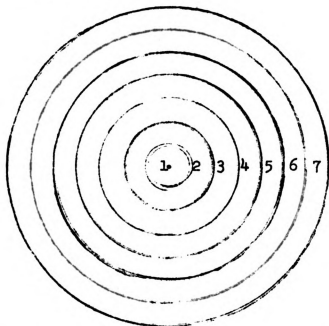
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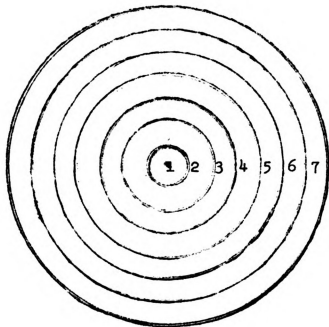
Let  $\mathcal{H}_\infty$  norm of the closed-loop system be denoted by  $\gamma_{\text{cl}}$ . Then

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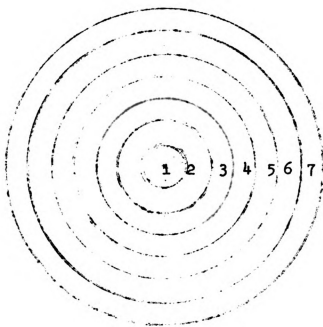
26. Suppose the circle below represented the activities which went on in your high school. How far out from the center of things were you? (The center of the circle represents the center of things in your high school. Please place the check where you think you were.)



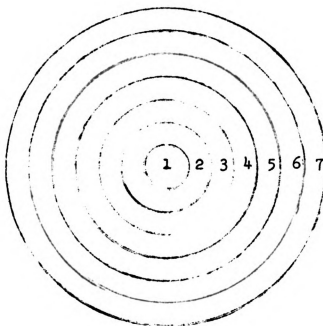
27. Now in the circle below, place a check where you would like to have been?



28. Now suppose this same circle represents the activities in college. How far out from the center of things would you say you now are?



29. Finally--in the circle below, place a check where you would like to be.



IF YOU ARE NOT SINGLE, SKIP TO QUESTION 35.

30. Your father's name \_\_\_\_\_

31. Your mother's name \_\_\_\_\_

32. Where was your father born? \_\_\_\_\_  
(City) (State or Country)

33. Where was your mother born? \_\_\_\_\_  
(City) (State or Country)

34. Please estimate your family's yearly income. \_\_\_\_\_

35. What is your father's present occupation? (Specify as farm manger, carpenter, dentist, etc.) If your father is not living, list his last occupation and then write deceased.

\_\_\_\_\_

36. By whom is your father employed? (Name of company, self, etc.)

\_\_\_\_\_

37. How long has your father been employed at the present occupation? \_\_\_\_\_

38. What is your mother's present occupation? If your mother is not gainfully employed, write housewife. If she is not living, list her last occupation, then write deceased.

\_\_\_\_\_

39. By whom is your mother employed? (Name of company, self, etc.)

\_\_\_\_\_

40. How long has your mother been employed in her present occupation? \_\_\_\_\_

41. If your mother is not gainfully employed at present or if she was not gainfully employed at the time of death, was she ever gainfully employed?

Yes \_\_\_\_\_ No \_\_\_\_\_

42. If yes, what did she do? \_\_\_\_\_

43. About how far did your mother go in school? (Mark only one of the following.)

- ☐ No formal education;
- ☐ Attended grade school (grades 1 to 8) but did not finish;
- ☐ Completed grade school through grade 8;
- ☐ Attended high school (grades 9 to 12) but did not finish;
- ☐ Attended a vocational or trade school but did not complete high school;
- ☐ Graduated from high school;
- ☐ Attended a vocational or trade school after high school graduation;
- ☐ Attended college but did not graduate;
- ☐ Graduated from college;
- ☐ Attended graduate or professional school but did not attain a graduate or professional degree;
- ☐ Attained a graduate or professional degree.

44. About how far did your father go in school? (Mark only one of the following.)

- ☐ No formal education;
- ☐ Attended grade school (grades 1 to 8) but did not finish;
- ☐ Completed grade school through grade 8.
- ☐ Attended high school (grades 9 to 12) but did not graduate;
- ☐ Attended a vocational or trade school but did not complete high school;
- ☐ Graduated from high school;
- ☐ Attended a vocational or trade school after high school graduation;
- ☐ Attended college but did not graduate;
- ☐ Graduated from college;
- ☐ Attended graduate or professional school but did not attain a graduate or professional degree;
- ☐ Attained a graduate or professional degree.

10. The following are the names of the persons who have been appointed to the various positions in the organization:

11. The following are the names of the persons who have been appointed to the various positions in the organization:

12. The following are the names of the persons who have been appointed to the various positions in the organization:

13. The following are the names of the persons who have been appointed to the various positions in the organization:

14. The following are the names of the persons who have been appointed to the various positions in the organization:

15. The following are the names of the persons who have been appointed to the various positions in the organization:



45. If you have any brothers, list Age \_\_\_\_\_ Occupation \_\_\_\_\_  
Age \_\_\_\_\_ Occupation \_\_\_\_\_  
Age \_\_\_\_\_ Occupation \_\_\_\_\_  
Age \_\_\_\_\_ Occupation \_\_\_\_\_

46. If you have any sisters, list Age \_\_\_\_\_ Occupation \_\_\_\_\_  
Age \_\_\_\_\_ Occupation \_\_\_\_\_  
Age \_\_\_\_\_ Occupation \_\_\_\_\_  
Age \_\_\_\_\_ Occupation \_\_\_\_\_

IF YOU ARE MARRIED,

47. What is your spouse's occupation? \_\_\_\_\_

48. By whom is your spouse employed? (Name of company, self, etc.)  
\_\_\_\_\_

49. How long has your spouse been employed at the present occupation? \_\_\_\_\_

50. Please estimate your spouse's yearly income. \_\_\_\_\_

1. The first part of the document  
describes the general situation  
of the country and the  
state of the economy.

2. The second part of the document  
describes the state of the  
economy and the state of the  
country.

3. The third part of the document  
describes the state of the  
country and the state of the  
economy.

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