5-1973

Prediction and Assessment of Liked and Non-liked Teachers as Rated by Various Student Groups

Nancy LaDee Fleming
Utah State University

Utah State University
MERRILL-CAZIER LIBRARY

PREDICTION AND ASSESSMENT OF LIKED AND NON-LIKED

TEACHERS AS RATED BY VARIOUS STUDENT GROUPS

by

Nancy LaDee Fleming

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Psychology

Approved:
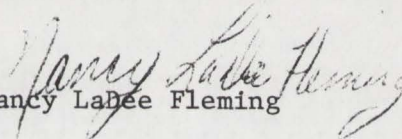
UTAH STATE UNIVERSITY
Logan, Utah

1973

ACKNOWLEDGMENTS

TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

LIST OF TABLES

LIST OF TABLES (Continued)

ABSTRACT

Prediction and Assessment of Liked and Non-liked

Teachers as Rated by Various Student Groups

by

Nancy LaDee Fleming, Master of Science

Utah State University, 1973

Major Professor: Dr. Michael R. Bertoch
Department: Psychology

This study was designed to: (1) determine whether the test scores
on the CPI and Teacher Inventory serve as predictors of "liked" and
"non-liked" teachers, and (2) determine whether various student groups
(minority, Anglo, disadvantaged and non-disadvantaged) rate "liked"
and "non-liked" teachers differently on each of the three variables
of the Teacher Inventory.

Ninety-two sophomore students, representing race and economic fac-
tors rated the 37 teachers of required sophomore subject matter classes
on a Like-Dislike Scale and the Teacher Inventory. Two lists were
thus generated: (1) teachers to whom various students rated as
"liked" teachers, and (2) teachers to whom various students rated as
"non-liked." Both groups of teachers were administered the CPI.

The data were analyzed by stepwise multiple regression equation
and analysis of variance.

From this study of sophomore high school teachers rated as
"liked" and "non-liked" by the students, the following may be concluded:

1.   The Teacher Inventory and CPI test scores are good predictors of
     teachers rated "liked" or "non-liked" by various student groups.
     The prediction value was greater than .91.

2.   Liked teachers as compared with the non-liked teachers tend to be
     perceived by the students as (1) grading more fairly, (2) making
     class more interesting with a variety of materials and activities,
     (3) having better class control, (4) being able to answer more of
     the questions students ask, (5) planning more carefully and utiliz-
     ing time better, (6) showing more of an interest in the students,
     (7) adjusting better to different situations that arise in class,
     (8) friendlier and more cheerful, (9) giving more consideration
     to the opinions and ideas of the students, (10) more inclined
     to admit when he is wrong, and (11) appearing to enjoy teaching more.

3.   Liked teachers as compared with the non-liked teachers tend to have
     these personality characteristics: (1) more methodical, mannerly
     and cautious, (2) more poised and self-confident, (3) have a better
     sense of personal worth, (4) more ambitious and resourceful,
     (5) more inclined to worry and complain, (6) more outgoing, active
     and impatient, and (7) younger in age (under 35).

4.   Liked teachers tend to relate well with the minority, Anglo,
     disadvantaged and non-disadvantaged students. There is a signi-
     ficant difference in the minority students' rating of liked
     teachers. They rate the teachers higher in comparison with other
     student groups.

5.   Non-liked teachers are significantly (.05) less effective in their
     teaching relationships with the minority students. On all variables

of the Teacher Inventory, non-liked teachers are rated lower than liked teachers.

(96 pages)

CHAPTER I

INTRODUCTION

Origin and Nature of Problem

In today's culturally deprived and disadvantaged urban areas
teachers are coming face-to-face with a life and death struggle. Not
only does this conflict include educating children who frequently see
no sense in learning, but also includes waging a war against prejudice,
poverty, hate, greed, unhappiness, and loneliness (Gehringer, 1970).

Numerous studies have demonstrated the effect teachers have upon
students' performance, attitudes, and drop-out rates (Barton, 1972;
Bojarsky and Pedersen, 1971; Broadbent, 1972; Fleming and Anttonen,
1971). Barton (1972) sought to determine why some teachers elicit posi-
tive and cooperative student responses while other teachers do not, and
whether there was any causal relationship between teacher characteris-
tics (personality, attitude, and behavior) and student drop-out rates.
In Barton's study, 130 drop-out students and 100 teachers from the
Salt Lake City School District were involved in the study. The drop-
out students were asked: (1) to identify those teachers they felt
were effective with them and with whom they felt most willing to co-
operate, (2) to identify those teachers that they strongly disliked and
with whom they were least willing to cooperate, and (3) to write one
sentence to one paragraph describing their feelings about each teacher.

The teachers both liked and disliked were then assessed by the
Minnesota Teacher Attitude Inventory (MTAI) for attitudes. The

personality characteristics for both groups of teachers were assessed on the Omnibus Personality Inventory and Flanders' Interaction Analysis which yielded a teacher behavioral assessment.

Twenty-three variables were identified and studied to find some trend that would account for the cooperation or non-cooperation of drop-out students with teachers. The instruments administered to both groups of teachers in the study showed that "liked" teachers had a more significant influence in retaining students in the schools.

Lathrop (as reported by Zax, 1971) felt that there would be some value for the teacher of his day (1930) to be made aware of those characteristics and practice rated most frequently by his students as qualities of "liked" teachers.

Without question, the teacher is the most important element in the success of programs that are developed for the students. The quality of teachers shows a stronger relationship to achievement, while variations in the facilities and curriculums of the schools account for relatively little variation in pupil achievement. Further-more, "teacher quality seems more important to minority achievement than that of the majority." (Fenner, 1967)

More research has yet to be done to determine the characteristics of a quality teacher. However, from the study of the writings of the great teachers, "It seems that the great teachers, with due recogni-tion of the role of scholarship and method, are primarily outstanding personalities, possessing the worthy and noble human qualities which can affect eternity." (Fenner, 1967, p. 27)

It seems safe to assume that a teacher which possesses this quality, whatever it may be, would be a "liked" teacher, as contrasted with the teacher who does not possess this quality, thus being classified as "non-liked," as rated by students from various ethnic and socio-economic backgrounds.

Because teachers are so essential to the processes of educating the students, a method of predicting "liked" factors of quality teachers needs to be determined.

Problem

Insufficient knowledge exists relative to teacher personality and behavioral characteristics which cause various types of students to classify them as "liked" or "non-liked" teachers.

Purpose and Objectives

The research project was designed to analyze the test scores on the California Psychological Inventory (CPI) and the Teacher Inventory developed by the Education Improvement Associates in terms of predictors of "liked" and "non-liked" teachers.

Specifically, the objectives were:

1. To determine whether a multiple regression equation based on CPI and Teacher Inventory test scores can statistically discriminate between "liked" and "non-liked" teachers.

2. To identify those variables from the CPI and Teacher Inventory through the stepwise multiple regression equation process which may have strong predictive value.

3. To determine whether "liked" teachers are rated differently on the Teacher Inventory on Personality by:

a) minority as compared with Anglo students.

b) disadvantaged as compared with non-disadvantaged students.

4. To determine whether "liked" teachers are rated differently on the Teacher Inventory on Communication Skills by:

a) minority as compared with Anglo students.

b) disadvantaged as compared with non-disadvantaged students.

5. To determine whether "liked" teachers are rated differently on the Teacher Inventory on Methods by:

a) minority as compared with Anglo students.

b) disadvantaged as compared with non-disadvantaged students.

6. To determine whether "non-liked" teachers are rated differently on the Teacher Inventory on Personality by:

a) minority as compared with Anglo students.

b) disadvantaged as compared with non-disadvantaged students.

7. To determine whether "non-liked" teachers are rated differently on the Teacher Inventory on Communication Skills by:

a) minority as compared with Anglo students.

b) Disadvantaged as compared with non-disadvantaged students.

8. To determine whether "non-liked" teachers are rated differently on the Teacher Inventory on Methods by:

a) minority as compared with Anglo students.

b) disadvantaged as compared with non-disadvantaged students.

Hypothesis

The main hypothesis of this study stated in the null form is:
The California Psychological Inventory (CPI) and Teacher Inventory
test scores will not predict teacher group membership in "liked" vs.
"non-liked" groups.

Sub-hypotheses

1. On the Teacher Inventory on Personality, there will be no
significant difference in student ratings of "liked" teachers by:

a) disadvantaged as compared with non-disadvantaged.

b) Anglo as compared with minority students.

2. On the Teacher Inventory on Communications skills, there will
be no significant difference in student ratings of "liked" teachers by:

a) disadvantaged as compared with non-disadvantaged students.

b) Anglo as compared with minority students.

3. On the Teacher Inventory on Methods, there will be no signifi-
cant difference in student ratings of "liked" teachers by:

a) disadvantaged as compared with non-disadvantaged students.

b) Anglo as compared with minority students.

4. On the Teacher Inventory on Personality, there will be no
significant difference in student ratings of "non-liked" teachers by:

a) disadvantaged as compared with non-disadvantaged students.

b) Anglo as compared with minority students.

5. On the Teacher Inventory on Communications skills, there will
be no significant difference in student ratings of "non-liked" teachers
by:

a) disadvantaged as compared with non-disadvantaged students.

b) Anglo as compared with minority students.

6. On the Teacher Inventory on Methods, there will be no significant difference in student ratings of the "non-liked" teachers by:

a) disadvantaged as compared with non-disadvantaged students.

b) Anglo as compared with minority students.

Definition of Terms

To help clarify the variables under consideration in this study, the following definitions have been established:

1. Liked teacher: One whose cumulative scores as rated by students equaled or exceeded the pro-rated[1] minimum in the "liked" categories.

2. Non-liked teacher: One whose cumulative scores as rated by students was below the pro-rated minimum for that in the "liked" categories.

3. Disdavantaged student: One whose parental income status for 1973 was below the standards established by the Neighborhood Youth Corps (NYC).[2]

4. Non-disadvantaged student: One whose parental income status for 1973 exceeded those standards established by the Neighborhood Youth Corps (NYC).

---

[1]The reader is referred to page 29 for detailed discussion of the research methods of this study.

[2]See Appendix A, p.64 for a table of the NYC Income Status for 1973.

CHAPTER II

REVIEW OF LITERATURE

The review of literature is divided into various segments of
research: (a) student ratings of teachers, (b) what students like in
a teacher, (c) minority and disadvantaged students in the educational
process, (d) predictions of teacher success (likedness using the
California Psychological Inventory (CPI).

Student Ratings of Teachers

Since the turn of the century, there has been an ever-increasing
emphasis placed on teacher evaluations. In attempting to evaluate
teachers, many approaches have been tried time and again. Some studies
have been based on subjective criteria, others on objective criteria.
Hawkins, in a report by Manuel Zax (1971, p. 285) approached the
question of teacher evaluation of elementary teachers by subjective
and objective means and found that "there is substantial agreement in
the identification of outstanding teachers by methods representing
formal evaluation and informal evaluation." Thus, he found that sub-
jective or objective means of evaluation may be used with equal success.

In 1961, the American Association of School Administrators
(AASA), the Department of Classroom Teachers of the NEA, and the National
School Boards Association on the basis of a comprehensive review of
studies dealing with effectiveness in teachers made this observation:

> Overall administrative opinion constituted the most
> widely-used single measure of teacher competence. Available
> studies showed in general that teachers could be reliably

> rated by administrators and supervisory personnel (usually
> with correlations of .70 or above). (Zax, 1971, p. 286)

Another common method of gathering data involves systematic coding or ratings of teachers by trained adult observers who attend one or more selected class sessions. More recently, this data has been re-coreded on film or videotaped during selected periods and later sub-jected to quantitative techniques (Veldman and Peck, 1969).

Coding of behavior displays unique value for studies of particular forms of student interaction, plus the opportunity to "play-back" any segments of the film for clarification, but this method is severely limited in that the sample teacher behavior is not under "normal" conditions. What is needed for many research purposes is the reliable description of the teacher's behavior based on many hours of classroom observations, and the obvious means of getting this information is from the students.

More comprehensive sampling of observations can be made by students on many occasions under "normal" conditions which avoids problems which occur on "one-shot" classroom observations. Unlike ratings of behavior by trained observers, students' evaluations have the advantage of averaging a large number of individual biases.

Within the past 40 years, student opinions of teachers have been gathered as a source of data on teacher effectiveness. This method of data gathering has met with a great deal of controversy. Kent (1967) indicates that teachers feel the students are incompetent in their judgmental skills and are not in a position to evaluate teachers accurately. However, McKeatchie (1956), McKeatchie and Soloman (1958), and Carney and McKeatchie (1966) say that student ratings have

remarkable consistency, and that students are able to make more valid and reliable ratings of teachers than any other group, including administration, supervisor, and experts (Howsam, 1963). Certain stable dimensions of teacher related to effectiveness have been established (Issacson et al., 1963).

Werdelin (1969), in an attempt to determine the consistency of evaluations among student ratings, teacher ratings, and self-ratings of the teachers, found that the teacher's (peer) ratings and students' ratings were more consistent than the teacher's self-ratings, indicating that the teachers may not be fully aware of how students perceive the teachers' behavior.

Teachers oppose student ratings for another reason; they feel that students don't know what is really valuable until they are out of school (McKeatchie, 1969). However, in a study by Druckers and Remmers (1951) in which a selected sample of students of the school year 1948-49 and alumni of 1936-1939 rated teachers on the Purdue Rating Scale, the findings failed to support that opinion. The alumni's opinion of teachers and the students' opinion were essentially the same, and the alumni's opinions did not seem to change over the 10 year period.

Finally, teachers oppose student evaluations because they feel the evaluations are merely personality contests. This may be if the teachers make it so, but King (1971, p. 9) says that "various studies of students' ratings suggest that popularity in its meretricious sense is not what students are after in asking for better teaching." He continues that studies do not confirm the suspicion that teachers can

win high ratings by easy grading and light assignments. "Tough"
teachers are commonly rated high.

In summary, student opinion is of importance for data collections
on teachers' actual classroom behavior; student ratings seem to be
reliable (Rowland, 1970) and have some validity (McKeatchie, 1969).
Student evaluations, as important as they are, should not be considered
apart from other means. They do provide valuable information from a
unique point of view.

What Students Like in a Teacher

The result of student ratings have produced many characteristics
of the effective teacher. Current literature indicates the investiga-
tions are not at variance but give reasonably consistent answers. In
an extensive study to upgrade the teacher training programs at the
University of Northern Colorado, Bybee and Chaloupka (1971) attempted
to determine profiles of teacher characteristics in order of preference
by nine student groups and one faculty group. The student group
included elementary, secondary, and University grade levels. These
groups also included advantaged, average and disadvantaged members.
The teacher characteristics or behaviors examined were:

I. Knowledge and Organization of Subject Matter--

    1. is well read

    2. makes clear what is expected of students

    3. is logical in his thinking

    4. keeps course material up to the minute

    5. is an authority on his subject

6. has a well-organized course

7. increases students' vocabulary by his own excellent usage

8. is well informed in related fields

9. covers the subject

10. has continuity in his course

II. Adequacy of Relations with Students in Class--

1. is pleasant in class

2. gives everyone an equal chance

3. is friendly without making a great deal of effort about it

4. never deliberately forces his own decisions on the class

5. never criticizes in a destructive way

6. never makes students afraid of asking questions

7. accepts students' viewpoints with an open mind

8. does not ridicule wrong answers

9. encourages students to think out answers

10. makes material significant

III. Adequacy of Plans and Procedures in Class--

1. is always on time for class

2. does not fill up time with trivial material

3. always has an orderly class

4. has well-thought-out procedures

5. is very fair in marking tests

6. spaces assignments evenly

7. always lets students know what is coming up the next day

8. always knows what he is doing

9. always has class material ready

10. always manages to get things done on time

IV. Enthusiasm in Working with Students--

    1. is sincere when talking with students

    2. is very enthusiastic about his subject

    3. enjoys teaching class

    4. encourages creativeness

    5. has a friendly attitude toward students

    6. has a good sense of humor

    7. gets students to work willingly

    8. appreciates accomplishment

    9. encourages students to think out answers

  10. makes material significant

V. Techniques or Methods of Teaching--

    1. lets me do things with my hands

    2. usually lectures to us

    3. often reads the book to us

    4. is skillful in asking questions so we can discuss the subject

    5. uses many films

    6. usually mostly essay questions

    7. uses mostly true-false questions

    8. uses games and other simulation activities

    9. lets us do projects

  10. uses a variety of teaching techniques.

Based on the findings of their research, they concluded that present teacher education programs should be re-evaluated. Teacher preparation programs at the present time emphasize knowledge of subject matter, ability to plan and prepare and methods of teaching; yet the

ultimate consumer of the product these programs produce, the student, views inter-personal relationships and enthusiasm in working with students as the most important characteristics of the teaching, "I like best."

Lathrop (as reported by Zax, 1971) felt that it would be of value to the teacher to be aware of those characteristics and practices rated most frequently by his students as qualities of "liked" teachers. From his study, he listed the following characteristics in order of frequency on the basis of students' views of great teachers such as Mark Hopkins, William James, Woodrow Wilson, and Oliver Wendell Holmes: (1) clarity of expression, (2) humor, (3) enthusiasm, (4) insistence on high standards, (5) sympathy, (6) interest in students, (7) expressive voice, (8) cordiality, (9) patience, (10) impressive physique, (11) tolerance, and (12) enjoyment of teaching.

In like manner, Lathrop listed the most frequent practices in order of their frequency: (1) use of effective illustration, (2) provision for activity for the learners, (3) careful preparation for each teaching exercise, (4) encouragement of efforts of the students, (5) drawing upon fields other than the special field, (6) statements of all sides to a question, (7) avoidance of adherence to the text, (8) provision for teaching students to think.

Coffman (1954) came up with four factors that best explain the outstanding teacher: Factor A was named "empathy," which included the ability to arouse interest, humor, interpersonal relations, and tolerance. Factor B was identified as "organization." Factor C represented the teacher's personality. Factor D was verbal fluency.

Mrs. Barton's (1972) study showed that liked teachers were:
(1) more indirect in teaching style; (2) were more accepting of ideas
expressed by students; (3) used less criticism; (4) gave fewer direc-
tions; (5) gave students a feeling of security; (6) encouraged student
response; (7) liked children and liked teaching; (8) encouraged free-
dom to think; (9) were deeper thinkers; (10) were more sensitive to
needs of students; (11) were more tolerant and realistic; (12) were
more creative and imaginative; (13) were less judgmental and less
authoritarian; (14) were more openminded where religion was concerned;
(15) were more accepting of other points of views; (16) had a strong
interest in being with people; (17) accepted themselves, felt under-
stood by others; (18) were not anxious or nervous; (19) adjusted well
socially; and (20) were more intellectual.

Gadzella (1968) determined that the most important criteria in
describing the "ideal" teacher (in rank order of importance) were:
(1) knowledge of subject (subject mastery); (2) interest in subject
(enthusiasm); (3) flexibility (ability to meet student needs);
(4) daily and course preparations (well organized), and (5) vocabulary
(ability to explain clearly).

Hart, in an extensive study to determine what students like and
dislike in teachers, found that liked teachers tend to be: (1) helpful
with schoolwork, explaining lessons and assignments clearly and
thoroughly; (2) cheerful, happy, good natured, with a sense of humor
and can take a joke; (3) human and friendly; (4) interested in students,
and (5) makes work interesting (Hurd, 1957). The reader is referred
to Appendix B for further assessment of Hart's study, arranged in

order of frequency of mention. In Hart's study, teachers students liked best were indicated by the term "Teacher A."

The above studies have generally shown that students liked a teacher best because he: (1) has good interpersonal relations and enthusiasm in working with the students, is interested in and sensitive to the needs of the students, offers encouragement to the students to think freely and express own opinions; (2) insists on high standards and knowledge of subject matter, is well prepared daily with a variety of methods, uses good discipline and is able to explain clearly so students can understand; (3) enjoys teaching, has a pleasant personality and is friendly and kind. In summary, these liked teachers seem to have pleasing personalities, a variety of teaching methods and a good relationship with their students.

Minority and Disadvantaged Students
in the Educational Process

The role of education in our society constitutes a major portion of an individual's life. Complex influences such as the home, family, and peer groups, impinge the process of educational development. Our society's educational process is unique in many respects from other societies in its concern for the individual. This "ideal" is best reflected in a quote from former U.S. Secretary of Health, Education and Welfare, John W. Gardner (1966) as follows:

> Everything that we do, all that we achieve, must finally be measured in terms of its effect on the individual. We set out to create a society in which the individual can flourish. But our highly-organized society carries its own threats to individuality.

> We can avert that threat. We can't escape size and
> complexity today, but we can design our institutions so that
> they serve the individual as well as the system. Our goal
> should be a society designed for people. (p. 40)

Achieving orderly and satisfactory educational development varies with the individual. For some, there are relatively few problems whereas for others there are considerable frustrations, obstacles, and dissatisfactions.

For those who go through the educational development process experiencing deprivations and handicaps, there could be a serious disruption to individual happiness. These handicaps and deprivations can encompass a wide spectrum of disadvantages, e.g., education, social, economic, physical, psychological and handicaps of race and ethnic origin. The most basic disadvantages are the economical aspects characterized by (1) low annual income; (2) high rate of unemployment; (3) under-utlization of human resources; (4) poor housing; (5) poor sanitary conditions; (6) large families with inadequate living space; (7) excessive reliance on welfare; and (8) attitudes of hopelessness (Crow, Murray, and Smythe, 1966).

"Poor children do badly in school because their teachers don't like them." (Yee, 1970, p. 10) This statement was based on the find-ings of attitude tests administered to 212 teachers and their students from 50 schools in middle-class and lower-class neighborhoods in Texas and California. Reissman (1962) contended that the disadvantaged student perceives their teacher's rejection of them as accurate, that a teacher does in fact react negatively to those students who are different from the middle-class white student.

The research shows that there is a substantially high positive correlation between (1) low school achievement and low-income youth, and (2) low school achievement and minority group youth (Ornstein, 1971). It may be that teachers grade the advantaged (particularly advantaged white) according to intelligence and type of socialization, and to the disadvantaged (particularly disadvantaged girls) according to intelligence and objectively measured school achievement (McCandless et al., 1972). Or, it may be that the white children have internalized success values to a greater degree prior to their entrance into school. The values may be particularly significant to a child's success in school. There is an indication that minority children, in particular, experience value conflicts in school (Wasserman, 1971).

White male adult teachers use more negative verbal statements with black students than with white students whereas there is no significant difference between the two races from female teachers. However, on trait ratings of the students following the training session, both male and female teachers rated black students more negatively than the white students (Coates, 1972).

An extensive study by Jensen (1970) used a large representative sample of Negro and Mexican-American students from kindergarten to eighth grade in largely de facto segregated schools and compared them with white students in the same California school district on a comprehensive battery of tests of mental abilities and of scholastic achievement, in addition to personality inventories and indices of socio-economic and cultural disadvantagement. It was found that when certain ability and background factors, over which the schools have little or no

influence, are statistically controlled, there are no appreciable differences between the scholastic achievements (as measured by the Stanford Achievement Tests) of minority and majority students.

Luke (1971) in a study to determine if academic and social differences between Mexican and non-Mexican students exist, concluded that the Mexican students do not differ significantly from a matched group of non-Mexican students either in grades or on the basis of national achievement tests. He also indicated that the results of the Mooney Problem Checklist showed the Mexican students with fewer problems than the non-Mexican.

Cultural differences (teacher, counselor, administrator) are not the issue in relating with the disadvantaged and minority students. An atmosphere in which the students feel that they can relate is the key (Von Endo, 1970). St. John (1971) in a study involving 956 students of minority and white origin and 36 teachers of varying characteristics found that race, sex, socio-economic status of teachers and students did not affect achievement. She did find, however, that minority students seem to be more responsive to teachers with interpersonal skill, rather than subject matter competence.

Some theorists contend that the white middle class teacher, because of his background, cannot perceive nor understand the needs of minority or disadvantaged students. Howard (1968) conducted a study to determine if there were differences between the way teachers, as members of the middle class, perceived the needs of these students as compared to the way the students saw their needs. Results indicated that the teachers probably understand the students better than the

theorists might predict, although some areas of lack of understanding were noted.

In summary, the above studies have generally shown that: (1) minority and disadvantaged students seem to be more responsive to teachers with interpersonal skills rather than subject matter competence; (2) an atmosphere in which a student feels he can relate is more important than the race, sex, or socio-economic status of either the teacher or the student; (3) white teachers probably understand the needs of minority and disadvantaged students better than theorists might predict; and (4) white students tend to receive higher grades than the minority or disadvantaged students.

Prediction of Teacher Success (Likeness) Using the California Psychological Inventory (CPI)

For years, researchers have studied various groups of educators to determine whether a correlation exists between personality character-istics and occupational choice. In terms of personality characteristics, a trend seems to be emerging which indicates that behavior may be predicted through analysis of personality characteristics. Hill (1960) assumed that the personality of the teacher will affect the teacher's behavior, thence students' behavior.

Coombs (1965) has indicated that the teacher is first and foremost a person. The teacher as a person is a vehicle through which whatever teaching he does is accomplished. In recent years, studies have attempted to correlate common personality characteristics and success in education. Ryans (1960) indicated that the teacher's human traits

and abilities may be grouped into two categories: (1) those involving
the teacher's mental abilities and skills, his understanding of
psychological and educational principles and his knowledge of general
and special subject matter to be taught, and (2) those qualities
stemming from the teacher's personality, his interests, attitudes,
and beliefs, his behavior in working relationships with pupils and
other individuals. The intellectual characteristics of teachers can
be measured with considerable degree of success. The second one is
classified in the composite as the personality of the teacher.

Adams, Blood, and Taylor (1959) found that personality character-
istics of art and science teachers differ from other educators. Find-
ings of the above study have largely been supported by other studies
which broaden the issue to include the premise that teachers from one
area of specialization differ from other educators. It may even be
that personality characteristics of the individual determine his area
of specialization.

In a study using the CPI scales of Do (dominance), Ac (achievement
via conformity) and Py (psychological-minded), Hill (1960) hypothesized
that each of these psychological characteristics would contribute to
favorable personality attributes which may be casual factors in the
case for better teachers. He found that the Do (dominance) scale and Py
(psychological-minded) scale did not predict at the .05 level. He
did find, however, that Ac (achievement vs. conformity) was significant
at the .05 level in the prediction.

Durflinger (1963a) stated that the CPI scales with the MTAI
(Minnesota Teachers Attitude Inventory) offer promise as instruments

for screening students especially women students for a career in elementary teaching. He also found that the femininity scale would be of assistance in identifying the characteristics of groups of women seeking an elementary teaching credential. "On the average they tend away from high femininity of interest scores." (Durflinger, 1963a, p. 783)

In a further study of personality correlations of successful teachers, Durflinger (1963b) found the successful teacher is not different from members of the standardized sample in dominance, social initiative, and capacity and desire for status. The successful teacher tends to display to a significant degree an outgoing, sociable and participative temperament. The successful teacher shows a lower degree of self-acceptance--a finding which indicates that the successful teacher tends to be conventional and quiet and doesn't display self-centeredness or aggressive behavior.

The successful teacher tends to be less inclined to create a good impression and less desirous to do so than the relatively unsuccessful teacher. The successful teacher tends not to achieve or display achievement potential corresponding to those factors of interest or motivation which facilitates achievement where either conformance or independence are positively valued behaviors. Furthermore, he exhibits a significant tendency to be less flexible than those of the standardized sample.

In intellectual efficiency, which is not a measure of intelligence at all, but an indicator of the degree of personal and intellectual efficiency that the individual has attained as a functioning social

being, there is no indication that this scale does differentiate the successful teacher from the unsuccessful one.

The psychological-minded scales determine the degree to which the individual is interested in and responsive to the needs and experiences and motives of others. Of all variables studied, standing on this scale shows the highest negative correlation with the general model pattern (communality). The femininity of interest scale is not significantly related to teaching success.

Although the scales of the CPI are a good predictive instrument in teacher success, caution should be taken not to base conclusions on the basis of one instrument.

CHAPTER III

THE METHOD OF STUDY

The method of study includes a discussion of how the research was conducted, what materials were used to obtain the data, and how the data were analyzed. The chapter is divided into various parts: method of sample selection, size of sample, description of tests, procedures for obtaining data, methods of scoring and analysis of data.

Sample

The population for the study consisted of the students and teachers of the sophomore class at Layton High School, Layton, Utah. There were several reasons why the population was delimited to the sophomore class:

1. Juniors and seniors have a greater selection of courses to fill core requirements for graduation. The greater selection of subjects allows the juniors and seniors to choose the teachers they want according to subject-matter specialties.

2. The sophomores are less free in the selection of subjects they are required to take. They must have as classes for the sophomore year: English, U.S. history, physical education, and it is strongly suggested that they have math and/or science. This restriction on subjects lessens the opportunity for sophomores to choose their teachers.

3. Delimiting the teacher sample to only required subject-matter teachers reduces student rating bias of favorite subject teachers being rated highest.

The sample was selected by a five-step process:

1. All sophomore teachers who taught English (N=13), U.S. history (N=6), physical education (N=6), science (N=6), and math (N=6) agreed to take part in this study. This accounted for 100 percent participation (N=37) from the teachers of required subject-matter courses.

   Each teacher was then rated as to degree of "likedness" by a random selection of students currently enrolled in his class. (The Like-Dislike Scale is shown in Appendix C, p. 68).

2. The total population of minority group sophomores (N=42) enrolled at Layton High School for the year 1972-73 participated in this study.

3. From the remaining Anglo population, a random sample was taken. An attempt was made to equalize boys and girls as well as G.P.A.'s with the minority population.

4. The students were further sub-divided from the standpoint of income. An income questionnaire was sent home to be filled out and returned to school (Appendix D, p. 70). Each questionnaire was coded so an accurate count could be made as to which income statements were returned. A constant follow-up enabled a complete return of the income statements. These statements sub-divided both student samples into disadvantaged students and

non-disadvantaged students, according to the guidelines of the
NYC Income Status (Appendix A, p. 64).

Size of Sample

The sample consisted of 37 teachers from required classes, 42
students from the minority population, and a random sample of 50 Anglo
students. The teachers were classified as follows: Liked teachers
(N-22) and non-liked teacher (N=15), for a total teacher sample of
37 teachers.

The student sample was classified as follows:

Table 1. Total student sample breakdown as to disadvantaged, non-
disadvantaged, minority, and Anglo

Students	Total	Boys	Girls
Minority non-disadvantaged	21	11	10
Anglo non-disadvantaged	31	14	17
Minority disadvantaged	21	13	8
Anglo disadvantaged	19	6	13
Total	92	44	48

The minority population was comprised of the following:

Mexican:	30 subjects
Black:	6 subjects
Japanese:	3 subjects
Indian:	2 subjects
Philipino:	1 subject
Total	42 subjects

Table 2.   G.P.A.'s of minority and Anglo students

G.P.A.	Number of Minority Students	Number of Anglo Students
3.5 - 3.9	3	4
3.0 - 3.4	6	6
2.5 - 2.9	9	14
2.0 - 2.4	5	12
1.5 - 1.9	4	6
1.0 - 1.4	9	5
.0 - .9	6	3
Total	N = 42	N = 50
Average G.P.A.	2.12	2.28

Description of Tests

Teacher inventory

Education Improvement Associates has spent two years developing a
comprehensive assessment program for junior and senior high school
teachers. Teachers, students, administrators and measurement experts
were involved in the preparation, selection and wording of the items.
"The teacher inventory has been administered successfully to over 5000
junior and senior high school students, including a full range of
intellectual exceptionality." (EIA Manual, 1972, p. 7)

Sixteen items on the inventory are organized into three categories:
(1) personality, (2) teaching methods, (3) communication skills.
Students are asked to indicate whether they strongly agree, agree,
undecided, disagree or strongly disagree on each item for each teacher.

Relative interpretations are possible because the same teacher inventory is applied to all teachers. This inventory is predicated on the notion of helping the less "effective" teacher rather than just identifying them. The categories pinpoint for the teacher specific areas of weakness that can be improved.

Field tests of the instrument were conducted in cooperating schools to permit item revision prior to the full-scale testing of the inventory. The inventory was piloted in San Diego area schools during 1971 and 1972. Over 5000 junior and senior high school students, representing a wide range of ability, have successfully used the instrument to evaluate their teachers.

The mean item scores for individual teachers ranged from -1.31 to +1.90 and indicated a high level of student discrimination. The split-half reliability of the teacher ratings exceeded .95 in each of the pilot schools. No validity coefficient was stated in the manual but it is assumed to have high content validity by the authors.

A follow-up questionnaire was administered in all pilot schools. Participating schools reported valuable information concerning the inventory. This information appears in Appendix F, p. 73.

In April of 1973, a test-retest reliability for internal consistency was administered over a 2 1/2 week period to a comparable sample of students from another high school in the Davis County School District. The test-retest sample consisted of 27 students from a U.S. history class. The total reliability coefficient of this test was .97. An item analysis for the test appears in Appendix G, p. 74.

The personality measuring instrument

The California Psychological Inventory (CPI) was selected for use in order to determine personality traits of teachers who were rated as "liked" and "non-liked" by the students. The CPI has broad appeal as a self-report inventory. In developing the CPI, its author claimed a desire to develop measures of "relatively" normal personality dimension, and with broader personal relevance than that possessed by many more pschiatrically oriented personality tests (e.g., Minnesota Multiple Personality Inventory).

The CPI is a good example of an empirically developed personality test. Methods used in its development were similar to those employed with the MMPI. The item format parallels the MMPI and many questions of the "less" disturbing nature are included in the CPI. The CPI contains 480 items, which may be scored along 18 dimensions. Gough (1957) reports two reliability students in the CPI manual. His studies show a test-retest correlation as high as those generally found in personality measurements, ranging from .49 to .87.

Numerous studies have presented considerable data on the validity of the CPI scales. In the Sixth Mental Measurement Yearbook, Buros (1965, p. 71) states " ... the CPI ... is one of the best, if not the best, available instrument of its kind. It was developed on the basis of a series of empirical studies and the evidence for the validity of its several scales is extensive." Anastasi (1968, p. 448) feels that on the whole the CPI is the best personality measure currently available.

Procedure

The teachers who participated in the study were classified "liked" or "non-liked" according to student ratings of the teachers on the Like-Dislike Scale. The students were informed that they were a part of a graduate study and that answering all the questions as honestly as possible was most important. The instructions were as follows:

Like-Dislike Scale: In the boxes below, indicate how you feel about each teacher by putting an "x" in the appropriate box. Place an "x" in the no opinion box only if you have not had that teacher this year (see Appendix C, p. 68).

The Likert scale of strongly agree, agree, undecided, disagree and strongly disagree are equated with the numerical values of 5, 4, 3, 2, 1, respectively. A frequency distribution was made to determine the count per column per teacher. The frequency of responses per column were then totaled. The numerical value of the columns (5, 4, 3, 2, 1) was then multiplied by the frequency of responses of that column for the teacher. This procedure continued until all columns for the teacher had been computed. The next step was to multiply the number of students rating the teacher by (5) strongly like and (4) like, to determine the range within which the teacher's score must fall to be considered a "liked" teacher. All scores below the number were considered "non-liked" teachers. This process for computing teachers as "liked" or "non-liked" is called "pro-rating."

Teacher Inventory: The student sample was administerd the Teacher Inventory. The Teacher Inventory was used to rate each required

subject-matter teacher that the student had during the year on three variables: personality, communication skills and teaching methods. The instructions were as follows:

In the following section, there are statements made about your teacher. Place an "x" in the box that best describes how you feel about that teacher. The student had one class period to complete this inventory; there appeared ample time to finish the questionnaire.

Since the CPI was an important component of the study, all teachers were administered this test.

California Psychological Inventory (CPI): The teachers were divided into two groups because of the lack of CPI booklets. One group of teachers were administered the CPI on Tuesday, April 3, 1973, and the other group on Thursday, April 5, 1973. No time limit was imposed. The teachers were asked to read the directions and to begin working.

Additional information was gathered regarding teacher age (over 35 or under 35) and the sex of each teacher.

Methods of Scoring Tests

The CPI and Teacher Inventory were scored manually. Every precaution was taken to insure the accuracy of the data. The numerical score for each of the 18 CPI personality dimensions and the nine socres for the three categories of the Teacher Inventory (personality-- agree, no opinion, disagree; communication skills--agree, no opinion, disagree; and teaching methods--agree, no opinion, disagree) were recorded on worksheets and subsequently punched on IBM cards for analysis.

Analysis of Data

The personality (CPI) scores and the Teacher Inventory scores were statistically treated by the use of the stepwise multiple regression equation to determine whether the stepwise multiple regression equation could statistically predict teacher group membership of "liked" and "non-liked" teachers.

From the Teacher Inventory, the scores were treated statistically by use of an anlysis of variance to determine whether there were any significant differences among the various student group ratings of "liked" and "non-liked" teachers.

CHAPTER IV

RESULTS

The results of this research are reported in two sections:
(1) prediction of "liked" and "non-liked" teachers, and (2) student
ratings of both "liked" and "non-liked" teachers.

Prediction of "Liked" and "Non-liked" Teachers

The results of this section will be summarized under the follow-
ing hypothesis: The CPI and Teacher Inventory test scores will not
predict teacher group membership in "liked" vs. "non-liked" groups.

The data were gathered via (1) Like-Dislike Scale administered
to the students, rating each teacher as to whether the student liked or
disliked that teacher; (2) the California Psychological Inventory
(CPI) administered to the teachers, thus attaining a personality
assessment; and (3) the Teacher Inventory administered to the students,
rating the teachers on personality, communication skills and methods.
The data were treated by the stepwise multiple regression equation and
failed to support this hypothesis (see Table 3).

Table 3. Regression analysis of variables[*]

Source	df	Mean Square	R^2
Total 29 variables	36	.2477477	.9131364

*A total representation of the regression analysis for each variable
 may be found in Appendix H.

The results of the stepwise multiple regression equation for the "liked" and "non-liked" teachers' CPI and Teacher Inventory scores are summarized in Tables 4, 5, and 6. Table 4 points out the 29 variables (i.e., 18 CPI, 9 Teacher Inventory, sex and age) that were considered in this study. Table 5 shows the statements on the Teacher Inventory that assess the three variables: Personality, Communication and Methods. Table 6 shows the stepwise multiple regression equation deletion results of the 29 variables considered in predicting teacher group membership.

The last variable to be deleted from the stepwise multiple regression equation was Methods-Agree (Teacher Inventory). Since Methods-Agree was the last test variable to be deleted, it can be assumed that the subjects' test scores on the Methods-Agree scale is the best predictor in discriminating between "liked" and "non-liked" teachers. Conversely, the least sensitive scale of the 29 variables considered and the first to be deleted was Communication skills-Disagree (Teacher Inventory). Although this scale predicted little of the total predictive value, when this variable was deleted one teacher from the "liked" group also was removed and placed in the "non-liked" teacher group.

A review of teachers' raw score means on the CPI (Table 7, p. 39) indicate that "liked" teachers tend to score significantly higher, as indicated by the stepwise multiple regression equation, on Capacity for Status, Social Presence, and Self-acceptance scales as compared with the "non-liked" teachers. In contrast, "liked" teachers tend to score significantly lower on the scales of Sense of Well-being,

Table 4.   Variables considered in the stepwise multiple regression
           equation.

Variables CPI Scales	Variables Teacher Inventory
Do Dominance	Personality (Per)
Cs Capacity for Status	Agree (A)
Sy Sociability	Disagree (D)
Sp Social Presence	No Opinion (NO)
Sa Self-acceptance	
Wb Sense of Well-being	Methods (Meth)
Re Responsibility	Agree (A)
So Socialization	Disagree (D)
Sc Self-control	No Opinion (NO)
To Tolerance	
Gi Good Impression	Communication Skills (Comm)
Cm Commonality	Agree (A)
Ac Achievement vs. Conformance	Disagree (D)
Ai Achievement vs. Independence	No Opinion (NO)
Ie Intellectual Efficiency	
Py Psychological Mindedness	Sex
Fx Flexibility	Age
Fe Femininity	
TOTAL 29 VARIABLES	

Table 5. Teacher Inventory variables

Personality	1.	My teacher shows an interest in me.
	2.	My teacher can adjust to different situations that arise in class.
	3.	My teacher is friendly and cheerful.
	4.	My teacher listens to the ideas and opinions of his students.
	5.	My teacher seems to enjoy teaching.
	6.	My teacher admits when he or she is wrong.
Communication Skills	7.	My teacher explains clearly the purposes of the class.
	8.	My teacher keeps me informed about how I am doing in class.
	9.	My teacher is available when I need help.
	10.	My teacher explains assignments clearly so I know how to do them.
	11.	My teacher encourages me to take an active part in the class.
Methods	12.	My teacher grades me fairly.
	13.	My teacher makes class interesting with a variety of activities and materials.
	14.	My teacher has good class control but not too strict.
	15.	My teacher is able to answer most of the questions I ask.
	16.	My teacher plans carefully and uses class time well.

Table 6. Stepwise regression equation results of the 29 variables from the CPI and Teacher Inventory scores

Variables*	R^2
Sex, age, Per A., Per D., Per NO, Comm A., Comm D., Comm NO, Meth A., Meth D., Meth NO, Do, Cs, Sy, Sp, Sa, Wb, Re, So, Sc, To, Gi, Cm, Ac, Ai, Ie, Py, Fx, Fe.	.9131364
Sex, age, Per A., Per D., Per NO, Comm A., ----, Comm NO, Meth A., Meth D., Meth NO, Do, Cs, Sy, Sp, Sa, Wb, Re, So, Sc, To, Gi, Ac, Ai, Ie, Py, Fx, Fe.	.9131236
Sex, age, Per A., Per D., Per NO, Comm A., ----, Comm NO, Meth A., Meth D., Meth NO, Do, Cs, Sy, Sp, Sa, Wb, Re, So, ----, To, Gi, Cm, Ac, Ai, Ie, Py, Fx, Fe.	.9130557
Sex, age, Per A., Per D., Per NO, Comm A., ---, Comm NO, Meth A., Meth D., Meth NO, Do, Cs, ---, Sp, Sa, Wb, Re, So, ---, To, Gi, Cm, Ac, Ai, Ie, Py, Fx, Fe.	.9129867
Sex, age, Per A., Per D., Per NO, Comm A., ---, Comm NO, Meth A., Meth D., ---, Do, Cs, ---, Sp, Sa, Wb, Re, So, ---, To, Gi, Cm, Ac, Ai, Ie, Py, Fx, Fed.	.9126599
Sex, age, Per A., ---, Per NO, Comm A., ---, Comm NO, Meth A., Meth D., ---, Do, Cs, ---, Sp, Sa, Wb, Re, So, ---, To, Gi, Cm, Ac, Ai, Ie, Py, Fx, Fe.	.9122255
---, age, Per A., ---, Per NO, Comm A., ---, Comm NO, Meth A., Meth D., ---, Do, Cs, ---, Sp, Sa, Wb, Re, So, ---, To, Gi, Cm, Ac, Ai, Ie, Py, Fx, Fe.	.9116947
---, age, Per A., ---, Per NO, Comm A., ---, Comm NO, Meth A., Meth D., ---, Do, Cs, ---, Sp, Sa, Wb, ---, So, ---, To, Gi, Cm, Ac, Ai, Ie, Py, Fx, Fed.	.9097894
---, age, Per A., ---, Per NO, Comm A., ---, Comm NO, Meth A., Meth D., ---, Do, Cs, ---, Sp, Sa, Wb, ---, So, ---, ---, Gi, Cm, Ac, Ai, Ie, Py, Fx, Fe.	.9075314

Table 6. Continued

Variables*	R^2
---, age, Per A., ---, Per NO, Comm A., ---, Comm NO, Meth A., Meth D., ---, Do, Cs, ---, Sp, Sa, Wb, --, --, --, --, Gi, Cm, Ac, Ai, Ie, Py, Fx, Fe.	.9060026
---, age, Per A., ---, Per NO, Comm A., ---, Comm NO, Meth A., ---, ---, Do, Cs, --, Sp, Sa, Wb, --, --, --, --, Gi, Cm, Ac, Ai, Ie, Py, Fx, Fe.	.9049157
---, age, Per A., ---, Per NO, Comm A., ---, Comm NO, Meth A., ---, ---, Do, Cs, ---, Sp, Sa, Wb, ---, --, --, --, Gi, ==, Ac, Ai, Ie, Py, Fx, Fe.	.8955285
---, age, Per A., ---, Per NO, Comm A., ---, Comm NO, Meth A., ---, ---, Do, Cs, --, Sp, Sa, Wb, --, --, --, --, Gi, --, Ac, --, Ie, Py, Fx, Fe.	.8792543
---, age, Per A., ---, Per NO, ---, ---, Comm NO, Meth A., ---, ---, Do, Cs, --, Sp, Sa, Wb, --, --, --, --, Gi, --, Ac, --, Ie, Py, Fx, Fe.	.8682444
---, age, Per A., ---, Per NO, ---, ---, Comm NO, Meth A., ---, ---, Do, Cs, --, Sp, Sa, Wb, --, --, --, --, Gi, --, Ac, --, --, Py, Fx, Fe.	.8570506
---, age, Per A., ---, Per NO, ---, ---, Comm NO, Meth A., ---, ---, Do, Cs, --, Sp, Sa, Wb, --, --, --, --, --, --, Ac, --, --, Py, Fx, Fe.	.8455829
---, age, Per A., ---, Per NO, ---, ---, Comm NO, Meth A., ---, ---, --, Cs, --, Sp, Sa, Wb, --, --, --, --, --, --, Ac, --, --, Py, Fx, Fe.	.8347282
---, age, Per A., ---, Per NO, ---, ---, Comm NO, Meth A., ---, ---, --, Cs, --, Sp, Sa, Wb, --, --, --, --, --, --, --, --, --, Py, Fx, Fe.	.8236520
---, age, Per A., ---, Per NO, ---, ---, Comm NO, Meth A., ---, ---, --, Cs, --, Sp, Sa, Wb, --, --, --, --, --, --, --, --, --, --, Fx, Fe.	.8073107

Table 6. Continued

Variables*	R^2
---, age, Per A., ---, ---, ---, ---, Comm NO, Meth A., ---, ---, --, Cs, --, Sp, Sa, Wb, --, --, --, --, --, --, --, --, --, --, Fx, Fe.	.7925125
---, ---, Per A., ---, ---, ---, ---, Comm NO, Meth A., ---, ---, --, Cs, --, Sp, Sa, Wb, --, --, --, --, --, --, --, --, --, Fx, Fe.	.7741997
---, ---, ---, ---, ---, ---, ---, Comm NO, Meth A., ---, ---, --, Cs, --, Sp, Sa, Wb, --, --, --, --, --, --, --, --, --, --, Fx, Fe.	.7395512
---, ---, ---, ---, ---, ---, ---, Comm NO, Meth A., ---, ---, --, Cs, --, Sp, Sa, Wb, --, --, --, --, --, --, --, --, --, --, Fx, --.	.7056918
---, ---, ---, ---, ---, ---, ---, Comm NO, Meth A., ---, ---, --, Cs, --, Sp, Sa, --, --, --, --, --, --, --, --, --, --, --, Fx, --.	.6720151
---, ---, ---, ---, ---, ---, ---, Comm NO, Meth A., ---, ---, --, ---, --, Sp, Sa, --, --, --, --, --, --, --, --, --, --, --, Fx, --.	.6267230
---, ---, ---, ---, ---, ---, ---, Comm NO, Meth A., ---, ---, --, --, --, Sp, --, --, --, --, --, --, --, --, --, --, --, --, Fx, --.	.6055167
---, ---, ---, ---, ---, ---, ---, ---, Meth A., ---, ---, --, --, --, Sp, --, --, --, --, --, --, --, --, --, --, --, --, Fx, --.	.5628912
---, ---, ---, ---, ---, ---, ---, ---, Meth A., ---, ---, --, --, --, --, --, --, --, --, --, --, --, --, --, --, --, --, Fx, --.	.4974716
---, ---, ---, ---, ---, ---, ---, ---, Meth A., ---, ---, --, --, --, --, --, --, --, --, --, --, --, --, --, --, --, --, --, --.	.4452563

*Terminology for the 29 variables will be found in Table 4.

Table 7. Raw score means and standard deviation on the CPI and
          Teacher Inventory variables for "liked" teachers (N-22) and
          "non-liked" teachers (N-15), considered in the stepwise
          multiple regression equation

Variables	Liked Teachers		Non-liked Teachers	
	Raw Score Means	Standard Deviation	Raw Score Means	Standard Deviation
Sex	.36	.49	.33	.49
*Age	.27	.45	.67	.49
*Per-A	89.32	24.31	62.27	18.84
Per-D	4.50	6.01	20.93	13.39
Per-NO	10.41	8.08	19.00	6.21
Comm-A	69.82	15.42	54.27	13.10
Comm-D	6.36	9.14	16.53	10.57
*Comm-NO	11.09	9.14	12.27	5.29
*Meth-A	73.14	11.75	52.93	10.81
Meth-D	4.00	3.78	19.87	10.63
Meth-NO	6.86	6.31	9.73	4.23
Do	31.64	6.25	30.07	7.05
*Cs	20.50	3.88	19.53	3.46
Sy	25.14	3.87	25.93	4.77
*Sp	36.91	4.90	36.80	5.95
*Sa	22.27	3.53	21.67	4.85
*Wb	38.91	4.14	39.40	3.92
Re	31.55	4.63	31.47	3.23
So	39.41	5.42	36.53	3.58
Sc	31.14	8.73	30.67	6.60
To	22.36	4.94	25.00	3.53
Gi	19.00	4.79	17.47	5.07
Cm	26.55	1.22	26.53	1.19
Ac	30.68	4.39	30.47	3.50
Ai	21.14	2.85	22.53	1.96
Ie	40.18	3.71	41.47	4.03
Py	12.05	2.48	12.67	1.91
*Fx	9.41	3.52	10.60	3.58
*Fe	19.27	4.68	19.33	4.19

*These variables are the 10 strongest predictors of "liked" teachers
 as indicated by the stepwise multiple regression equation.

Flexibility and Femininity scales. The ten strongest predictors of "liked" and "non-liked" teachers are so indicated with an asterisk (*) on Table 7, p. 39.

The Teacher Inventory results tabulated from the total student sample of student ratings of the teachers on the Personality variable are presented in Table 8. Table 9 shows the results of the Communications variable and the Methods variables are represented in Table 10.

The liked teachers, on the Teacher Inventory, score higher on a percentage basis on each variable in agreement with the statement concerning how students feel about each teacher. The Methods variable indicates the largest discrimination of ratings among the student evaluations between "liked" and "non-liked" teachers.

The great difference of each of the three variables partially accounts for the strong predictor value obtained.

The reader is referred to Tables 4 and 5 for a description and abbreviation definitions of the Teacher Inventory.

Table 8. Teacher Inventory results tabulated from the total sample of student ratings of the teachers on the Personality variable*

Teacher Status	Number of Teachers	Mean Scores		
		Agree	Disagree	No Opinion
Liked	22	84.68	4.90	10.18
Non-liked	15	61.40	21.40	18.53

*A total representation of the sample ratings may be found in Appendix J.

Table 9. Teacher Inventory results tabulated from the total sample of student ratings of the teachers on the Communications variable[*]

Teacher Status	Number of Teachers	Mean Scores		
		Agree	Disagree	No Opinion
Liked	22	78.14	6.05	10.41
Non-liked	15	62.07	22.80	14.40

*A total representation of the sample ratings may be found in Appendix K.

Table 10. Teacher Inventory results tabulated from the total student sample ratings of the teachers on the Methods variable*

Teacher Status	Number of Teachers	Mean Scores		
		Agree	Disagree	No Opinion
Liked	22	86.09	5.59	8.36
Non-liked	15	62.73	25.00	12.33

*A total representation of the sample ratings may be found in Appendix L.

Summary of Data on Prediction of

"Liked" and "Non-liked" Teachers

In summary, the stepwise multiple regression equation, with the 29 variables considered, predict the teacher group membership in "liked" vs. "non-liked" teacher groups using the CPI and Teacher Inventory as variables.

The prediction value was .91 with the last variable to be deleted (Method-Agree on the Teacher Inventory) predicting better than .44. The total variance unaccounted for was less than .09.

The first hypothesis was not supported.

The teacher raw score means on the CPI variables indicate differences do exist between "liked" and "non-liked" teacher groups on the personality scales. These differences probably accounted for the discrimination between liked and non-liked teachers on the multiple regression equation.

On the Teacher Inventory, teachers rated as "liked" scored higher on all the agree factors of the three variables than the non-liked teachers. The Methods variable indicated the largest variations in ratings between the two groups of teachers.

Student Ratings of Both "Liked" and "Non-liked" Teachers

Education Improvement Associates' "Teacher Inventory" was used to (1) aid in predicting "liked" vs. "non-liked" teachers, discussed previously under Hypothesis #1 in the first section of this chapter, and (2) measure whether there were any differences among various students' ratings (minority, Anglo, disadvantaged, non-disadvantaged) of "liked" and "non-liked" teachers in relation to personality, communication skills and methods. Each of these three areas, then, became a basis from which to formulate hypotheses for "likedness." They were:

Hypothesis #2. On the Personality variable, there is no significant difference in student ratings of liked teachers as rated by: (a) disadvantaged vs. non-disadvantaged students, and (b) Anglo vs. minority students.

Hypothesis #3. On the Communications variable, there is no significant difference in student ratings of liked teachers as rated by: (a) disadvantaged vs. non-disadvantaged students, and (b) Anglo vs. minority students.

Hypothesis #4. On the Methods variable, there is no significant
difference in student ratings of liked teachers as rated by:
(a) disadvantaged vs. non-disadvantaged students, and (b)
Anglo vs. minority students.

Hypothesis #5. On the Personality variable, there is no signifi-
cant difference in student ratings of non-liked teachers as
rated by: (a) disadvantaged vs. non-disadvantaged students,
and (b) Anglo vs. minority students.

Hypothesis #6. On the Communications variable, there is no
significant difference in student ratings of non-liked
teachers as rated by: (a) disadvantaged vs. non-disadvantaged
students, and (b) Anglo vs. minority students.

Hypothesis #7. On the Methods variable, there is no significant
difference in student ratings of non-liked teachers as rated
by: (a) disadvantaged vs. non-disadvantaged students, and
(b) Anglo vs. minority students.

Hypothesis #2

The second hypothesis states: There is no significant difference
among the various student group ratings of "liked" teachers on the
Personality variable of the Teacher Inventory. The data were treated
with an analysis of variance. Table 11 presents the analysis of
variance and means for the sub-group ratings of the "liked" teachers.

The F-ratio shows no significant difference between the minority
and Anglo student mean score ratings; however, a significant difference
was indicated between the disadvantaged and non-disadvantaged students
at the .01 level of significance. A significant interaction also is
present between the students' race and economic backgrounds.

The minority non-disadvantaged students rate the teacher higher
than the Anglo non-disadvantaged students but the rating is not
consistent in the same direction of movement within the disadvantaged
group ratings. The direction of movement in ratings is the exact in-
verse; thus an interaction is present (see Table 12).

Table 11. Analysis of variance and means for the sub-group ratings of
           "liked" teachers on the Personality variable of the Teacher
           Inventory

Source of Variance	Degrees of Freedom	Mean Square	F-ratio
Total	235		
Race (Minority vs. Anglo)	1	4.59	1.27
Econ (Non-dis. vs. dis.)	1	27.86	7.68*
Interaction	1	21.67	5.97**
Error	232	3.63	

Student status	Adjusted Means
Anglo	16.97
Minority	16.68
Non-disadvantaged	17.17
Disadvantaged	16.47

 *Significant at the .01 level.
**Significant at the .05 level.

Table 12. 2X2 Anova presenting the interaction between race and economics

                              ECONOMICS

              Non-disadvantaged   Disadvantaged

      Anglo
                    17.01   16.92   16.97 ⌐
RACE
                                                                 │
      Minority
                    17.34   16.02   16.68 ⌐

                    17.17   16.47   F = 1.27

                         F = 7.68

Hypothesis #3

The third hypothesis comparing the Anglo student with the minority student and the disadvantaged with the non-disadvantaged student relative to the Communications variable is presented in Table 13. The data were treated with an analysis of variance. Although mean scores for the student group ratings show some differences, there is no significant difference among the student group ratings.

Table 13. Analysis of variance and means for the sub-groups of "liked" teachers on the Communications variable of the Teacher Inventory

Source of Variance	Degree of Freedom	Mean Square	F-ratio
Total	235		
Race (Minority vs. Anglo)	1	2.72	.93
Econ (Non-dis. vs. disad.)	1	10.69	3.65
Interaction	1	6.62	2.26
Error	232	2.93	

Student status	Adjusted means
Anglo	13.72
Minority	13.94
Non-disadvantaged	17.17
Disadvantaged	16.47

Hypothesis #4

The fourth hypothesis compares the student sub-groups in relation to the Methods variable (see Table 14). The mean scores were almost identical, but no significant difference is present.

The Null Hypotheses (#3 and #4) were both accepted.

Table 14. Analysis of variance and means for the sub-group ratings of "liked" teachers on the Methods variable of the Teacher Inventory

Source of Variance	Degrees of Freedom	Mean Square	F-ratio
Total	235		
Race (Minority vs. Anglo)	1	.17	.08
Econ (Non-dis. vs. disad.)	1	6.85	3.34
Interaction	1	2.17	1.06
Error	232	2.05	

Student status	Adjusted means
Anglo	14.13
Minority	14.07
Non-disadvantaged	14.27
Disadvantaged	13.92

In summation, there are no differences among the student sub-group ratings of "liked" teachers on the Communications and Methods variables of the Teacher Inventory. However, on the Personality variable, the non-disadvantaged students rate the teachers significantly higher than the disadvantaged students. An interaction occurred within

the Personality variable, in which the minority non-disadvantaged and the Anglo disadvantaged students rate the "liked" teachers signifi- cantly higher as compared with the minority disadvantaged and Anglo non-disadvantaged students. No significant difference in student ratings occurred between the Anglo and minority students on the teacher personality statements.

Hypothesis #5

The fifth hypothesis examined the data for those teachers rated as "non-liked" on the Personality variable. The data were treated by analysis of variance, and the findings indicated that there was no difference between the non-disadvantaged and disadvantaged students in their ratings of the teachers. However, differences between race groups were significant at the .05 level (Table 15).

Table 15. Analysis of variance and means for the sub-group ratings of the "non-liked" teachers on the Personality variable on the Teacher Inventory

Source of Variance	Degrees of Freedom	Mean Square	F-ratio
Total	176		
Race (Minority vs. Anglo)	1	53.86	4.99*
Econ (Non-disad. vs. dis.)	1	14.37	1.33
Interaction	1	.11	.01
Error	173	10.80	

Student status	Adjusted means
Anglo	15.31
Minority	14.19
Non-disadvantaged	15.03
Disadvantaged	14.46

*Significant at the .05 level.

Hypothesis #6

The data on the Communications variable was treated by the analysis of variance. A significant difference (.05 level) was indicated between the minority and Anglo students in their ratings of the teachers. The Anglo students rate the "non-liked" teachers higher than the minority students. There was no significant difference in the economic background of the students in their evaluations of the teachers (Table 16).

Table 16. Analysis of variance and means for the sub-group ratings of "non-liked" teachers on the Communications variable of the Teacher Inventory

Source of Variance	Degrees of Freedom	Mean Square	F-ratio
Total	176		
Race (Minority-Anglo)	1	62.65	7.37
Econ (Non-disad.-disad.)	1	5.22	.61
Interaction	1	1.26	.15

Student status	Adjusted means
Anglo	12.91
Minority	11.71
Non-disadvantaged	12.48
Disadvantaged	12.14

Hypothesis #7

The last hypothesis to be examined by the analysis of variance was the student ratings of "non-liked" teachers on the Methods variable. Race, again, was a significant variable in the ratings of non-liked

teachers. There was no difference in ratings between the non-dis-

advantaged students and the disadvantaged students (Table 17).

Table 17. Analysis of variance and means for the sub-group ratings
of "non-liked" teachers on the Methods variable of the
Teacher Inventory

Source of Variance	Degrees of Freedom	Means Square	F-ratio
Total	176		
Race (Minority - Anglo)	1	35.29	4.07
Econ (Non-disad. - disad.)	1	4.93	.57
Interaction	1	1.27	.15

Student status	Adjusted means
Anglo	12.57
Minority	11.66
Non-disadvantaged	12.28
Disadvantaged	11.94

In summation, for the "non-liked" teachers there was no signifi-

cant difference in student ratings for the Personality, Communication

and Methods variables on the Teacher Inventory for the disadvantaged

students as compared with the non-disadvantaged students. There was,

however, a significant difference at the .05 level in regard to how

the Anglo and minority students rated the "non-liked" teachers on the

Personality, Communications and Methods variables. The minority stu-

dent consistently rated the teacher lower than his Anglo counterpart.

CHAPTER V

SUMMARY AND CONCLUSIONS

The purpose of this research was twofold: (1) determine whether
the test scores of the California Psychological Inventory (CPI) and
the Teacher Inventory in terms of predictors of "liked" and "non-liked"
teachers, and (2) determine whether various student groups (minority,
Anglo, disadvantaged and non-disadvantaged) rate "liked" teachers and
"non-liked" teachers differently on each of the three variables of
the Teacher Inventory.

During the academic year 1972-73, sophomore students at Layton
High School rated teachers of required subject-matter classes which they
had had that year from the "Teacher Inventory" developed by the Educa-
tion Improvement Associates and the "Like-Dislike Scale" rating each
teacher as to how the students felt about that teacher on a 1-5 point
scale (5 points being considered high). Teachers were rated as
"liked" when the cumulative scores as rated by the students equaled
or exceeded the prorated minimum for that teacher in the "liked"
categories, and those teachers whose scores were below that prorated
minimum were rated as "non-liked." This process of prorating is
discussed in detail on page 29. The Teacher Inventory rates the
teachers in three areas: Personality, Communication Skills, and Methods.
The students in the sample were divided into race and family income,
thus creating minority, Anglo, disadvantaged and non-disadvantaged
student groups.

Of the 37 teachers who taught required sophomore subject-matter classes, all were administered the California Psychological Inventory (CPI).

Predicting "Liked" and "Non-liked" Teacher Group Membership

The results of the CPI test scores and the Teacher Inventory (Personality, Communication Skills and Methods) test scores were analyzed through the stepwise multiple regression equation to determine whether these test scores would serve as predictors of "liked" and "non-liked" teacher group membership.

Findings

1. The stepwise multiple regression equation, with the 29 variables considered, predict the teacher group membership in "liked" and "non-liked" teacher groups using the CPI and Teacher Inventory as variables.

2. The prediction value for this sample on the stepwise multiple regression equation was better than .91 with less than .09 unaccounted for variance.

3. The last variable to be deleted was the Methods-Agree (Teacher Inventory) which has the strongest predictive value of the variables considered with .44.

4. Methods-Agree variable indicated teachers who were liked had these qualities: (a) grades fairly, (b) makes class interesting with a variety of activities and materials, (c) has good class control but not too strict, (d) able to answer most of the questions students ask, and (e) plans carefully and uses class time well.

5. The least sensitive variable, and the first to be deleted, was Communication-Disagree (Teacher Inventory), which accounted for .00001 of the total predictive value. When this variable was deleted, one teacher from the "liked" teacher group membership was removed and placed in the "non-liked" group membership.

6. Raw score means of the CPI for "liked" and "non-liked" teachers, according to the stepwise multiple regression equation results, indicated that flexibility (Fx), social presence (Sp), capacity for status (Cs), sense of well-being (Wb) and femininity (Fe) scales do discriminate between the "liked" and "non-liked" teachers.

7. The last ten variables to be deleted, in order of importance are: (1) Methods-Agree (Teacher Inventory) discussed in finding #4; (2) Flexibility, indicating "liked" teachers tend to be less flexible; (3) Social Presence; "liked" teachers score higher indicating more poise and self-confidence; (4) Communication-No Opinion; (5) Self-acceptance; "liked" teachers tend to have a better sense of personal worth; (6) Capacity for Status; "liked" teachers score higher indicating that they are more ambitious and resourceful as compared with the non-liked teachers; (7) Sense of Well-being; "liked" teachers score lower on this variable indicating they tend to worry and complain more; (8) Femininity; "liked" teachers are less feminine, more active, outgoing and robust; (9) Personality-Agree (Teacher Inventory); "liked" teachers tend to: (a) show interest in their students, (b) adjust to different situations that arise in class, (c) be friendly and cheerful, (d) listen to the ideas of his students, (e) seem to enjoy teaching,

and (f) admit when he is wrong; and the last variable to be deleted,
(10) age, indicates that "liked" teachers are younger.

These ten variables together predict better than .79.

Various Student Group Ratings of "Liked"
and "Non-liked" Teachers

The results of the various student group (minority, Anglo,
disadvantaged and non-disadvantaged) ratings of "liked" and "non-liked"
teachers on Personality, Communications and Methods were compared by
an analysis of variance to determine whether any differences existed
in student ratings of "liked" and "non-liked" teachers on each of the
three variables.

Findings

Student ratings of "liked" teachers:

1. There is no significant difference on the Communications and
Methods variables in student ratings of "liked" teachers.

2. On the Personality variable, however, the non-disadvantaged
students rate the "liked" teachers significantly higher as compared
with the disadvantaged students. No significant difference exists
between the minority and the Anglo students' ratings of the teachers
on Personality.

3. An interaction was indicated on the Personality variable
between the minority non-disadvantaged student rating the "liked"
teachers higher as compared with the Anglo non-disadvantaged students.
The Anglo disadvantaged students rated the teacher significantly

higher as compared with the minority disadvantaged students on the Personality variable.

Student ratings of "non-liked" teachers:

1. For the "non-liked" teachers, on all variables of the Teacher Inventory, there was no significant difference in the student ratings of the teachers by the non-disadvantaged students as compared with the disadvantaged students.

2. For the "non-liked" teachers, there was a significant difference at the .05 level between the minority and Anglo student ratings of the teachers. Minority students rate the "non-liked" teachers lower on the Personality, Communications and Methods variables of the Teacher Inventory.

Conclusions

From this study of teachers rated "liked" and "non-liked" by various student groups, the following may be concluded:

1. The Teacher Inventory and CPI test scores are good predictors of teachers being rated "liked" or "non-liked" by various student groups.

2. All 29 variables (i.e., 18 CPI, 9 Teacher Inventory, sex, age) should be considered in predicting teacher "likedness." The least sensitive variable on this sample, Communication-Disagree predicted .00001 of the total but discriminated sufficiently to displace one teacher when this variable was deleted.

3. Liked teachers tend to be perceived by the students as:
   (1) grading students fairly, (2) making class interesting
   with a variety of activities and materials, (3) having good
   class control, (4) being able to answer most of the questions
   that students ask, (5) planning carefully and utilizing
   time well, (6) showing an interest in the students, (7) ad-
   justing to different situations that arise in class, (8) being
   friendly and cheerful, (9) listening to the ideas and opinions
   of the students, (10) admitting when he is wrong, and
   (11) appearing to enjoy teaching.

4. Liked teachers, according to the CPI, tend to have these
   qualities: (1) less flexible as compared with the non-liked tea-
   chers, tending to be more deliberate, cautious, mannerly and
   methodical, (2) more poised, spontaneous and self-confident
   in social and personal interaction, (3) have a good sense
   of personal worth, self-accepting and capacity for indepen-
   dent thinking and action, (4) ambitious, active, resourceful,
   effective in communication and having a wide spectrum of
   interests, (5) worry and complain more than the non-liked
   teachers, and (6) less feminine, tending to display character-
   istics of being outgoing, active, robust and impatient.
   Liked teachers are also younger in age (under 35) as compared
   with the non-liked teachers (over 35).

5. Liked teachers tend to relate well with the minority, Anglo,
   disadvantaged and non-disadvantaged students.

6. Non-liked teachers are less effective in their teaching
    relationships with the minority student. On all variables
    tested by the Teacher Inventory, the minority students
    consistently rated the non-liked teachers low as compared with
    the Anglo students.

Limitations

The limitations of this study were:

1. A possible limitation to the Like-Dislike Scale administered to the
    students is that the degree to which the student's responses re-
    flect his true attitude is questionable. In administering this
    questionnaire, the investigator observed a tendency in the students
    to hesitate in not rating a teacher as good.

2. The reader should use caution in generalizing the results beyond
    the Layton High School sophomore class.

Recommendations

If the research were to be conducted again, the following
recommendations are made:

1. Use a larger sample of the sophomore class to enable a more
    thorough evaluation of the teachers. In some cases, a few teachers
    in this sample were evaluated by as few as three students. A
    larger sample would deter this situation.

2. Investigate more specifically the CPI test scores of the "liked"
    and "non-liked" teachers for significance in discriminating be-
    tween the two groups of teachers.

3. Investigate the relationship that may exist between the student

    ratings of the teachers and the students' self-concept, G.P.A.,

    and like or dislike for school.

Implications

Based on the findings of this research, the following speculations

are offered:

1. The Teacher Inventory not only identifies the less effective

    teacher but also pinpoints behaviors for the teacher, i.e.,

    specific areas of weakness as perceived by the students. With

    this in mind, a summary of student responses, either as a total

    student response or a breakdown of the students by race and in-

    come, would be helpful to identify, for the teacher, what areas

    students feel he needs to improve upon. Since the non-liked

    teacher scored low in Communication Skills, he would need to

    improve in the following areas: (1) keeping the student informed

    about how he was doing in class, (2) being available when the

    students need help, (3) explaining assignments more clearly,

    (4) keeping the student aware of the purposes of the class, and

    (5) being more accepting of the students, thus encouraging them

    to take an active part in the class.

3. Non-liked teachers scored low in the Methods variables, indicating

    that these teachers need to: (1) make more effort to plan and

    utilize class time more effectively, (2) have more control of

    the class without being too strict; with this it's suggested that

    the teacher be the one in charge of the class without displaying

dictatorial qualities and yet remaining warm and human, (3) keep abreast of current happenings in the field to help make class interesting, using this information, (4) use a variety of activities and materials to keep the class alive, (5) inform students of the requirements and expectations of the class. This constant feedback to the students may place the teacher in a more favorable light as far as how the students perceive the teacher's grading procedures.

4. Use the CPI and Teacher Inventory as a screening device; those teachers who score low on these variables should not be placed in schools which have a perponderance of minority students, since these students relate better with the warm teachers having good interpersonal skills.

5. Anglo students seem more tolerant of the less effective teachers. Although schools do not want less effective teachers, they are there and need to be placed somewhere. Therefore, it is suggested that more competent teachers be placed in schools to work with minorities which offer a challenge to the teachers. This may correct problems that exist at present times where poor schools get poorer teachers.

6. In the evaluation of the teachers by administrators, an attempt should be made to collect evaluations from the students on the teacher's performance to aid in a more comprehensive and accurate evaluation.

LITERATURE CITED

Adams, Henry L., Don F. Blood, Herbert C. Taylor, Jr. 1959. Personality differences among art and science students, education students, and experienced teachers. The American Psychologist 14:371.

Barton, Florence R. 1972. Do teachers cause dropouts? A study to determine attitudes, personality characteristics, and teaching behaviors of teachers who are effective with dropout students. Unpublished Ph.D. dissertation. University of Utah Library, Salt Lake City, Utah.

Bojarsky, C. and N. Pedersen. 1971. Youth speaks out about teachers; future teachers of America survey. Today's Education 60:44-6.

Broadbelt, S. 1972. Disguised racism in public schools. Educational Leadership 29:699-702.

Bybee, Rodger W. and Donald W. Chaloupka. 1971. Students' perceptions of the teachers they like best: A comparison including advantaged, average, and disadvantaged students. Colorado Journal of Educational Research 10(4):31-35.

Carney, R.W., and W.J. McKeachie. 1966. Personality, sex, subject matter, and student ratings. Psychological Record 16:137-144.

Coates, Brian. 1972. White adult behavior toward black and white children. Child Development 43:143-154.

Coffman, W.E. 1954. Determining students' concepts of effective teaching from their ratings of instructors. Journal of Educational Psychology 45(5):277-286.

Coombs, Arthur W. 1965. The professional education of teachers. Allyn and Bacon, Inc., Boston, Massachusetts. 134 p.

Crooks, R.C. 1970. The effects of an interracial preschool program upon racial preference, knowledge of racial differences, and racial identification. Journal of Social Issues 26(4).

Crow, L.D., W.I. Murray, and H.H. Smythe. 1966. Educating the culturally disadvantaged child. New York: David McKay.

Drucker, A.J. and H.H. Remmers. 1951. Do alumni and students differ in their attitudes toward instructors? Journal of Educational Psychology 42:129-143.

Durflinger, Glenn W. 1963a. Academic and personality differences between women students who do complete the elementary teaching credential program and those who do not. Educational and Psychological Measurement 23:775-783.

Durflinger, Glenn W. 1963b. Personality correlates of success in student teachers. Educational and Psychological Measurement 23:383-390.

Education Improvement Associates. 1972. Teacher Inventory Manual. P.O. Box 15398, San Diego, California 92115.

Fenner, Mildren S. (Ed.). 1967. Opinions differ: The Coleman report. N.E.A. Journal, pp. 26-27.

Fleming, Elyse S. and Ralph G. Anttonen. 1971. Teacher expectancy or my fair lady. American Educational Research Journal 8:241-252.

Gadzella, B.M. 1968. College student's views and ratings of an ideal professor. College and University 44(1):89-96.

Gardner, J.W. 1961. Excellence, can we be equal and excellent, too? New York: Harper.

Gehringer, C.J. 1970. Helping the disadvantaged youth. Clearing House 44:304.

High School Journal. 1971. Educations of the disadvantaged for the 70's. Vol. 54(6):390-395.

Hill, Robert E., Jr. 1960. Dischotomous prediction of excellence. Journal of Educational Research 53:349-351.

Howard, Douglass P. 1968. The needs and problems of socially disadvantaged children as perceived by students and teachers. Exceptional Children 34:327-335.

Howsam, Robert B. 1963. Teacher evaluation: Facts and folklore. The National Elementary Principal 43(2):6-18.

Hurd, Dean W. 1957. A determination of characteristics college students like and dislike in teachers. Unpublished M.S. thesis. Utah State University Library, Logan, Utah.

Isaacson, R.L., W.J. McKeachie and J.E. Milhalland. 1963. Correlation of teacher personality variables and student ratings. Journal of Educational Psychology 54:110-117.

Jensen, Arthur R. 1970. Do schools cheat minority children?

Kent, Laura. 1967. Student evaluations of teaching, pp. 56-85. In American Council on Education Handbook of Selected Readings in Evaluation of Teaching Performance. Office of Instructional Development, Colorado State University.

King, A. Paul. 1971. The self-concept and self-actualization of university faculty in relation to student perceptions of effective teaching. Unpublished Ph.D. Dissertation. Utah State University Library, Logan, Utah.

Luke, Douglas B. 1971. Academic and social differences study between Mexican and non-Mexican students at Layton High School. Unpublished M.S. thesis. University of Utah Library, Salt Lake City, Utah.

McCandless, B.R. 1972. Teachers' marks, achievement test scores, and aptitude relations with respect to social class, race, and sex. Journal of Educational Psychology 63:153-159.

McKeachie, W.J. 1957. Student ratings of faculty: A research review. Improving College and University Teaching 5:4-8.

McKeachie, W.J. 1969. Student ratings of faculty. American Association of University Professors Bulletin 55(4):439-444.

McKeachie, W.J. and D. Solomon. 1958. Student ratings of instructors: A validity study. Journal of Educational Research 51: 379-382.

Ornstein, Allan C. 1971. Who are the disadvantaged? Young Children 26(5):264-272.

Riessman, Frank. 1962. The culturally deprived child. New York: Harper and Row.

Rowland, R. 1970. Can teaching be measured effectively? Improving College and University Teaching 18(2):153-157.

Ryans, David. 1960. Characteristics of teachers. Washington, D.C., American Council on Education.

St. John, Nancy. 1971. Thirty-six teachers: Their characteristics and outcomes for black and white pupils. American Educational Research Journal 8(4):635-648.

Veldman, Donald J. and Robert F. Peck. 1969. Influences on pupil evaluation of student teachers. Journal of Educational Psychology 60:103-108.

Von Ende, Z. 1970. Denver doesn't quit on problem students. American Ed. 6:18-22.

Wasserman, S.A. 1971. Values of Mexican-American, Negro, and Anglo blue-collar and white-collar children. Child Development 42: 1624-8.

Yee, Albert Y. 1970. My teacher doesn't like me. Trans-Action 7:10+.

Zax, Manuel. 1971. Outstanding teachers: Who are they? Clearing House 45(5):285-289.

APPENDIXES

63

APPENDIXES

Appendix A

NYC Income Status for 1973

Family Size	Income
1	2100
2	2725
3	3450
4	4200
5	4925
6	5500
7	6200
8	6850
9	7500
10	8150
11	8800
12	9450

* If there are more than 12 in the family, add 600 dollars to the income.

Appendix B

Hart's Study Table

Reasons for liking Teacher A best, arranged in order of frequency of mention, as reported by 3725 seniors

Reasons for liking "Teacher A" best	Frequency of Mention	Rank
Is helpful with schoolwork, explains lessons and assignments clearly and thoroughly and uses examples in teaching	1950	1
Cheerful, happy, good-natured, jolly, has a sense of humor and can take a joke	1429	2
Human, friendly, companionable, "one of us" . . .	1024	3
Interest in and understands pupils	937	4
Makes work interesting, creates a desire to work, makes classwork a pleasure	805	5
Strict, has control of class, commands respect	753	6
Impartial, shows no favoritism, has no "pets" . .	695	7
Not cross, crabby, grouchy, nagging, or sarcastic	613	8
"We learned the subject"	538	9
A pleasing personality	504	10
Patient, kindly, sympathetic	485	11
Fair in marking and grading, fair in giving examinations and tests	475	12
Fair and square in dealing with pupils, and has good discipline	366	13
Requires that work be done properly and promptly, makes you work	365	14

Reasons for liking "Teacher A" best	Frequency of Mention	Rank
Considerate of pupil's feelings in the presence of the class, courteous, makes you feel at ease	362	15
Knows subject and knows how to put it over	357	16
Respects pupil's opinions, invites discussion in class	267	17
Not superior, aloof, "high hat," does not pretend to know everything	216	18
Assignments reasonable	199	19
Is reasonable, not too strict, or "hard-boiled"	191	20.5
Helpful with students' personal problems, including matters outside of classwork	191	20.5
Dresses attractively, appropriately, neatly, and in good taste	146	22
Young	121	23
Work well planned, knows what class is to do	110	24
Enthusiastically interested in teaching	108	25
Gives students a fair chance to make up work	97	26
Homework assignments reasonable	96	27
Recognizes individual differences in ability	86	28
Frank, "straight from the shoulder," a straight-shooter	76	29.5
Personally attractive, good looking	76	29.5
Teaches more than subject	74	31
Interested in school activities	68	32

Reasons for liking "Teacher A" best	Frequency of Mention	Rank
Sticks to the subject	53	33
Modern	52	34
Sweet and gentle	50	35.5
Pleasing voice	50	35.5
Intelligent	42	37
Prompt and business-like	41	38
Sincere	36	39
Knows more than the subject	32	40
Has pep	31	41
Uses good judgment	22	42
Cultured and refined	20	43

Appendix C

Like-Dislike Scale

Name _____

In the boxes below, indicate how you feel about each teacher by putting an "x" in the appropriate box. Place an "x" in the no opinion box only if you have not had that teacher this year.

Teacher	Strongly like	Like	No opinion	Dislike	Strongly dislike
English Dept.					
Teacher 1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
Social Studies Dept.					
14					
15					
16					
17					
18					
19					
Phys. Educ. Dept.					
20					
21					
22					
23					
24					
25					

Teacher	Strongly like	Like	No opinion	Dislike	Strongly dislike
Science					
26					
27					
28					
29					
30					
31					
Math. Dept.					
32					
33					
34					
35					
36					
37					

Appendix D

Student Income Statement

Dear Parent:

I am currently working on a master's degree at Utah State University. I am performing an experiment for my thesis using the 10th grade students at Layton High School.

The economic background is one item in the study. If you feel that you can help me in this, please check the boxes that apply to you. Any information I receive will be held strictly confidential.

Father's occupation _____

Mother's occupation _____

Total number in family:

3/__/   4/__/   5/__/   6/__/   7/__/   8/__/   more/__/

Income:

4200-4925/__/   4925-5500/__/   5500-6200/__/

6200-6850/__/   6850-7500/__/   7500 and more/__/

Thank you for your cooperation.

Sincerely yours,

Nancy Fleming
376-3401

Appendix E

Teacher Inventory

Your Name _____   Teacher's Name _____

        In the following section, there are statements made about your

teacher.   Place an "X" in the box that best describes how you feel

about this teacher.   SA=Strongly Agree, A=Agree, Un=Undecided,

D=Disagree, and SD=Strongly Disagree.

EXAMPLE: I like school.

	SA	A	Un	D	SD

1.   I feel the teacher is interested in me.

2.   My teacher is friendly and cheerful.

3.   My teacher listens to the ideas and
     opinions of his students.

4.   My teacher encourages me to take an
     active part in the class.

5.   My teacher has good class control but
     is not too strict.

6.   My teacher can adjust to different
     situations that arise in the class.

7.   My teacher admits when he is wrong.

8.   My teacher makes class interesting,
     with a variety of activities and
     materials.

9.   My teacher plans carefully and uses
     class time well.

10. My teacher is able to answer most of
     the questions I ask.

11. My teacher grades me fairly.

12. My teacher keeps me informed about
     how I am doing in class.

	SA	A	Un	D	SD
13. My teacher is available when I need help.					
14. My teacher explains assignments clearly, so I know how to do them.					
15. My teacher explains clearly the purposes of the class.					
16. My teacher seems to enjoy teaching.					

Appendix F

Followup Questionnaire on Pilot Study of Teacher Inventory

Followup questionnaire responses of certified personnel to pilot
evaluation studies for 1971-1972

	Strongly agree	Agree	No Opinion	Disagree	Strongly disagree
1) The results of the evaluation provided useful information for improving my teaching.	19%	61%	12%	6%	2%
2) The students in my classes were fair in their evaluation of me.	20	54	16	10	0
3) My students were capable of evaluating me on most of the teacher characteristics.	16	65	9	7	3
4) I would find it helpful to have this type of evaluation repeated periodically.	13	58	21	1	7

Appendix G

Inter-Item Analysis of Teacher Inventory Administered to a

Comparable Sample in a Davis County School District

Test-retest reliability for April 1973

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree	R^2
Question 1						
Test	0	14	8	3	2	.9977
Retest	1	13	8	3	2	
Question 2						
Test	10	12	2	3	1	.8265
Retest	5	15	1	6	0	
Question 3						
Test	7	16	2	3	0	.9490
Retest	5	13	2	6	1	
Question 4						
Test	4	16	5	2	1	.6556
Retest	3	9	9	6	0	
Question 5						
Test	4	12	5	6	1	.4783
Retest	3	7	12	5	0	
Question 6						
Test	4	15	5	2	2	.4692
Retest	3	7	11	2	2	
Question 7						
Test	5	11	2	6	3	.9381
Retest	4	14	3	4	2	
Question 8						
Test	2	5	9	8	3	.7332
Retest	1	10	8	7	1	
Question 9						
Test	1	16	6	4	0	.7925
Retest	3	9	9	6	0	

Appendix G (Continued)

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree	R^2
Question 10						
Test	6	15	2	2	1	.9740
Retest	4	18	3	3	0	
Question 11						
Test	8	10	3	5	1	.7386
Retest	3	19	1	1	2	
Question 12						
Test	0	4	11	10	1	.9767
Retest	0	6	11	9	1	
Question 13						
Test	2	16	4	3	2	.9250
Retest	2	15	8	1	1	
Question 14						
Test	4	11	5	4	3	.8142
Retest	3	11	4	8	1	
Question 15						
Test	1	8	8	7	3	.8723
Retest	3	7	9	5	3	
Question 16						
Test	11	12	4	0	0	.8778
Retest	7	18	2	0	0	

Appendix H

Regression Analysis of the 29 Variables Considered in the

Stepwise Multiple Regression Equation

Regression analysis of each variable used in the equation

Source			df	Mean Square
Var 1	Sex		1	.0042
Var 2	Age		1	.1128
Var 3	Teacher Inventory Personality-Agree		1	.1609
Var 4	Teacher Inventory Personality-Disagree		1	.0032
Var 5	Teacher Inventory Personality-No Opin		1	.0192
Var 6	Teacher Inventory Communication-Agree		1	.0727
Var 7	Teacher Inventory Communication-Disagree		1	.0001
Var 8	Teacher Inventory Communication-No Opin		1	.0849
Var 9	Teacher Inventory Methods-Agree		1	.0278
Var 10	Teacher Inventory Methods-Disagree		1	.0210
Var 11	Teacher Inventory Methods-No Opinion		1	.0029
Var 12	Do	Dominance	1	.0517
Var 13	Cs	Capacity for Status	1	.0924
Var 14	Sy	Sociability	1	.0007
Var 15	Sp	Social Presence	1	.1119
Var 16	Sa	Self-acceptance	1	.3097
Var 17	Wb	Sense of Well-being	1	.0729
Var 18	Re	Responsibility	1	.0231
Var 19	So	Socialization	1	.0031
Var 20	Sc	Self-control	1	.0007
Var 21	To	Tolerance	1	.0119
Var 22	Gi	Good Impression	1	.0444
Var 23	Cm	Commonality	1	.0196
Var 24	Ac	Achieve vs. Conform	1	.0811
Var 25	Ai	Achieve vs. Independence	1	.0378
Var 26	Ie	Intellectual Efficiency	1	.0658
Var 27	Py	Psychological Minded	1	.0334

Appendix H (Continued)

Source			df	Mean Square	
Var 28	Fx	Flexibility	1	.2458	
Var 29	Fe	Femininity	1	.0363	
Model			29	.2808	
Error			7	.1107	
Total			36	.2477	RSQ^*=.9131364

*RSQ is the terminology for the prediction value of the multiple
regression equation.

Appendix I

Teachers Raw Scores for CPI

Liked Teachers	Sex	Do	Cs	Sy	Sp	Sa	Wb	Re	So	Sc	To	Gi	Cm	Ac	Ai	Ie	Py	Fx	Fe	Age* 35
T1	F	25	19	27	35	23	41	35	37	35	20	23	27	28	21	41	8	8	23	+
T2	F	30	22	25	39	25	35	29	49	25	23	16	27	30	23	39	12	13	24	−
T4	M	38	22	28	44	28	30	23	24	13	14	14	26	23	18	32	12	9	20	−
T6	M	38	20	25	33	24	39	38	39	34	26	24	28	38	26	45	11	5	21	−
T8	F	38	21	25	31	16	44	36	44	35	27	23	25	33	23	41	15	8	26	+
T9	F	21	22	20	30	19	36	28	38	37	20	22	27	32	21	41	11	12	24	−
T11	M	26	17	20	33	21	34	35	30	34	17	19	27	28	18	39	11	6	20	−
T12	F	39	27	28	42	24	39	29	41	16	18	13	27	28	19	38	12	12	24	−
T13	M	36	24	28	35	19	43	35	41	40	27	25	28	35	21	43	12	8	21	+
T14	M	37	23	30	40	24	42	34	43	37	28	28	28	35	23	43	10	6	16	−
T16	M	37	19	24	42	25	37	32	37	37	23	24	26	38	22	43	16	10	13	−
T17	F	39	23	34	49	27	40	33	34	23	26	14	25	33	21	44	17	12	22	+
T19	M	24	7	19	34	16	29	23	39	29	14	14	26	24	17	32	9	7	12	−
T20	M	26	18	23	35	23	38	33	44	25	13	15	28	26	16	33	13	7	20	−
T21	M	29	22	24	40	19	44	32	41	47	29	26	24	32	24	43	16	16	19	−
T23	F	31	23	29	33	25	37	33	45	28	27	13	28	31	22	40	10	10	28	−
T24	F	24	23	19	39	18	37	25	36	27	21	16	25	27	26	43	10	18	16	−
T27	M	34	19	26	33	18	36	37	41	40	28	22	25	37	25	44	13	13	15	+
T28	M	28	18	27	34	23	41	39	46	41	26	19	28	33	18	41	14	5	20	−
T33	M	33	21	27	43	24	39	26	41	22	23	16	27	25	21	40	10	7	12	+
T35	M	23	18	20	35	22	43	29	39	38	23	18	26	28	18	40	14	6	13	−
T37	M	40	23	25	33	27	34	30	38	22	19	14	26	31	22	39	9	9	15	−

Non-liked Teachers

	Sex	Do	Cs	Sy	Sp	Sa	Wb	Re	So	Sc	To	Gi	Cm	Ac	Ai	Ie	Py	Fx	Fe	Age* 35
T3	F	15	12	14	24	12	36	28	41	33	17	17	25	25	21	39	9	6	23	+
T5	F	33	22	28	40	27	40	32	43	29	28	17	25	32	23	46	13	14	20	−
T7	M	27	20	24	26	16	41	32	40	44	18	27	26	33	22	43	14	4	20	+
T10	F	32	21	26	42	24	29	31	37	17	24	15	27	25	25	35	12	9	26	−
T15	M	35	23	32	35	26	37	34	35	25	26	14	27	29	25	45	9	11	20	+
T18	M	36	21	27	44	25	43	32	37	34	29	20	18	32	27	49	15	18	19	+
T22	F	32	20	26	36	21	41	31	40	39	29	23	27	34	20	38	11	10	26	−
T25	M	22	16	23	30	13	43	35	36	35	26	13	27	31	22	44	11	12	20	+
T26	M	20	17	20	43	21	41	23	31	31	24	17	27	26	22	38	13	12	14	−
T29	M	30	24	31	42	22	43	33	36	34	27	28	24	32	22	42	15	13	12	+
T30	M	35	19	29	38	26	41	28	33	26	26	16	28	31	20	41	13	14	16	+

Continued

Non-liked Teachers	Sex	CPI Scales																	Age* 35
		Do	Cs	Sy	Sp	Sa	Wb	Re	So	Sc	To	Gi	Cm	Ac	Ai	Ie	Py	Fx	Fe	
T31	M	39	23	29	39	25	37	34	38	24	24	12	27	35	24	45	13	10	17	+
T32	M	28	23	31	38	23	41	31	35	33	28	18	26	36	22	42	14	11	14	+
T34	M	27	16	22	38	18	43	32	30	30	25	12	26	28	22	40	14	9	20	−
T36	F	40	16	27	37	26	35	36	36	26	24	13	28	28	21	35	14	6	23	+

*The teachers were classified by age. If the teacher was older than
 35 years, it is so indicated by a plus (+) sign. A minus (-_ sign
 indicates 35 years old or younger.

Appendix J

Teacher Inventory Results Tabulated from the Total Student

Sample Ratings of Both Liked and Non-Liked

Teachers on the Personality Variable

Liked Teachers	Number of Students Rating	AGREE		DISAGREE		NO OPINION	
		Raw Score	Percentage Score	Raw Score	Percentage Score	Raw Score	Percentage Score
T1	7	38	90	1	02	3	05
T2	8	43	90	0	00	5	10
T4	9	34	63	6	11	14	26
T6	7	39	93	1	02	2	05
T8	7	32	76	1	02	9	21
T9	4	21	88	0	00	3	13
T11	9	41	76	7	13	6	11
T12	11	59	89	4	06	3	05
T13	19	94	82	8	07	12	11
T14	19	95	83	10	09	9	08
T16	14	71	85	1	01	11	13
T17	21	117	93	3	02	6	05
T19	12	44	61	6	08	22	31
T20	4	24	100	0	00	0	00
T21	30	157	87	8	04	15	08
T23	26	145	93	5	03	6	04
T24	3	17	94	0	00	1	06
T27	2	12	100	0	00	0	00
T28	10	42	70	8	13	10	17
T33	6	36	100	0	00	0	00
T35	3	15	83	0	00	3	17
T37	2	8	67	3	25	1	08
Means			84.68		4.9		10.18

Appendix J (Continued)

Non-liked Teachers	Number of Students Rating	AGREE		DISAGREE		NO OPINION	
		Raw Score	Percentage Score	Raw Score	Percentage Score	Raw Score	Percentage Score
T3	4	12	50	6	25	6	25
T5	14	56	67	11	13	17	20
T7	16	30	31	50	52	16	17
T10	3	6	33	7	39	5	28
T15	21	103	82	6	05	17	13
T18	11	53	80	6	09	7	11
T22	16	70	73	14	15	12	13
T25	14	57	68	15	18	12	14
T26	12	44	61	13	18	15	21
T29	10	23	38	19	32	18	30
T30	14	64	76	11	13	9	11
T31	9	35	65	8	33	11	21
T32	6	18	50	11	31	7	19
T34	18	65	60	16	15	27	25
T36	10	52	87	2	03	6	10
Means			61.4		21.4		18.53

Appendix K

Teacher Inventory Results Tabulated from the Total Student

Sample Ratings of Both the Liked and Non-Liked

Teachers on the Communication Variable

Liked Teachers	Number of Students Rating	AGREE		DISAGREE		NO OPINION	
		Raw Score	Percentage Score	Raw Score	Percentage Score	Raw Score	Percentage Score
T1	7	31	89	0	00	4	11
T2	8	30	75	4	10	6	15
T4	9	22	49	12	27	11	24
T6	7	26	74	2	06	7	20
T8	7	28	80	5	14	2	06
T9	4	19	95	0	00	1	05
T11	9	32	71	10	22	3	07
T12	11	48	87	4	07	3	05
T13	19	70	74	9	09	16	17
T14	19	77	81	7	07	9	09
T16	14	61	73	3	04	6	07
T17	21	92	88	3	03	10	10
T19	12	35	58	0	00	25	42
T20	4	19	95	0	00	1	05
T21	30	128	85	6	04	16	11
T23	26	124	95	1	01	3	03
T24	3	14	93	0	00	1	07
T27	2	10	100	0	00	0	00
T28	10	35	70	6	12	9	18
T33	6	30	100	0	00	0	00
T35	3	13	87	1	07	1	07
Means			78.14		6.05		10.41

Appendix K (Continued)

Non-liked Teachers	Number of Students Rating	AGREE		DISAGREE		NO OPINION	
		Raw Score	Percentage Score	Raw Score	Percentage Score	Raw Score	Percentage Score
T3	4	11	55	6	30	3	15
T5	14	41	59	14	20	15	21
T7	16	30	31	36	38	14	18
T10	3	8	53	6	40	1	07
T15	21	70	67	13	12	22	21
T18	11	38	69	7	13	11	20
T22	16	65	81	7	09	8	10
T25	14	39	56	16	23	15	21
T26	12	34	57	20	33	6	10
T29	10	28	56	13	26	9	18
T30	14	53	76	11	16	6	09
T31	9	21	47	18	40	6	13
T32	6	17	57	7	23	6	20
T34	18	66	73	16	17	8	09
T36	10	47	94	1	02	2	04
Means			62.07		22.8		14.4

Appendix L

Teacher Inventory Results Tabulated from the Total

Student Sample Ratings of Both the Liked and

Non-liked Teachers on the Methods Variable

Liked Teachers	Number of Students Rating	AGREE		DISAGREE		NO OPINION	
		Raw Score	Percentage Score	Raw Score	Percentage Score	Raw Score	Percentage Score
T1	7	32	91	1	03	2	06
T2	8	36	90	1	03	3	08
T4	9	23	51	6	13	16	36
T6	7	32	91	1	03	2	06
T8	7	31	89	4	11	0	00
T9	4	19	95	0	00	1	05
T11	9	41	91	1	02	3	07
T12	11	48	87	2	04	3	05
T13	19	83	87	4	04	10	12
T14	19	73	77	12	13	10	11
T16	14	61	87	2	03	7	10
T17	21	94	90	5	05	6	06
T19	12	43	72	5	08	12	20
T20	4	18	90	2	10	0	00
T21	30	134	89	5	03	11	07
T23	26	125	96	2	02	3	02
T24	3	13	87	0	00	2	13
T27	2	10	100	0	00	0	00
T28	10	37	74	8	16	5	10
T33	6	26	87	1	03	3	10
T35	3	14	93	1	07	0	00
T37	2	8	80	1	10	1	10
Means			86.09		5.59		8.36

Appendix L (Continued)

Non-liked Teachers	Number of Students Rating	AGREE		DISAGREE		NO OPINION	
		Raw Score	Percentage Score	Raw Score	Percentage Score	Raw Score	Percentage Score
T3	4	13	65	6	30	1	05
T5	14	42	60	18	26	10	14
T7	16	30	38	41	51	9	11
T10	3	8	53	5	33	2	13
T15	21	77	73	10	10	18	17
T18	11	36	65	10	18	9	16
T22	16	62	78	10	13	8	10
T25	14	46	66	13	19	11	16
T26	12	39	65	17	28	4	07
T29	10	25	50	20	40	5	10
T30	14	54	77	10	14	6	09
T31	9	25	56	14	31	6	13
T32	6	18	60	9	30	3	10
T34	18	51	57	25	28	14	16
T36	10	39	78	2	04	9	18
Means			62.73		25.0		12.33

VITA

Nancy LaDee Fleming

Candidate for the Degree of

Master of Science

Thesis: Prediction and Assessment of Liked and Non-liked Teachers
         as Rated by Various Student Groups

Major Field: Psychology

Biographical Information:

  Personal Data: Born at Ogden, Utah, October 15, 1943. Daughter
      of Isabel B. Fleming.

  Education: Attended elementary school in Ogden, Utah; graduated
      from Ogden High School in 1961; received a Bachelor of Arts
      degree from Weber State College with a major in Physical
      Education, in 1965; did graduate work in counseling psychol-
      ogy at Utah State University, completing requirements for
      counseling certification in 1968; completed requirements
      for a professional certificate in 1971; completed require-
      ments for the Master of Science degree, specializing in
      counseling psychology, at Utah State University in 1973.

  Professional Experience: 1965-68, teacher of Physical Education
      in both junior and senior high schools in Davis County
      School District; 1968 to present, counselor at Layton High
      School, Layton, Utah; summer 1971, instructor for Upward
      Bound program at Weber State College.