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ABSTRACT.

This bibliography includes annotations of 122 selected research articles and reports on teacher candidates which have appeared in the literature from 1968 to 1972. The entries are numbered and are arranged alphabetically by author in the body of the bibliography. Code letters identify descriptor categories by which each entry is classified. A listing of items by descriptor category follows the annotations. (Author)

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**TEACHERS AND TEACHING: ANNOTATED**

**BIBLIOGRAPHIES ON SELECTED TOPICS**

**VOLUME 1: TEACHER CANDIDATES**

5P 109 H67

**Teachers and Teaching: Annotated Bibliographies on Selected Topics**

**Valerie Hakam Sacay, Editor**

- Volume 1:** Teacher Candidates
- Volume 2:** Analyzing Teacher Attitudes Toward Students and Behavioral Interaction in the Classroom
- Volume 3:** Characteristics, Attitudes and Values of Teachers
- Volume 4:** Evaluation of Teacher Qualifications and Performance for Purposes of Selection, Self-Improvement, and/or Professional Advancement

**BROOKLYN COLLEGE OF THE CITY UNIVERSITY OF NEW YORK**  
**Institutional Research and Program Evaluation**

**June, 1975**

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v.h.s.

## INTRODUCTION

This bibliography includes annotations of selected research articles and reports on Teacher Candidates which have appeared in the literature from 1968 to 1972. The entries are numbered and are arranged alphabetically by author in the body of the bibliography. Code letters identify the descriptor categories by which each entry is classified. A listing of items by descriptor category follows the annotations.

CODE LETTERS AND DESCRIPTOR CATEGORIES

<u>Code</u>	<u>Descriptor</u>
A	academic course work or academic background
B	behavior analysis; patterns of
C	comparative studies--cross-background, cross-cultural, cross-educational, cross-occupational
D	difficulties, problems; teacher candidates perception of
E	effectiveness in task--performance, success
I	cognitive style--intelligence, creativity, perception
P	personality--characteristics, structure, profile
Pa	attitudes
Pc	self-concept
Pd	dogmatism
Pe	ethnic viewpoint
Pl	preference for teaching at a level :
Pm	motivation
Ps	sex
Pv	values ,
R	interactions with and ratings by supervisory personnel
S	pupils--relationships with, interaction with, perception of, attitudes toward, evaluation of and by
T	supervised teaching experience--classroom teaching, special training programs
Tv	use of videotapes in
V	validity and reliability studies--comparison of test or measurement devices
Vp	predictive studies

1. Ager, M. Dogmatism and the verbal behavior of student teachers. Journal of Teacher Education, 1970, 21, 179-183.

Purpose. To test the validity of the Rokeach Dogmatism Scale when applied to student teachers' verbal behavior. It was hypothesized that there would be no relationship between scores on the Dogmatism Scale and measures of verbal behavior.

Procedure. The Rokeach Dogmatism Scale was administered to 30 female elementary education student teachers in a denominational liberal arts college five weeks before student teaching. An observer visited each student teacher in the classroom six times. The 15 minute observations were rated every three seconds on the Flanders' Verbal Interaction Analysis. Correlations were run between D scale scores and 43 measures of verbal behavior by a computer BM DO program.

Results. The only measure of verbal behavior significantly related to the D scale scores was the category concerning the use of positive reinforcement, praise, or encouragement. Since only one of the 43 relationships was significant, the original hypothesis must be accepted. It is pointed out, however, that from the consistency of the direction and size of the nonsignificant relationships, dogmatism as a factor in verbal behavior of student teachers is an area worth further examination. The data indicated that open-minded persons used indirect behaviors to a greater extent than closed-minded persons (which is consistent with previous findings that closed-minded persons have a greater need for closure than do open-minded persons). The assumption is made that superior teachers tend to use indirect verbal behaviors more frequently than inferior teachers.

- A  
Pa
2. Asbury, F. R., Ball, R. L., and Constantino, N. V. Effects of foundations course on personality variables. Journal of the Student Personnel Association for Teacher Education, 1970, 9, 23-32.

Purpose. To determine degree of attitudinal change resulting from taking a foundations of education course organized with emphasis on self-appraisal, occupational appraisal, ways of thinking about education, and teacher-aide experiences.

Procedure. Three hundred and sixty-five teacher candidate students were given the Minnesota Teacher Attitude Inventory (Form A) and the Myers-Briggs Type Indicator at the beginning and again at the end of the foundations of education course.

Results. (1) Students scored significantly higher ( $p < .001$ ) on the MTAI post course measures. (2) There was a significant ( $p < .05$ ) change from Judging toward Perceiving on the mean scores of the MBTI. (3) There was a significant mean movement from Thinking toward Feeling on the scores of the MBTI ( $p < .05$ ). (4) There was no significant mean movement in terms of Introversion-Extroversion on the MBTI.



3. Austad, G.A., and Emmer, E.T. Personality Correlates of Teacher Performance in a Micro-Teaching Laboratory. Austin, Texas: Research and Development Center for Teacher Education, 1970. ED 049 160

Purpose. To correlate personality characteristics with teaching behavior within the setting of a micro-teaching laboratory.

Procedure. Eighty students enrolled in an introductory education course at the University of Texas served as subjects for this study. The Self-Report Inventory (SRI; Bown, 1961) and the Adjective Rating Scale for Self Description (ASD; Parker and Veldman, 1969) were administered, and 10 personality characteristics deemed predictive of teacher behavior were extracted from the resulting data. Groups of 6 to 8 students were then assigned to a microteaching laboratory section where each student was required to teach six to nine lessons in the course of the semester with feedback and criticism following each lesson. Students were instructed to attend cumulatively to four teaching tasks used as evaluative criteria: clarifying objectives, assessing pupil readiness, motivating and maintaining pupil interest, and evaluating instructional outcomes. Effectiveness and teacher-pupil interaction (Flanders Interaction Analysis, 1965) were analyzed by three trained raters from tape recordings of all lessons.

Results. Using Pearson's product moment coefficients of correlation, only 3 personality variables were found to be significantly related to improved laboratory performance beyond the .05 level. Six significant relationships were found to exist in the opposite direction of prediction. The number of significant results obtained from the 98 possible combinations was thus no greater than would have been expected by chance. Highly significant changes did occur on all criteria from early semester to late semester, but they were not related to SRI or ASD variables.

4. Baird, J. Verbal behavior of student teachers in home economics. Journal of Home Economics, 1970, 62, 725-728.

Purpose. The effect of teaching the Flanders Interaction Analysis to student teachers in home economics was investigated. Research objectives were (a) to observe and categorize the verbal behavior of student teachers in home economics who had no training in the Flanders system, (b) to observe and categorize the verbal behavior of student teachers who had training in the Flanders system, and (c) to compare the two groups.

Procedure. Two random samples (one experimental, one control) of eight student teachers each were observed and verbal behavior was coded using the Flanders Interaction Analysis. The eight experimental subjects were instructed in the Flanders system prior to student teaching. Amount of teacher and student talk, indirect/direct (I/D) ratios and revised I/D ratios were analyzed using t-tests. Teacher influence patterns and grade point averages were correlated.

Results. Two Interaction Analysis categories revealed significant differences. Mean percent use of statements in category three (acceptance, clarification, and use of student ideas) by the experimental group was more than twice as large as mean percent use by the control group ( $p < .005$ ). Though in experimental student teacher classes there was more total pupil talk, category eight (teacher-initiated pupil talk) was significantly greater ( $p < .05$ ) in control student teacher classes.

Other trends, though nonsignificant, are worth noting. Category one statements (acceptance of students' feelings) were four times greater for experimental subjects. Six of eight experimental subjects used category one statements while only two of eight control subjects used such statements. There was more total pupil talk in experimental group classes. Pupils in experimental group classes self-initiated talk four times more often than was their talk teacher-initiated, while teacher-initiated pupil talk was balanced with self-initiated pupil talk in control group classes. The experimental group used more than twice as many indirect than direct statements.

The benevolent effects of teaching Interaction Analysis are reiterated. Follow-up studies of previously trained student teachers are suggested. The findings in this study seem to parallel findings in previous research using the Flanders Interaction Analysis with student teachers.

5. Barretto, A.R. Prospective Elementary School Teachers' Attitudes  
Toward and Competency in Science. Jamaica, New York: Saint  
John's University, 1969. ED 045 359

Purpose. To determine the relationship between science attitude and  
academic science competency.

Procedure. Three hundred elementary school teacher candidates at a  
metropolitan teacher's college were given a science competency test  
and a science attitude scale. Scores on these instruments were related  
to student characteristics, including their educational background, and  
a measure of their self-perception of the adequacy of their science  
preparation.

Results. Concurrent linear correlations between science competency and  
over-all college grade point average, and science attitude were 0.39,  
0.31, and 0.19 respectively. Correlations between science attitude and  
over-all grade average and science grade average were 0.22 and 0.07  
respectively. Students with higher college grade point averages or with  
more semester hours of college science scores significantly higher on  
the science attitude scale. Other significant differences between com-  
parison groups on the science competency test are listed. (ERIC ab-  
stract)

6. Bown, O.H., and Richek, H.G. Teachers-to-be: Extraversion/Introversion and self-perceptions. Elementary School Journal, 1969, 70(3), 164-170.

Purpose. To investigate whether introverted teachers are as likely to be "warm" (in terms of their attitudes toward their pupils) as extroverted teachers.

Procedure. The subjects were 149 women who were students in elementary and secondary education at the University of Texas. Introversion/Extroversion was measured by the Myers Briggs Type Indicator. Attitudes toward children were measured on the Bown Self-Report Inventory.

Results. Analysis of the data indicates that teachers-to-be who are introverted tend to perceive their phenomenal world less positively than those who are extroverted. More negative perceptions can affect an individual in terms of being less warm and positive in interactions with children.

Comment. This area is one in which there has been relatively little good research and its critical importance for all who attempt to make some sense out of what goes on in a classroom between student and teacher should be recognized.

- D
7. Broadbent, F.W., and Cruickshank, D.R. The Identification and Analysis of Problems of First Year Teachers. Paper read at Annual Convocation on Educational Research, 1965.  
ED 013 786

Purpose. To identify and analyze perceived problems of beginning teachers at the State University College at Brockport.

Procedure. The subjects were 163 elementary and secondary graduates (June 1964) from S.U.C. at Brockport. Each received the Perceived Problems Inventory (PPI) which consists of 117 items that fall into seven categories. The subject was to rate each item on four points ranging from serious to moderate.

Results. The findings indicate that there are six major problem areas for beginning teachers. They are as follows (ranked in frequency): (1) methods, (2) evaluation of students, (3) discipline, (4) parent relations, (5) routines and materials, and (6) lack of personal confidence.

6. Brody, E.B. The effects of creativity and intelligence on ratings. British Journal of Educational Psychology, 1970a, 40, 342-344.

**Purpose.** To determine: (a) student teachers' intellectual ability as indicated by their College Entrance Examination Board-Verbal (CEEB-V) scores; (b) student teachers' creativity as measured by Mednick's Remote Association Test (RAT); (c) pupils' creativity as measured by the RAT; (d) pupils' social class as indicated by occupation of head of household; and (e) the relationships between all of the above and pupil ratings of student teacher effectiveness.

**Procedure.** Subjects were 19 male and 26 female undergraduate student teachers assigned to several suburban New Jersey secondary schools, and their pupils. After administration of the above-mentioned tests, student teachers were separately classified as belonging to (a) a high or low intellectual ability group and (b) a high or low creativity group. Their pupils were also placed in either a high or low creativity group, and, in addition, grouped according to socioeconomic status.

Pupils rated their student teachers on a 5-point scale. These data were analyzed for each teacher as follows: (1) mean rating of student teacher by all pupils; (2) mean rating of student teacher by low creativity pupils; (3) mean rating of student teacher by high creativity pupils; (4) mean rating of student teacher by pupils in the low social class group; and (5) mean rating of student teacher by pupils in the high social class group. Differences in mean ratings between items (2) and (3), and items (4) and (5), were then determined.

**Results.** The results indicate that student teachers who were either high or low on both the CEEB-V and RAT were rated more favorably by all of their pupils than teachers who were high on only one of these variables. Furthermore, teachers either high or low on both variables were rated more favorably by pupils high in creativity and high in social class than teachers who were high on only one of these variables.

The fact of highly rated teachers being rated more favorably by pupils high in creativity and social class suggests that--in the present sample--effective teaching involves meeting the expectations of creative pupils and pupils ranked high in social class. The result indicating that teachers low in both creativity and intelligence are favorably rated is difficult to interpret.

7. Broadbent, F.W., and Cruickshank, D.R. The Identification and Analysis of Problems of First Year Teachers. Paper read at Annual Convocation on Educational Research, 1965.  
ED 013 786

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9. Brody, E.B. A note on the validity of the Minnesota Teacher Attitude Inventory (MTAI). Journal of Educational Research, 1970b, 64, 67.

Purpose. To compare student teachers' scores on the MTAI with the "effectiveness ratings" given them by their college-bound and non-college-bound high school students.

Procedure. The effectiveness of 36 student teachers was rated by their secondary school students on a 5-point scale, ranging from excellent to poor. Each student teacher was then assigned two rating scores: (1) the mean rating assigned by all of his students and (2) a mean difference rating obtained by subtracting non-college-bound students mean rating of the student teacher from the mean rating of college-bound students. All student teachers took the MTAI.

Results. The mean of the mean ratings assigned student teachers who scored high on the MTAI was not significantly different from that of student teachers who scored low on the MTAI. Teachers who scored low on the MTAI were given significantly more favorable ratings ( $p < .05$ ) by their college-bound students.

Comment. A low score on the MTAI may indicate that a prospective teacher is more "cognitively oriented" and thus more effective teaching college-bound students.



10. Brown, B.B. An Investigation of Observer-Judge Ratings of Teacher Competence. Final Report. Gainesville: Florida University, 1969. ED 027 281

Purpose. Demonstrating and testing Conant's recommendation that teacher competence should determine certification, this four-phase study from 1964-68 developed and field-tested procedures for evaluating teacher competence and for determining how evaluation is affected by the beliefs of student teachers and observer-judges.

Procedure. Following the Phase I orientation of observer-judges and evaluation of rating instruments and procedures, 539 observer-judges from colleges, public schools, and State Departments of Public Instruction rated 407 student teachers' clinical classroom performances over a one-year period (Phase II) with Teacher's Classroom Behavior instruments. Prior to rating, students and observer-judges took three Study of Beliefs tests. Phase II data was statistically analyzed and compared with data from Phase III in which 100 Phase II subjects, then first-year teachers, and 100 experienced teachers were evaluated.

Results. Data analysis in Phase IV revealed: predictable interrelationships among teacher beliefs, teacher competence, observer descriptions, and observer-judge beliefs; belief gaps between colleges of education and public schools; and theory-practice discrepancies in teachers and observer-judges. Recommendations for use of these findings in teacher evaluation programs are made. (ERIC abstract)

- A  
V
11. Butterfield, M. Academic performance of Cuban-teacher students at the University of Miami. College and University, 1969, 44(3), 263-267.

**Purpose.** To determine the relationship between grades attained by Cuban-teacher students at Miami University and their test scores on the Cooperative English Test (CET) and the National Teachers Examination (NTE).

**Procedure.** The subjects were 113 Cuban students with degrees approximately equivalent to U.S. bachelor's degrees, and nineteen students who had completed one of the programs in English in Cuba representing less than a U.S. bachelor's degree.

The CET, Form I, was administered before the student entered the program (the Cuban Teachers Program at Miami University). The NTE was then taken at a regularly scheduled administration following entrance into the program. The comparison grades were obtained from the second twelve credits taken in the program.

**Results.** Over half of the students scored low on the CET--below the 20th percentile. However, those who had studied English extensively in their program did better on the CET than did the group in general. There was no clear relationship between grades and scores on the CET.

On the NTE again, those students who had studied English did better than those who did not. These students scored between 450-707 while others scored between 500-600.

Thus, it appears that admission officers should carefully consider the extent of English course work taken by students at a Cuban university before admitting them to Miami University or other U.S. institutions. Also, it seems that the CET can be used as an indication of English proficiency by admission officers. Finally, Cuban students with a Cuban university background and successful completion of a U.S. course of study should be able to attain at least average scores on the NTE.

12. Cappellizzo, E.M., and Brine, J. Dogmatism and prospective teachers. Journal of Teacher Education, 1969, 20, 148-152.

Purpose. To study dogmatism in prospective teachers and to determine its level, if it changes, and what it is a function of.

Procedure. The subjects were 254 students from the University of Massachusetts who were enrolled in an undergraduate course in the history of education. All received the Rokeach Dogmatism Scale (Form E) and a brief questionnaire on personal history.

The findings of this study were compared with those of earlier studies by Soderbergh (1964) and Rabkin (1966).

Results. Statistical analysis of the data indicates that prospective teachers as a group are neither more or less dogmatic than state university students in general. This population was found to be more dogmatic than that of Rabkin's study. Combined data of all the studies indicate that prospective teachers, like university students in general, are more dogmatic than experienced teachers.

13. Chadderton, H. et al. Home Economics Teachers, Preservice and Inservice Levels, Their Interest in Teaching, Their Attitudes Toward Children and Families. Minneapolis: Minnesota University Bureau of Educational Research, 1966. ED 016 041

**Purpose.** Major questions explored in this cooperative research study were (1) what are the attitudes of present and prospective teachers toward children, teaching, and individuals and groups different from themselves, (2) what early college experiences might modify these attitudes, and (3) what experiences as juniors, seniors, and first-year teachers influence attitudes.

**Procedure.** Representatives from six institutions in six states planned and carried out the 10-year study using Minnesota Teacher Attitude Inventory, Johnson Home Economics Interest Inventory and Teacher Data Sheets to determine attitudes and interests of home economics students early in the college program, later in the college years, and after some experience in teaching.

**Results.** Some general findings were--(1) more acceptable attitudes toward children were evident in individuals who felt their teaching loads were satisfactory, engaged in youth activities, taught vocational home economics, had recently enrolled in college credit courses, and had found supervision helpful, (2) students' attitudes became more favorable toward children between freshman and senior years, but less favorable during the first year of teaching, (3) students chose a career in teaching more for practical reasons than as a result of experience previous to college such as that related to children or high school home economics courses, (4) interest in teaching did not increase significantly between the freshman year and the first year of teaching, and (5) attitudes toward others different from their own groups changed but toward less positive ones from the junior year to the first year in teaching. More study of factors possibly influential in the findings was recommended. (ERIC abstract)

14. Cicerelli, V. G. University supervisors' creative ability and their appraisal of student teachers' classroom performance: An exploratory study. Journal of Educational Research, 1969, 62(8), 375-381.

**Purpose.** To determine whether there was a difference between the more creative and the less creative university supervisors as far as the observed factors they used in evaluating student teachers' classroom behavior.

**Procedure.** The subjects of the study were thirteen staff members serving as supervisors of student teachers at the secondary level. Each supervisor had a master's degree, and one had a doctorate, with the remaining group working toward the doctoral degree. Each was assigned students in the subject area that was his specialty. In addition, the instructors were considered to be of superior ability by the university which employed them. Two measures of creative ability were used: the Torrance Tests of Creative Thinking (Form A of the Verbal Test), and the remote Association Test (RAT). The Torrance Tests provided measures of verbal fluency, verbal flexibility, and verbal originality, while the RAT provided a somewhat different measure of originality. It was decided to obtain an indication of how well these two measures of creativity correlated, and also how closely they were related to the categories used by supervisors in assessing student teachers. The categories set up for the assessment of the student teachers were obtained from a content analysis of the observation reports made by the supervisors on the student teachers' classroom behavior.

**Results.** There were no correlations found between the two measurements of creativity. These tests, therefore, appear to be measuring different things. There was, however, a positive correlation between the total number of categories used to describe a student teacher and the RAT. Thus, the more creative supervisor uses a greater number of factors in evaluating student teachers. Furthermore, there was a positive correlation between creativity and the use of broad, general categories of evaluation. Thus, the more creative supervisor will use a larger, broader base of factors in evaluation while the less creative supervisor will use a more detailed specific approach to evaluation. Finally, the more creative supervisor was more concerned with teacher-pupil relations than was the less creative supervisor. These findings suggest that the less creative supervisor who focuses on specifics, will give very specific prescriptions to student teachers in order to improve their classroom behavior. The more

Cicerelli, V. G.

creative supervisor, on the other hand, tends to see the lesson more in terms of its general organization, planning and objectives. These factors should be considered in determining how creative supervision acts to change a student teacher's behavior.

15. Clayton, T. E. et al. Preparing Beginning Teachers for Working with the Educationally Disadvantaged: A Continuing Study of the Influence on Student Teachers of a Training Program for Cooperating Teachers. Final Report. New York: Syracuse University School of Education, 1969. ED 036 460

Purpose. A 2-year investigation attempted to ascertain whether summer workshop training of elementary teachers in the use of such feedback practices as Flanders' Interaction Analysis, video tape techniques, and other conceptual supervisory tools would produce measurable change in the instructional behavior of their student teachers as compared to student teachers working with non-workshop trained teachers.

Procedure. Pre- and posttests included the Teaching Situation Reaction Test (TSRT); a Semantic Differential on concepts of aspects of teaching; and two administrations (Real and Ideal) of the Minnesota Student Attitude Inventory (MSAI). A team of trained observers observed each student teacher six times during the semester using Hough's 23- or 32- category Observation System for Instructional Analysis (OSIA).

Results. An increase of congruence between stated intent and instructional performance over the period of student teaching was shown. Although the data were more suggestive than conclusive, there was slight evidence that for definable subgroups of student teachers, particular supervisory activities were related to the positive changes. Implications are discussed, particularly with regard to the use of the instruments, and recommendations made about training designs and further research in the area. (ERIC abstract)

16. The College Supervisor: Standards for Selection and Function.  
An AST Position Paper. Washington, D.C.: Association for  
Student Teaching Commission on Standards for Supervising  
Teachers and College Supervisors, 1968. ED 028 991

This position paper on the college supervisor of student teaching is divided into three sections. Section one (on the selection of college supervisors) contains an enumeration of the responsibilities of the college supervisor from which general criteria can be derived for selection, assumptions on which the criteria for selection are based, the professional and personal qualifications which a supervisor should possess (the actual criteria for selection), and recommendations for establishing a basis for selection. Section two details recommendations for teaching conditions which should be followed for competent supervisors to function effectively. Section three completes the body of the document, capsuling guidelines which help the supervisor to establish the dimensions of his role and structure a desirable setting for student teaching and supervision. (ERIC abstract)



17. Courtney, E. W. Attitudinal Changes of the Student Teacher--  
A Further Analysis. An Example of an Orthogonal Com-  
parisons Analysis Model Applied to Educational Research.  
Menomonie, Wisconsin: Stout State University, 1965.  
ED 022 894

Purpose. To present an example of a research study involving the use of coefficients of orthogonal comparisons in analysis of variance tests of significance.

Procedure. A sample research report and analysis was included so as to lead the reader through the design steps. The sample study was designed to determine the extent of attitudinal changes in industrial education and home economics student teachers due to the effects of the attitudes of their supervising teachers. The Minnesota Teacher Attitude Inventory was administered in a pre- and post-test design.

Results. Scores from the post-test and the difference between pre- and post-test scores were utilized in the analysis. Attitude scores were collapsed into four levels and the students' fields were considered as two levels of an educational factor in a 2 by 4 design.  
(ERIC abstract)

18. Cullen, R. J., and Auris, C. The Relationship Between Ethnic Prejudice and Student Teaching Behavior. Paper read at American Educational Research Association Annual Meeting, 1969. ED 028 122

Purpose. To determine: (1) differences in ethnic prejudices among teachers; (2) how prejudice toward Negroes differs from that toward other ethnic groups; and (3) the relationship between ethnic prejudice and various characteristics of student teaching behavior.

Procedure. The subjects were student teachers from a large mid-western state university. There were 43 in early childhood, 124 in elementary and 195 in secondary education.

Bogardus' Ethnic Distance Scale was used to measure ethnic prejudice in terms of the level of acceptance of an ethnic group. Hinckley's Attitude Toward the Negro Scale measures specific attitudes toward Negroes in terms of whether the subject agrees or disagrees with 16 statements about Negroes' rights, etc. Teaching behavior was assessed according to a semantic differential scale of eight teaching characteristics believed to be related to prejudice. Information about the subjects' behavior was based on their supervisors' reports.

An analysis of variance, a t-test, and correlational procedures were performed on the data.

Results. Findings indicate no significant difference among the three groups of subjects. The highest level of ethnic prejudice was toward Negroes. Correlational studies indicated that those subjects who rated high on presentation-communication, enthusiasm, professional attitude and sense of humor manifested less prejudice than others. Those who had difficulty assuming responsibility and accepting constructive criticisms evidenced significantly more prejudice than others.

19. Davis, O. L., Jr., and Yamamoto, K. Teachers in preparation: II Professional attitudes and motivations. Journal of Teacher Education, 1968, 19(3), 365-369.

Purpose. This study was designed to investigate attitudes toward teaching and children and certain unconscious motivations for teaching among students enrolled in secondary, elementary and early childhood education programs.

Procedure. The subjects were 61 female students in secondary, 40 in elementary and 31 in early childhood junior level education courses at Kent State University. Each was administered the Bowers Teacher Opinion Inventory (indicates satisfaction with teaching), Minnesota Teacher Attitude Inventory (measures attitudes toward children and school work), and Teacher Preference Schedules - Forms G and A (taps unconscious motivations for teaching, personal gratification and attitudes supporting gratification).

Results. Findings indicate that certain teacher programs, on the various levels, attract certain personality types. Secondary programs attract females whose attitudes and motivations do not encourage students' dependency but rather self-actualization. Early childhood and elementary teachers indicate early childhood attitudes and gratifications, i.e., they're more exhibitionistic. The study goes into the psychodynamics of these differences in great depth.

20. Davis, T. N., and Satterly, D. J. Personality profiles of student teachers. British Journal of Educational Psychology, 1969, 39, 183-187.

**Purpose.** To determine the characteristics in a student's personality profile associated with "high" and "low" teaching ability.

**Procedure.** The 16 PF Questionnaire (Form A) was administered to 119 female students of Homerton College at time of entry and 26 months later prior to final teaching practice. Small groups of students of "high" and "low" teaching ability were identified and their personality profiles compared. All students were graded on the 5-point teaching scale of the Cambridge Institute and on an additional 5-point scale for research purposes only. In addition, scores for all pupils were obtained on the Valentine Reasoning Test.

**Results.** Four factors--conscientiousness, toughmindedness, confidence, and relaxed behavior--significantly differentiated between the groups on both test occasions, and practicality on the first occasion. Two-way analysis of variance on all possible pairs of factors revealed 15 interactions significant at the .01 level. The findings suggest that particularly poor performances were encountered where tender-mindedness, high insecurity and tenseness, respectively, are associated with a lack of conscientiousness. Coefficients of test-retest stability over the period were calculated (Pearson product moment coefficients of correlation).

21. De Blassie, R. R. A comparative study of the personality structures of persistent and prospective teachers. Journal of Educational Research, 1971, 64, 331-333.

Purpose. To determine whether personality differences exist between persistent teachers (those who completed a teacher-training program and accepted a teaching position) and prospective teachers with an undergraduate background in liberal arts.

Procedure. Subjects were 32 teachers enrolled in a Master of Arts in Teaching program who had been teaching for at least three years; and 32 students enrolled in a master's degree program designed to prepare them to teach disadvantaged youth, but who had undergraduate majors in liberal arts. Both groups were given Cattell's Sixteen Personality Factors Questionnaire.

Results. Among the persistent teachers, males were found to be more humble, forth-right, and tender-minded than females. Males in the persistent teacher category were more humble, placid and tender-minded than females in the prospective teacher category and more placid than males in the prospective teacher category. Female persistent teachers were less humble and tender-minded and more forth-right than male prospective teachers. Among prospective teachers, males were more humble and tender-minded than females. (All findings were significant at least at the .05 level).

22. Di Scipio, W.J. Divergent thinking and personality measures of English and American education majors. Journal of Genetic Psychology, 1971, 119, 99-107.

Purpose. To measure divergent thinking abilities of American and English education majors and their respective personalities.

Procedure. Subjects were 30 female volunteers at a small parochial teacher-training college in London and 30 female education majors at a liberal arts college in New York City, who had been matched for age, verbal I.Q., family size and socioeconomic level. The verbal fluency factor to be isolated was ideational fluency. Tests administered were: Shapiro's Hypothesis Test (devised on format out-lined by Shapiro, R.J.); Hudson's Uses Test (based on Guilford's Creativity Test); an open-ended essay on one of two topics; and the Extraversion-Introversion and Neuroticism scales. Stability dimensions of personality were measured by the Eysenck Personality Inventory (EPI), Form A.

Results. The English women tended to score higher on measures of divergent thinking than American women. Personality measures revealed that the English women were significantly ( $<.05$ ) more neurotic than American women. The Hypothesis test was significant at  $<.01$ ; the Uses test at  $<.02$ ; and the Essay test at  $<.001$ .

Comment. Results were interpreted in terms of cross-cultural differences in the educational systems. The author contends that the hypothesis that permissiveness and the minimizing of formal requirements in educational programs fosters divergent thinking was upheld.

23. Dziuban, G. et al. The National Teacher Corps Program, 1966-67 Evaluation Report. Georgia: Atlanta Public Schools, 1967. ED 019 110

Purpose. A project to determine the effectiveness of National Teacher Corps (NTC) interns in the Atlanta, Georgia school system was designed to find out if the interns had helped the disadvantaged pupils in their classes to raise achievement levels and improve self-concepts.

Procedure. Specific research objectives were (1) to assess the progress in verbal mental age attained by NTC pupils as measured by a pre- and posttest on the Peabody Picture Vocabulary Test and the Goodenough Draw-a-Man Test, (2) to compare the self-concepts of the NTC pupils with those of a similar group of pupils by using a teacher check list developed by the Evaluation Committee, (3) to compare pupil readiness for first grade with that of kindergarten pupils a year earlier (who had not had interns) by using the Metropolitan Reading Readiness Test, Form A, and (4) to compare teacher attitudes of NTC interns with those of other beginning teachers of Title I and Non-Title I schools by means of the Minnesota Attitude Inventory.

Results. Statistical treatment of the data collected on a variety of measures showed that the NTC interns positively affected the children's language and self-concept development and improved their readiness for first grade. The NTC interns exhibited attitudes associated with effective teaching more often and to a greater extent than did regular teachers. (ERIC abstract)

24. Eberlein, L., Park, J., and Matheson, W. Self-ideal congruence in five occupational groups. Alberta Journal of Education Research, 1971, 17, 95-103.

**Purpose.** To obtain normative self concept vs. ideal-self concept (S-I) congruence data for the Interpersonal Check List (ICL) and to examine differences in self concept, ideal-self concept, and S-I congruence which might exist between five occupational groups with different functional roles.

**Procedure.** Subjects were: 121 counselor trainees, 307 teachers-in-training (seniors who had practice teaching experience), 25 priests registered in a pastoral counseling seminar, 167 tenth grade student volunteers, and 64 male Canadian Army Officer cadets attending a leadership training program.

The Interpersonal Check List (Leary, 1957) was used to obtain measures of self concept and ideal-self concept. Further scores on four dimensions were obtained from a factor analysis of responses. To determine S-I congruence, a vector analysis technique measured the distance between the 16, 8 and 4 S dimensions and the similar I dimensions.

**Results.** The magnitude of the S-I discrepancy is inversely related to congruence. The priest group was the least congruent; counselor trainees and army officer cadets were the most congruent. The hypothesis is that army officer cadets and counselor trainees are more confident, less self-deprecating and probably in less conflict about personal matters than the other groups.



25. Erb, D.L. Attitudes of White College Education Seniors Toward Blacks. Paper read at American Personnel and Guidance Association Annual Meeting, 1970. ED 040 239

Purpose. To assess the racial attitudes of white college education seniors and to study the relationship between racial prejudice and the following predictor variables: personal contact, change orientation, religiosity, and efficacy.

Procedure. Three research instruments were used to assess racial attitudes and predictor variables: The Attitude Behavior Scale: White/Negro (developed by Jordan and Hamersma) to measure racial attitudes; the Personal Characteristics scale to identify teachers' attitudes toward habits, appearance, and interpersonal characteristics of blacks; the Education Content scale to assess attitudes of future teachers toward the abilities, motives, aspirations, and behaviors of black students.

Results. Data showed that contact, change orientation, and efficacy were significantly related to racial attitudes. A correlation between religiosity and prejudice was not supported by the data. Tables illustrating test data are included.  
(ERIC abstract)

26. Evans, K.M. Teachers and some others: A comparative study. Educational Research, 1969, 11(2), 153-156.

Purpose. To study the differences in attitudes of teacher-training students and 5 other professional groups.

Procedure. All the subjects were male. Group I was composed of 32 post-graduate teacher-training students, who, unlike the other groups, were tested at the beginning and end of their course. The five other groups consisted of 32 Anglican theology students; 21 Baptist theology students; 18 engineering students; 22 experienced primary teachers; and 24 experienced graduate teachers. All were administered the Study of Values and the Minnesota Teacher Attitude Inventory (MTAI).

Results. Findings on the Study of Values indicate that at the beginning of their training, the teacher-trainees' basic values resembled those of experienced teachers but differed from the other groups studied. They did not significantly change by the end of the course. This result is the same as Evans' (1967) in his study of changes in teacher attitudes.

On the MTAI, basic attitudes and values of the teacher-training group in the beginning of the course were similar to the experienced teachers', and during the training course the group acquired attitudes about pupils similar to those of the experienced teachers'.

The author discusses possible explanations for the findings.

27. Fagan, B.T. The Effectiveness of Three Different Programs of Trade and Industrial Teacher Education for Beginning Teachers. (Ed.D. thesis, University of Kentucky) 1970.  
ED 042 026

Purpose. Three levels of preservice training for 111 beginning teachers of industrial occupations, who were employed between June 1, 1968, and who were teaching in the area vocational school system of Kentucky in April 1969, were evaluated to determine the effectiveness of the program.

Procedure. Six characteristics, consisting of lesson planning, use of the four-step method, use of instruction sheets, use of audio-visual aids, technique in evaluation, and shop management, were assessed and compared against such variables as age, general intelligence, occupational experience, teaching experience, educational background of teachers and the occupation to be taught.

Results. Conclusions were: (1) Added amounts of teacher preparation tend to increase the level of performance of the beginning teacher, (2) The maximum level of preservice training should be adopted as a minimum preparation time as concluded on the basis of interviews and observations, (3) The quality of teaching by beginning teachers in extension centers and in area centers is equal, and (4) Age is not a determining factor of success for beginning industrial teachers. (ERIC abstract)

28. Feshbach, N.D. Student teacher preferences for elementary school pupils varying in personality characteristics. Journal of Educational Psychology, 1969, 60(2), 126-132.

Purpose. This study tests the hypothesis that student teachers place a higher value upon children who manifest behaviors reflecting caution and conformity than they place upon children exhibiting independence and challenge.

Procedure. Two hundred and forty middle-class Caucasian females, enrolled in elementary school student teaching at the University of California at Los Angeles, were used as subjects. Each was presented with 16 story situations depicting boys and girls manifesting four personality clusters. A 4 x 2 factorial design varying personality cluster by sex was used.

Results. The findings indicate that student teachers rated the conforming, rigid, dependent and passive child more positively than the flexible, nonconforming, independent and assertive child on several intellectual and social dimensions.

While ratings of the personality clusters were similar for both sexes, the sex appropriateness of the cluster influenced the judgment.

29. Feshbach, N.D., and Beigel, A. A note on the use of the semantic differential in measuring teacher personality and values. Educational and Psychological Measurement, 1968, 28(3), 923-929.

Purpose. To investigate the relationship between student teachers' self perceptions and their conceptions of the ideal child in the classroom.

Procedure. The subjects were 145 students who were just beginning student teaching and 92 students who had completed one quarter of their student teaching. All were female elementary school student teachers at the University of California, Los Angeles.

Each subject was administered the Semantic Differential (developed by Osgood, Suci and Tannenbaum, 1957) which was used to assess attitudes, values, and related personality attributes.

Results. Statistical analysis of the data indicates that the student teacher's self-evaluation contributes to her perception of the ideal child. Student teachers tend to place a higher value on qualities in others which are similar to their own. A teacher's judgment of the ideal child is also related to the way the teacher herself would ideally like to be.

The results indicate that these subjects see themselves as controlled, conforming and cautious. They aspire to be less inhibited and more independent, but not overly so.

Findings here are similar to the findings of Getzels and Jackson (1963).

30. Feynman, A.C., and Muhl, R.F. Practice teaching. A student view. Peabody Journal of Education, 1969, 46(6), 346-349.

Purpose. To obtain information about student teachers from their pupils using a descriptive rather than a questionnaire method.

Procedure. Two tenth grade, non-academic English classes were asked to write compositions for which they would not be graded. In these they would discuss their honest, sincere reactions to their student teacher. The entire sample group was characterized as unmotivated, and intelligence scores ranged from 79 to 126.

Results. The overwhelming response was a disguised appeal for a teacher who was "nice" to the students. This "niceness" might be expressed through politeness, courtesy, friendliness, patience, or personal consideration.

One recurrent criticism, however, was that pupils felt student teachers were not strict enough. This illustrates the fact that students do not confuse "strictness" with "not being nice" as is commonly thought.

Students also commented on teaching methods. They praised teachers who gave clear explanations and patient repetitions. These teachers didn't arouse fear in students if the latter committed an error. Students also responded favorably to a fair distribution of teacher attention, and recognized the amount of preparation put in by their student teachers.

These results suggest that even limited, poorly motivated students do comprehend the ingredients of good teaching. For the most part, they yearn for "the kind of teacher that you would want for a friend, a real friend."



31. Filburn, E. Student teaching: Whose responsibility? The Growing Rites of Secondary English: Essays by the Experienced Teacher Fellows at the University of Illinois 1966-1967 (Edited by Charles Sahor and others), 1968, 188-200. ED 026 378

Cooperating teachers, college supervisors, and student teachers must work as a team to plan student-teaching programs which will provide opportunities for evaluating teacher performance and subject matter competence and which will encourage individual teaching styles. The evaluation of student-teacher performance can be improved by three-way conferences in which the supervisor and cooperating teacher involve the student teacher in evaluating himself. Also, use can be made of an evaluation procedure like that suggested by Curtis and Andrews, in which the cooperating teacher supplies evidence to help the supervisor grade the student teacher. Promising trends in the supervision of student teaching include the use of a team of supervisors (a subject matter specialist and an education specialist), the provision of such "pre-student teaching" experiences as microteaching, and the employment of television, tape recordings, or formal systems (e.g., Flanders' system of interaction analysis) for the analysis of behavior during student teaching. Despite the improvements, the student teaching situation is far from ideal and can be further improved only through cooperation between the universities and the public schools. (ERIC abstract)

32. Fling, S.H. The Relationship Between Classroom Verbal Behavior of Student Teachers and the Classroom Verbal Behavior of Their Cooperating Teachers. Paper read at Annual Convocation on Educational Research, 1966.  
ED 013 788

Purpose. To test the hypothesis that the verbal behavior of student teachers in the classroom does not change in relation to the verbal behavior of their cooperating teacher.

Procedure. A verbal-behavioral measurement of 12 student teachers and 6 cooperating teachers was undertaken using the observation schedule and record form 3D. Analysis of variance of student teacher scores was performed. A co-variance analysis was also conducted using the cooperating teachers' scores as the independent variable.

Results. Student teacher verbal behavior changed significantly during the student teaching period, becoming more supportive, less repeating, and less accepting (in a routine manner) of children's responses. While frequency of student-teacher responses decreased, frequency of student-teacher initiated statements increased significantly. A high relationship was found between questioning-behavior patterns of student teachers and their cooperating teachers in categories of complex problems, simple problems, pre-framed, and affective-imaginative problems. Some relationship was found between both groups in supporting, approving, accepting, repeating, rejecting, and criticizing behaviors. These findings negated the hypothesis of the study and suggest that further research in verbal-behavioral relationship be undertaken using observer teams and a variety of instruments, settings and samples. (ERIC abstract)



33. Fuller, F.F. Concerns of teachers: A developmental conceptualization. American Educational Research Journal, 1969, 6(2), 207-226.

Purpose. To investigate the concerns of beginning teachers and to see if there is a level of consistency with other research done in this field.

Procedure 1. Fourteen student teachers enrolled in an education seminar were used for this study. Six of these subjects met for two hours a week with a counseling psychologist at which time they discussed anything they wanted to. The same procedure was followed the next term with eight subjects co-counseled by two counseling psychologists. A frequency distribution was made of the topics discussed during those meetings.

Results 1. Findings indicated that these subjects are concerned with the new school situation and discipline during the early meetings, and pupils and pupil learning during the later weeks. There was a move from a concern about self to a concern with learning.

Procedure 2. Twenty-nine student teachers, supervised by four different supervisors, were asked to write "what you are concerned about now" after a discussion with a counseling psychologist. Responses were classified into three categories: (1) Where do I stand? How adequate am I? How do others think I'm doing? (2) Problem behavior of pupils. Class control. Why do they do that? (3) Are pupils learning? How does what I do affect their gain?

Results 2. Results indicate that they were all concerned with self adequacy and/or class control while none were concerned primarily with the pupils' learning.

Regrouped Data of Other Investigations. Findings of other research indicate that teacher concerns fall into various categories depending on the point they are at in their professional career. These areas are the pre-teaching phase which is characterized by non-concern and lack of interest with teaching per se; early teaching phase which is characterized by concerns about the self and adequacy; and late concerns which center around the pupil and his needs, abilities, capacities, etc.

Comment. The study points out how the bulk of the education courses do not provide what the beginning teachers indicate that they need, i.e., self assurance. Perhaps curriculum should be geared to "self-actualization" and less learning of facts per se.

34. Fuller, F.F. et al. Effects of Personalized Feedback During Teacher Preparation on Teacher Personality and Teacher Behavior. Final Report. Austin: Texas University, 1969.  
ED 028 148

Purpose. To examine the effects of three kinds of psychological feedback on teacher preparation, personality, and feedback.

Procedure. This five-year study gathered data on 174 prospective teachers through personality tests, self-evaluation forms, and sound films of student teaching behavior. Subjects were divided into four groups--one for control and three for feedback treatment, which involved minimally one or more personal interviews with a psychologist (Assessment Feedback). The first feedback group received only Assessment Feedback; the second, in addition to receiving Assessment Feedback, was permitted to view the sound films (Behavior Feedback); and the third, after receiving Behavior Feedback, was placed in student teaching situations judged maximally facilitating by observers.

Results. In general, students with feedback evidenced more self-confidence, classroom ease, and positive attitudes toward observation procedures. In regard to two propositions about feedback (students would become more receptive to pupil feedback and would increase characteristics related to effective teaching), changes were not observed between different treatment groups but rather between the beginning and end of preparation and between pooled experimental and control subjects. Striking differences between elementary and secondary education majors were recorded. (ERIC abstract)

35. Goldsman, B.A. Effect of classroom experience and video tape self-observation upon undergraduate attitudes toward self and toward teaching. Proceedings of the 77th Annual Convention of the American Psychological Association, 1969, 4, 547-548.

Purpose. To determine what effect (a) a 30-minute classroom session with a third grade, and (b) a video tape observation of self in the classroom session would have on sophomore elementary education undergraduates' attitudes toward self and toward teaching.

Procedure. Sixty-three elementary education majors were randomly selected from the sophomore class and divided into two groups — an experimental group and a control group. Three administrations of two Q sorts — California Q set - Form III (Block, 1961) and a modification of the Minnesota Teacher Attitude Inventory (Cook, Leeds, and Collis, 1951) — were conducted at one week intervals for both groups. Before the second administration, those in the experimental group read an assigned story to a third grade class and engaged the class in story-connected activities for 30 minutes. Preceding the third administration, each experimental subject viewed the video tape of the classroom session.

Results. On all attitudes toward self which showed significant change ( $<.05$ ), the changes in attitude in the experimental group were in the more complimentary direction; in the control group, significant changes in attitude toward self were in a more uncomplimentary direction. In attitude toward teaching, the direction of change for the experimental group was opposite from the control group.

Comment. In an informal discussion to obtain reactions to the study, those in the experimental group said the experience alleviated anxieties they had been developing toward teaching, and recommended that this type of experience be a regular part of the teacher education program.

36. Gowan, J.G., and Bruoh, C. What makes a creative person a creative teacher? Gifted Child Quarterly, 1967, 11(3), 157-159.

Purpose. To identify the personality traits of creative teachers.

Procedure. The subjects were from a creativity workshop conducted at San Fernando Valley State College. It involved 350 gifted children in 13 classes, 13 demonstration teachers selected for their creative ability, 13 counselors, and 66 teacher trainees.

The Gough Adjective Check List was used by the teachers to describe themselves and by the consultants to describe the teachers.

Results. Findings indicate that creative teachers have a great deal of energy, are self-confident, warm and outgoing in nature, and are especially free from immature negativisms.

Comment. The lack of a definition of terms and the quality of the testing instrument leave the validity of these findings open to question.

37. Gray, I.A. Attitude Change in Pre-Student Teaching Experience. Final Report. Stevens Point: Wisconsin State Universities Consortium of Research Development, 1970. ED 054 076

**Purpose.** To determine the effects of two kinds of lab experience on pre-student teaching education majors' attitudes toward oral language development.

**Procedure.** The subjects were in two groups. Group I (role-playing in lieu of experience with children) was composed of 85 college students enrolled in a course entitled Speech in the Elementary School at the University of Illinois during the 1968 fall quarter. Group II (actual experience with children) consisted of 78 college students enrolled in the same course during the winter quarter.

An attitude scale (Lusty, 1968) which included choices and ranking of choices was administered to both groups at the beginning and end of the quarter. Comparative data were examined to note indications of change in attitude.

**Results.** Analyses of the data indicate that Group I was more concerned with self-need than Group II; Group I appeared to be less concerned with children than Group II; Group II indicated more respect for colleagues' abilities, preparation and performance.

Findings indicate the significance of direct experience with children for the future teacher.

38. Gustafson, K.L. Simulation of Anxiety Situations and Its Resultant Effect on Anxiety and Classroom Interaction of Student Teachers. East Lansing: Michigan State University, 1969. ED 033 064

Purpose. To determine the effectiveness of simulating anxiety situations in reducing anxiety and increasing the classroom interaction of student teachers; and to test the statement that simulation cannot change attitudes.

Procedure. The subjects (N=30) were all secondary education majors at Michigan State University who were enrolled in the secondary education methods course for fall 1968 and in student teaching for winter 1969.

Anxiety of the subjects was measured on pre- and posttests based on the IPAT Anxiety Scale. This instrument consists of 40 questions that fall within five major anxiety areas. Each question has three alternative answers. The Flanders Interaction Analysis Instrument (1967) was used to measure verbal interaction of teachers and students. Student-teaching success was determined by a scale developed by West (1968). The subjects were rated on a six point scale from "very best" to "failed". The subjects' self-concept was measured on a semantic differential (Osgood and others, 1958). Concerns about student teaching were identified by an instrument (Triplitt, 1967) which lists the 16 most frequently expressed concerns of secondary student-teachers. The subjects were asked to rate them in order of #1 being the greatest concern to #16 being the least concern.

A simulator (of anxiety situations) was constructed. It consisted of 31 short motion picture vignettes, television cameras and video tape recorder, television monitor and a recall worker (who was operationally defined as "specially trained individual to aid subject in recalling feelings and emotions felt during the simulation"). Each subject in the experimental group spent six one hour sessions viewing the materials and discussing his thoughts, feelings, attitudes and emotions with the recall worker.

Results. Analysis of the data indicates no support of the hypothesis that simulation could lower anxiety. It was also implied that student talk, as measured by Flanders, did increase in the classrooms of student teachers who had simulation experience. Self-

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concept did not increase as a result of the simulation. Classroom control concerns did not decrease as a result of the simulator experience.

Comment. An excellent piece of research. Its wealth of background information is clearly spelled out and easily understood--even by those without a background in psychology.

## CODE LETTERS AND DESCRIPTOR CATEGORIES

<u>Code</u>	<u>Descriptor</u>
A	academic course work or academic background
B	behavior analysis; patterns of
C	comparative studies--cross-background, cross-cultural, cross-educational, cross-occupational
D	difficulties, problems; teacher candidates perception of
E	effectiveness in task--performance, success
I	cognitive style--intelligence, creativity, perception
P	personality--characteristics, structure, profile
Pa	attitudes
Pc	self-concept
Pd	dogmatism
Pe	ethnic viewpoint
Pl	preference for teaching at a level
Pm	motivation
Ps	sex
Pv	values
R	interactions with and ratings by supervisory personnel
S	pupils--relationships with, interaction with, perception of, attitudes toward, evaluation of and by
T	supervised teaching experience--classroom teaching, special training programs
Tv	use of videotapes in
V	validity and reliability studies--comparison of test or measurement devices
Vp	predictive studies



## INTRODUCTION

This bibliography includes annotations of selected research articles and reports on Teacher Candidates which have appeared in the literature from 1968 to 1972. The entries are numbered and are arranged alphabetically by author in the body of the bibliography. Code letters identify the descriptor categories by which each entry is classified. A listing of items by descriptor category follows the annotations.

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Zita M. Cantwell  
Director

39. Haberman, M. The Concept of Transfer and the Preparation of Teachers. French Lick, Indiana: Conference in honor of Florence B. Stratmeyer, 1965. ED 023 635

Fundamental to evaluating the effectiveness of teacher education is determining whether the theory and practice of preservice training carry over into inservice teaching. Considering the large number of beginning teachers who soon drop out of teaching, it appears that they do not. Possibly teacher educators have put too much reliance on the concept of transfer. A review of the literature reveals that transfer may not be the sole factor in the learning process; only in earlier studies of transfer are individual differences accounted for, usually by recognizing intelligence as a major determinant in the transfer process. The success of a beginning teacher may be due to his personal adaptability to the principal, the pupils, the setting, and the role expectations he must face in his teaching assignment rather than to any similarity between his student teaching practice and his first teaching situation. Consequently, "it seems . . . that teacher education will be better served by seeking to learn more ways of developing elements within individuals rather than trying to reconstruct identical situational elements between preservice and in-service experiences." The task of teacher educators is to stimulate professional commitment in their students by serving as models of good teaching practice, with the laboratory experience serving to mold individual students' perceptions of the teaching profession. (ERIC abstract)

40. Haberman, M. The relationship of bogus expectations to success in student teaching (or Pygmalion's Illegitimate Son). Journal of Teacher Education, 1970, 21, 69-72.

Purpose. Data was gathered to examine the likelihood of raising cooperating teachers' and student teachers' expectations. It was hypothesized that cooperating teachers who are told that their student teachers have high potential will later rate their students higher than control cooperating teachers. Additionally, it was hypothesized that student teachers who are told of the outstanding nature of their cooperating teachers will later rate them higher than uninformed control students.

Procedure. Before classroom assignments were made, 120 Douglass College women were randomly assigned to four groups. Group I students were told they were assigned to one of the finest teachers in New Jersey. Group II students were told nothing but their cooperating teachers were informed that their student teachers had very high potential for student teaching. Group III was a combination of I and II. Group IV students and cooperating teachers were told nothing. At the conclusion of the student teaching period, student teacher achievement was rated by cooperating teachers on a nine-point scale. Student teachers rated cooperating teachers as "above average" or "below average".

Results. A chi square test revealed no significant differences between the expectation groups (I and III) and the non-expectation groups, thus rejecting the second hypothesis. A limitation of the results is discussed in terms of grading practices of cooperating teachers. The simplistic belief that informing teachers to hold high expectation effects behavioral change is challenged.

Comment. What is not discussed is the possibility that the methodology of this study is too simplistic to obtain significant results on a highly complex interactional process.

41. Harootunian, B., and Koon, J.R. The Reinforcement Behaviors of Teachers-in-Training. Paper read at American Educational Research Association Annual Meeting, 1970. ED 040 951

Purpose. This research explores the sanctioning behavior of prospective teachers. It was hypothesized that teachers' sanctioning behavior will vary in a given teaching task depending on a) their tendency to be anxious (their need to avoid failure), b) their perception of the student's competency, and c) the difficulty of the material to be mastered.

Procedure. The sample consisted of 40 teacher trainees (27 females and 13 males), enrolled in undergraduate education courses, who were required to teach a student on a concept formation task. The student was a confederate who performed on a set level for all teachers. Each teacher was set to expect a certain level of student performance. Teachers had been administered the Test Anxiety Questionnaire and divided into high anxious and low anxious groups. A 2x2x2 factorial design was employed with two levels of anxiety, two levels of student competence, and two levels of task difficulty. There were thus eight conditions, each with five teachers. The apparatus consisted of a screen separating teacher and student through which stimulus cards could be presented. Tokens were used by the teacher as monetary reinforcers. In the easy task, facial discriminations on the cards were to be discriminated, while in the difficult task, the learner had to discriminate a series of tiny dots in the corner of the card. Teacher effectiveness was to be compared. Differential instructions were given to teachers of competent and noncompetent students.

Results. Data came out as predicted but not significantly so due to the small sample size. The only significant F ratio involved the interaction between anxiety and competence. Several data were consistent with the hypothesis that, when the fearfulness of anxious teachers was aroused by below-par performance of competent students, diminished rewards resulted. The noncompetent student brought out the generosity of these same teachers. The rewarding behavior of low anxious teachers was much less affected by task and student variables. The significant differences in the rewarding behavior of high anxious and low anxious teacher-trainees were due to their differential expectations for competent students. Concerning punitive behavior, a tendency was observed for high anxious teachers to use fewer negative sanctions than low anxious

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teachers. These results suggest that teachers, when placed in situations in which they fear failure (high anxious), tend to use a narrower range of reinforcing behavior (reward less and punish less) and thus not use rewards and punishments as "effectively" as they might. This finding is consistent with previous research demonstrating that anxiety arousal interferes with or reduces variability in task performance.

In teacher expectation studies, it has been maintained that gains in high expectation pupils depend in part on observation of the effects of differential reinforcement on the pupil. It was suggested, from the present results, that perceiver characteristics may well be of value in describing the dynamics of the "Pygmalion" effect.

42. Hart, M.M., and Brown, M. Dogmatism as related to accuracy of student teacher's judgment of students. Journal of Teacher Education, 1967, 18(4), 429-437.

Purpose. To investigate the possible relationship between a teacher's level of dogmatism and her evaluation and judgment of certain classroom behaviors.

Procedure. Seventy-five University of Minnesota student teachers of home economics were asked to judge the relative strengths of six areas of values held by their 1,267 secondary school students.

Each, prior to student teaching, received the Adorno F Scale, the Inventory of Beliefs, and the Omnibus Personality Inventory (Autonomy Scale), to test three levels of dogmatism. The Study of Values (Allport, Vernon and Lindsey) was also administered to provide data on the student teachers' values.

Results. Statistical analyses of the data indicate no significant differences among teachers with high, medium, and low dogmatism levels with respect to accuracy of judgment of students' values. Lack of significant statistical data at the .05 level may be due to the fact that other important variables enter into dogmatism.

Statistical analysis of the mean scores in accuracy in judgment did indicate that teachers with low dogmatism are consistently more accurate in their judgments.

Comment. A great deal of statistical analysis of variables. Seemed to be trying to stretch the data to fit the hypothesis. Little discussion of why there was a lack of significance for the hypothesis.

43. Heddendof, R. Professionalism and personality types among student teachers. Journal of Teacher Education, 1971, 22(3), 310-313

**Purpose.** To discover whether correlations exist between teacher personality types and the degree to which teachers hold professional attitudes.

**Procedure.** Subjects were 152 student teachers at two private liberal arts colleges. They were given the Sixteen Personality Factor Test before and after student teaching. They also filled out a questionnaire containing personal and social background information. This information was used in conjunction with the 5 factors isolated by Cattell and considered to be correlated with success in professional occupations: dominance, lack of inhibition, imagination, shrewdness, and liberalism.

**Results.** No statistical analysis was given. However, Heddendof concluded that the person who is inclined to be successful in teaching tends to be practical and conventional, and that this mode differs from the personality model inclined to be successful in a profession. College A had a higher percentage of the successful professional type student, and 18% of the student teachers indicated they did not plan to teach the following year after completing student teaching. College B had a higher percentage of the successful teacher type, and only one student, who planned to find a position in higher education, did not indicate a plan to teach after graduation.



44. Henjam, A. A study of the significance of student teachers' personality characteristics. Journal of Teacher Education, 1969, 20, 143-147.

Purpose. To study the relationship between certain personality characteristics of secondary academic student teachers and success in the student-teaching experience.

Procedure. Seventy-eight University of Minnesota student teachers were given Cattell's Sixteen Personality Factor Questionnaire (Forms A and B) prior to teaching, and, at the close of the student-teaching units, their pupils were given the Hoyt-Grim Pupil Reaction Inventory. Each University supervisor then assigned letter grades and ranked the student teachers in order of teaching effectiveness. Analyses of relationships between student teachers' personality characteristics and their grade, rank, and assessment by pupils were made through correlation, regression, and analysis of variance techniques.

Results. It was found that at the senior high level it was important for the teacher to be highly intelligent and enthusiastic. At the junior high level it was also important for the teacher to be emotionally mature, inclined to experiment, somewhat extroverted, and socially adjusted.

45. Hill, R., and Medley, D. Change in Behaviors of First Year Intern Teachers. Paper read at American Educational Research Association Meeting, 1968. ED 034 724

Purpose. To examine changes in the teaching behavior of 70 first-year secondary school teacher interns in a metropolitan area who were members of an Intern Teaching Program. These interns receive six weeks of training in their initial summer and during their first year receive close supervision and participate in seminar classes. Initial observations of intern teachers were made in early February and final observations were made in late May. Measurements at these two times span a hypothetical period of accelerating growth in teacher planning and skill, and should reflect a positive change in teacher behavior.

Procedure. Of the 70 (43 male, 27 female) first year interns, 36 were at the senior high school level and 34 were at the junior high school level. Interns taught in four subject areas: mathematics; science, English, and social studies.

Each intern was observed four times by two trained observers, each using one of two observation instruments: Flanders Interaction Analysis (IA) and the Medley Observation Schedule and Record 4 Verbal (OSCAR 4V). Observers sampled behavior for 28 minutes during a class period. OSCAR 4V scores were rescaled to form orthogonal contrasts. Individual scores were subjected to analysis of variance.

Results. The IA data yielded 14 scores indicating significant changes in the teaching behavior of the Interns and the following statements were made regarding these changes: a) student initiated responses increased dramatically while direct student responses decreased; b) there was a decrease in teacher use of praise; c) there was a shift from convergent to divergent teacher questions; d) there was a decrease in the content-cross area; e) increased student talk was followed by both an increase in the amount of teacher acceptance and a decrease in the amount of evaluation by the teachers; and f) student talk seemed to increase following all teacher talk.

Significant changes were reflected on 14 OSCAR scores including: a) increase in teacher describing; b) shortening of teacher questions; c) decrease of elaborating interchanges; d) increase of divergent interchanges; and e) shift in interchanges toward "acceptance."

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In general, the teacher interns were describing more, using more divergent questions and less convergent questions, and becoming less evaluative and more neutral in their responses.

46. Hiller, J. Verbal response indicators of conceptual vagueness. American Educational Research Journal, 1971, 8, 151-161.

Purpose. This experiment studies the assumption that a communicator's vagueness, which is defined as a stimulus condition which directly varies with the speaker's lack of knowledge, leads to an associated verbal vagueness response. Specifically, the study investigates the hypothesis that a manipulation of command of knowledge would produce a concomitant manipulation of verbal vagueness response frequency.

Procedure. A 2 x 2 design was employed in varying level of knowledge. In one group, a taped "good lesson" served as the basis of a two-minute lecture while in a second group, 50% of the original material was randomly replaced with excerpts from another lesson (knowledge treatment). Immediate command of knowledge was varied by allowing one group of speakers more time to prepare lectures than a second group (preparation treatment).

Twenty-four male undergraduate volunteers, 16 of whom were preparing to be teachers, served as experimental lecturers.

Results. While the Preparation Treatment had no effect, the Knowledge Treatment had a marked effect. The knowledge manipulation may have produced effects in addition to differences in comprehension of lesson material. The subjects, who were described as highly motivated, may have had their anxiety level and self-confidence manipulated when the lesson they were to base their own lecture on "turns into the babbling confusion presented ... by the low knowledge tape recording." The author holds that according to vagueness theory, stress normally arises when a speaker is instructing a group on material he does not know well.

47. Hough, J., Lohman, E., and Ober, R. Shaping and predicting verbal teaching behavior in a general methods course. Journal of Teacher Education, 1969, 20, 213-224.

Purpose. Two training designs were used in this study to help beginning teachers develop awareness and skill in the use of a variety of verbal teaching behaviors.

Procedure 1. In one type of design, 168 undergraduate students in teacher education classes were taught the Flanders Interaction Analysis to a point of minimum proficiency. In addition, students practiced various verbal teaching behaviors in a series of micro-teaching episodes. Pairs of students were assigned to a public school classroom so that while one was engaged in exploratory teaching, the other could take interaction analysis and give feedback to the partner.

In the second type of design, students underwent a similar experience but without the use of a formal category system.

Results 1. Data collected on teaching behaviors in microclass lessons showed that students trained in the use of interaction analysis used: (1) more praise and encouragement; (2) more acceptance and clarification of student ideas; (3) fewer directions; (4) less criticism and justification of authority; (5) less corrective feedback; and (6) solicited less student talk in response to the teacher.

Procedure 2. Thirty students who had been in the groups taught interaction analysis and 30 students who had been in the control groups were followed into student teaching the next academic year to see if differences found in the microclass situation persisted.

Each of the 60 student teachers was observed six times during his student teaching by a trained observer using the Flanders Interaction Analysis.

Results 2. The data indicate that student teachers trained in the use of interaction analysis differed from the comparison group in the following: (1) they used more acceptance and clarification of student feelings; (2) they used more praise and encouragement of student action or behavior; (3) they used more acceptance and clarification of student ideas; (4) they used less lecture; (5) they spent less time in giving directions; and (6) they stimulated more student-initiated talk.

48. Johnson, J. Change in student teacher dogmatism. Journal of Educational Research, 1969, 62(5), 224-226.

Purpose. To determine if a change in student teacher dogmatism during the student teaching experience was a function of the degree of dogmatism of the supervising teacher.

Procedure. The subjects consisted of 80 college seniors (77 female and 3 male) who were enrolled for off-campus student teaching at George Peabody College for Teachers. Fifty-one of the subjects were secondary student teachers, and twenty-nine were student teaching at the elementary level. Eighty supervising teachers were also involved in the study.

The Dogmatism Scale, Form E, was administered to the eighty student teachers just prior to the beginning of the student teaching experience and again at the conclusion of the ten-week period of student teaching. The scale was also completed by the eighty supervising teachers at some time during the ten-week period.

Results. A change in the degree of student teacher open- and closed-mindedness was seen as a function of the degree of dogmatism of the cooperating supervising teacher with whom the student was placed.

Hence, it is important to exercise care in the placement of student teachers with supervisors as the latter appear to significantly influence the former.

Comment. It would be interesting to investigate further the fact that those students who scored lower than their supervisors on the Dogmatism scale showed a greater shift toward the supervisors' views than did the higher scoring group. If the lower scorers are considered to be more open-minded, then they are also more susceptible to supervisor influence. Such a result has important implications in student placement with specific supervisor types.

49. Johnson, J.L., and Seagull, A.A. Form and function in the affective training of teachers. Phi Delta Kappan, 1968, 50(3), 166-170. ED 024 630

Presently a contradiction exists between form and function in teacher education. Although creativity and self-awareness are voiced as goals for teachers and their students, teachers are all too often educated by means of lectures, a form which holds quiet attentiveness rather than intellectual aggression a chief value. In their own classes, education professors fail to utilize the techniques they advocate: team teaching, programed texts, and group process. Since teachers tend to teach in the form in which they were taught, a dichotomy between actions and words is perpetuated. Consultations with specially trained teachers of disturbed children revealed that teachers found it difficult to make explicit demands on colleagues or children, were unaware of their value as models, feared to generalize from past experience, saw no relationship between rules governing the behavior of normal children and that of disturbing children, and were fearful of negative criticism. If teachers are to be well-integrated individuals able to foster self-actualization in children, the form of teacher education must be amended to follow its function. Teacher education must encourage creativity and experimentation and provide a model for flexible, dynamic, innovative action so that mistakes may be viewed as opportunities for growth and development. (ERIC abstract)

50. Johnson, J.W., and Waldrop, R.S. A study of evaluation in social science oriented educational psychology courses. Educational and Psychological Measurement, 1969, 29, 969-976.

Purpose. To investigate the concurrent validity of the Redwood School Test through correlation with the course grade and to investigate the construct validity through assessment of change after course experience and correlation with other variables.

Procedure. The Redwood School Test was constructed to measure a factor designated as application ability. This sample consisted of 184 students in an educational psychology course. In addition to the Redwood School Test, subjects were given the Forced Choice-Teacher Attitude Inventory (Bartlett, 1966), the Test of Basic Knowledge in Psychology (an experimental 25 item multiple choice screening test of basic psychological knowledge), and a Biographical Information Card. Group I subjects took the RST and FC-TAI at the final class meeting. Group II subjects completed the RST, FC-TAI and TOBKIP at the initial class meeting, and the RST and FC-TAI were then re-administered at the final class meeting.

Results. RST scores correlated significantly with final course grade (Group I -  $p < .05$ ; Group II -  $p < .01$ ) and a significant improvement was found between pre-course and post-course performance ( $p < .05$ ). Performance on the RST was significantly related to previously acquired psychological knowledge ( $p < .01$ ). Pre-course RST scores correlated .25 with pre-course FC-TAI scores and post-course scores correlated .38.

Comment. Johnson and Waldrop conclude that the RST would seem appropriate for measuring proficiency in teacher preparation.



51. Johnston, D.P. The relationship of self-supervision to change in selected attitudes and behaviors of secondary student teachers. Educational Leadership, 1969, 27(1), 47-63.

**Purpose.** To determine the relationship between student teachers' attitudes and the incidence of direct and indirect control of their classroom interaction behavior; and to compare those supervising themselves with those supervised in the traditional mode.

**Procedure.** The student teachers used were from Memphis State University. All received the Minnesota Teacher Attitude Inventory (MTAI) and all were observed during a 20-minute lesson using Flanders' system of interaction. The population was divided into three categories: high score, average score and low score on the MTAI.

**Results.** Analysis of the research indicates the following: 1) there was no significant relationship between attitudes and teaching behavior before supervisory treatment; 2) supervision tends to promote a significant relationship between attitudes and teaching behavior; 3) those in self-supervision tended toward indirect teaching; and self-supervision tends to promote higher scores on the MTAI.

52. Johnston, D.P. Selected Aspects of Self-Supervision by Student Teachers. Final Report. Tennessee: Memphis State University, 1968. ED 029 280

Purpose. To determine the comparative effects of self-supervision and traditional supervision upon student teacher attitudes and behavior.

Procedure. A stratified random sample of 84 student teachers in secondary school academic subject areas was distributed into four treatment groups according to a trichotomization of their scores on the Minnesota Teacher Attitude Inventory (MTAI). Each student teacher taught two 20-minute lessons with the same content to different classes of five pupils. One group supervised itself using videotape and Flanders' system of interaction analysis; another group was supervised in a more traditional manner (supervisor present). The two remaining groups experienced both self-supervision and teacher supervision. Upon program completion the MTAI was retaken (in one group retesting was at delayed intervals).

Results. Analysis of variance indicated the following: (1) No significant relationship exists between attitudes and teaching behavior before supervisory treatment. (2) Supervisory treatment tends to promote a significant relationship between attitudes and teaching behavior. (3) Self-supervision tends to promote indirect teaching and higher MTAI scores. (4) Estimates by student teachers of the percentage of indirect teaching they exhibit in their lessons are very inaccurate under both traditional and self-supervision. (5) No significant relationship exists between time and attitude change in student teachers supervised in a traditional manner. (ERIC abstract)

53. Jones, R.L. Teacher education: Preferences for teaching intellectually exceptional children. Education and Training of the Mentally Retarded, 1971, 6(1), 43-48.

Purpose. To study the relationships between preferences for teaching educable mentally retarded children and preferences for teaching certain traditional school subject matter and/or grade levels.

Procedure. The subjects were 540 female college undergraduates and experienced teachers. The subjects were asked to rate their teaching preferences on a range from exceptional to non-exceptional on a 15 point scale.

Results. Data were analyzed according to 15x15 matrices of inter-correlations. Significant relationships were indicated among the variables under study. The general findings imply that factors related to preferences for teaching elementary level educable mentally retarded were similar to those related to teaching preferences for kindergarten-elementary teaching.

54. Justis, T.B. A reliable measure of teacher effectiveness.  
Educational Leadership Research Supplement, 1969, 27(1),  
49-55.

Purpose. The first hypothesis raised is whether student teachers who teach effectively in one subject field teach as well in a second subject field. In seeking an independent predictor variable, since performance tests take time and careful planning, a second hypothesis was constructed: Will student teachers who score well on the Minnesota Teacher Attitude Inventory (MTAI) also produce high pupil achievement mean scores in their classes?

Procedure. The criterion measure of teacher effectiveness was defined as the mean of all post-test scores of a class of pupils on content-validated tests of subject matter objectives. Objectives were limited to areas that were unfamiliar to both student teachers and pupils. To enhance reliability, the student teachers were required to teach twice in succession using objectives in two different subject fields.

In establishing the sample, ten high school student teachers from UCLA were measured for general teaching ability and were selected for their unfamiliarity with two different subject fields. Each subject was given a kit containing objectives, resource materials, practice exercises, and distractors, and was instructed to prepare a lesson overnight so as to produce optimal pupil achievement. On the following day, student teachers instructed for 30 minutes in each subject and were given paper and pencil post-tests and 15 minutes for testing. Objectives were prepared so that they would reliably generate differences in the test-retest design. Care was taken so that no student teacher or pupil would have an initial advantage.

Results. After the data were collected, each student teacher was ranked by all the pupils in his class for each subject taught. Correlations of rankings were significant, indicating that most student teachers who were effective in one subject were as effective in the second subject as well. Student teachers were also ranked by MTAI scores which were then correlated with each of the two subject rankings. These correlations were statistically significant.

This study was said to have generated the first reliable measure of general teaching ability. Also, it demonstrated a relationship between student teacher attitudes and general teaching ability. This study supports the contention that pupil performance is a valid criterion measure of teaching effectiveness.

55. Kane, R.B. Use of the Semantic Differential Technique to Measure Prospective Elementary School Teacher Attitude Toward Mathematics and Other Subjects. Final Report. Lafayette, Indiana: Purdue Research Foundation, 1968. ED 021 761.

The first objective of this research was to compare the attitudes of prospective elementary school teachers toward mathematics and three other areas--language arts, science, and social studies--as academic disciplines and as future teaching areas. The second objective was to test the predictive validity of congruity theory when applied to subjects and concepts from elementary education. The third objective was to study semantic differential (SD) factor structure for the educational concepts and subjects studied. The final objective was to describe the locations in semantic space of the meaning of each concept studied and to describe any cluster patterns among these meanings. Subjects in this study were prospective elementary school teachers on whom substantial efforts had been expended to enhance their mathematical sophistication. Each of the four sections of this report deals with those aspects of the research which bear on one or more of the objectives listed above. (ERIC abstract)

56. Kennedy, T.G., and Humphrey, R.A. Effect of the system approach on changing preservice teacher attitudes toward selected instructional design factors. Journal of Educational Research, 1971, 64(8), 365-369.

**Purpose.** To determine the effect of system approach training upon preservice teachers' attitudes toward selected design factors.

**Procedure.** Subjects were students in education courses at Western Montana College. Two groups were randomly chosen--twenty students for the experimental group and twenty-three for the control group. A semantic differential was constructed measuring eleven design factors relative to three semantic scales: (1) evaluation, (2) stability, and (3) receptivity. The students were given this measure as a posttest to determine their attitudes toward the experimental program.

**Results.** A significant difference ( $p < .001$ ) existed between the two groups' attitudes toward the overall program as measured by the semantic scale evaluation.

57. King, J.H., and Ellis, J.R. A survey of the characteristics judged to contribute to the ineffectiveness of college teacher educators. Journal of Teacher Education, 1971, 22(3), 331-334.

Purpose. To obtain opinions regarding factors that have prevented college faculty responsible for teacher education from attaining higher achievement in their teaching, research, and service functions.

Procedure. A questionnaire was sent to an appropriate administrator in each institution listed in the 1967 Directory of the American Association of Colleges for Teacher Education (N=812). Completed questionnaires were received from 500 (62%).

Results. Those faculty members judged to be ineffective in teaching performance were characterized as: (a) lacking in knowledge of their special field and in preparation for college teaching, (b) unable to relate effectively with colleagues and students and emotionally unstable, (c) lacking in motivation, creativeness, and ability to communicate effectively and (d) unable to use instructional methods and materials effectively. Those judged ineffective in research were characterized as (a) lacking in specific research know-how and in preparation for the tasks of educational research, (b) emotionally unstable or mentally ill, (c) lacking motivation and creativeness, and (d) poorly organized and attendant to detail. Those judged ineffective in service functions were characterized as being (a) lacking in relevant professional experience, (b) emotionally unstable or mentally ill and unable to relate effectively with the broader community, and (c) lacking in motivation and ability to communicate effectively.

58. Kirchner, J.H., and Hogan, R.A. Value patterns of future teachers in three curricula. Journal of Teacher Education, 1968, 19(3), 349-353.

Purpose. To investigate whether there are differences in the value patterns of future teachers enrolled in different curricula (elementary, secondary and special education).

Procedure. Allport, Vernon and Lindzey's Study of Values was administered to students in three philosophy of education classes at Illinois State University, during the first and last week of class. Analyses of variance were done for each of the samples, separately and combined, to determine if there were any significant differences on the Study of Values scales between samples, between sexes, among curricula, and between administrations of the test.

Results. Findings indicate that there were no significant differences between the groups: on the test scales at the beginning of the course; according to major field on the test scales either at the beginning or end of the course; according to sex; according to who taught the course; or among female future teachers. Significance at the .05 level of confidence was obtained between scores of female seniors enrolled in elementary and secondary education.

In general, there was a tendency for males to score higher than females on theoretical, economic and political scales and lower on the aesthetic and religious scales. In controlling for curriculum it was found that secondary males scored significantly higher on the political and theoretical scales and significantly lower on the religious and aesthetic scales than did females in secondary education.

The authors state that their findings indicate the need for further investigation into the study of teacher values.

Comment. Because of the small and specific population used, the findings in this study should be carefully considered.



59. Kushel, G., and Masik, L.K. Job values of prospective classroom teachers. Journal of the Student Personnel Association for Teacher Education, 1970, 8(2), 33-35.

Purpose. To determine the job values of aspiring teachers.

Procedure. A Job Values Questionnaire (Kublen and Dipboye, 1959) was given to 77 education students from the Graduate School of Education at Long Island University. The questionnaire provided a list of 11 job value statements and the subjects were directed to rank them in order of preference.

Results. The highest value was "An interesting and stimulating job where you would like the work itself." Other values rated high dealt with freedom of expression, helping others and independence. Low-ranking values dealt with high pay, being boss, becoming famous, steady work and security, and good fringe benefits.

Comment. No explanation of the selection process for the sample population is given.

60. Lange, D.N. An Application of Social Learning Theory in Affecting Change in a Group of Student Teachers Using Video Modeling Techniques. Paper read at American Educational Research Association Annual Meeting, 1970. ED 040 131

Purpose. In determining the extent to which imitation can be employed in training student teachers, it was hypothesized that a video taped model demonstrating indirect teacher verbal behavior is more successful in eliciting indirect teacher verbal behavior from a group of student teachers than is a neutral movie (as indicated by the I/D ratio and Revised I/D ratio of the Flanders Interaction Analysis).

Procedure. Forty randomly selected juniors who had completed methods courses in teaching and were just beginning student teaching were divided into two groups. A student teacher supervisor whose teacher behavior was predominantly indirect rather than direct was selected to prepare a video taped lesson. Interaction analysis of the video tape verified her ability to employ indirect verbal behavior. The tape was of a 20-minute interaction with a middle ability fourth grade reading group. The model led a group discussion of a story and attempted to maximally involve students. Twenty subjects were shown this movie while another 20 subjects viewed a neutral movie.

A pretest-posttest control design was used. All subjects were given an objective in reading for which they were to prepare and teach a lesson plan to their own elementary class as part of their coursework. The posttest assignment was carried out two days after the treatment. The pretest data were collected from a reading objective lesson during the first week of student teaching. Observations were coded according to the Flanders system by two raters.

Results. Results indicated the acceptance of the hypotheses. A single 20-minute exposure to a model demonstrating a specific set of behaviors produced a significant amount of the same behaviors in the student teachers who observed it. These results support previous findings on the use of video taped modeling. Recommendations for further investigation--including the use of more specific model behavior, varying the amount of times the film is shown, and examining the relationship between video modeling and certain personality variables--are proposed.

61. Lantz, D.L., and Bott, W.K. Effects of F scale scores on changes of MTAI scores. Journal of the Student Personnel Association for Teacher Education, 1971, 10(1), 20-24.

Purpose. To investigate the relationship between traits measured by the California F scale and changes in attitude measured by the MTAI during a one-semester course in educational psychology.

Procedure. Subjects were 192 students enrolled in a course in educational psychology. On the first day of class the Minnesota Teacher Attitude Scale and the F scale (a self-report instrument designed to measure anti-democratic attitudes) were administered to all the students. Verbal scores on the College Qualification Test (presumably a college entrance requirement) were used to control the independent variable of scholastic aptitude.

Results. Students who have low F scores make significantly greater gains on the MTAI than do students with high F scores ( $p < .01$ ).

62. Lawson, D. Indicators of Teacher Ability to Relate to Students. Paper read at American Educational Research Association Annual Meeting, 1971. ED 050 008

Purpose. An attempt was made to determine the meaning students give to teacher ability to relate to students and to note differences in teacher ratings by ethnically differing students. It was hypothesized that ratings of teacher interns would be directly related to certain classroom interactions such as "praise and reward," "teacher acceptance of students' ideas," and "teacher empathy." Additional hypotheses were made with regard to sex and ethnic student rating differences.

Procedure. A series of video tapes of six-minute "Black Power" microteaching lessons of 50 teacher interns (17 males, 33 females, 47 white) were shown to 62 high school students (16 black, 22 Oriental, 24 white). Reliability for the instrument measuring teacher ability to relate to students was established. The reliability protocol consisted of nine items which were to be rated on a seven point scale. Potential correlates of the criterion measure were sought by adult observer use of the Flanders Interaction Analysis. Clinical raters also viewed video tapes and rated them on the reliability scale.

Results. Interaction analysis of video tapes identified 51 potential teacher behavior correlates, 15 of which were found to correlate significantly with teacher ability to relate to students. In general, student raters of teacher interns appeared to significantly associate ability to relate with four variables: positively with student talk, followed by teacher lecture; negatively with extended silence; positively with quality of sound; and positively with student talk-initiation. Thus teachers relate better to their students when their lectures are based on preceding student comments, when freedom of expression is allowed, and when the quality of the teacher's voice is favorably rated. Students downgraded teachers' reliability when classroom silence is prolonged, though appropriate. Females tended to rate higher teachers giving extended but not prolonged directions and teachers giving extensive rather than simple praise.

F-ratios indicated no significant difference among mean teacher reliability scores by race and sex of student raters. Thus there was insufficient evidence to claim ethnic and sex differences in student ratings of teacher reliability.

The researcher, in extending his conclusions, finds validity in

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supporting the notion that teacher relatability is enhanced not so much by what the teacher is doing as by what the teacher allows students to do. Personal characteristics unrelated to teaching behavior might effect relatability.

63. Limbacher, P.S. A Study of the Effects of Microteaching Experiences Upon the Classroom Behavior of Social Studies Student Teachers. Paper read at American Educational Research Association Annual Conference, 1971. ED 046 855

**Purpose.** This study hypothesized that student teachers, as a result of participation in a Teaching Techniques Laboratory microteaching experience, would: a) be evaluated more favorably by pupils on initial and final efforts on the Teacher Performance Appraisal Scale (TPAS); b) be the recipients of more favorable pupil ratings of teacher effectiveness on the Illinois Teacher Evaluation Questionnaire (ITEQ); c) be thought by their cooperating teachers to assume full responsibility for classroom instruction earlier; and d) have high Indirect/Direct Flanders' Interaction Analysis ratios. The current study represents an attempt to evaluate the effectiveness of microlab teacher training.

**Procedure.** The sample consisted of two groups of 25 social studies student teachers--one group having undergone training, the other not. Video tapes of 33 initial week and 32 final week 30-minute observations were obtained. A classroom observer also recorded verbal and non-verbal cues. After the video taping period, pupils were asked to evaluate the preceding lesson using the TPAS. The 41-item Illinois Teacher Evaluation Questionnaire (ITEQ) was administered to pupils during the final teaching week.

The Teaching Techniques Laboratory provides student teachers with from six to nine video taped microteaching experiences prior to student teaching. Microlessons last about ten minutes and are presented to classes of from four to six high school students or college freshmen. Lessons are evaluated by pupils and the laboratory supervisor 20 minutes after the conclusion of the lesson. Pupil evaluations are made on a ten-item scale covering aims, content, method, evaluation, and accomplishment. Student teachers are guided in monitoring and reacting to pupil and video tape feedback.

**Results.** The TPAS data were computer analyzed and revealed that the experimental group student teachers were rated significantly higher than control group teachers on initial week and final week lessons.

The experimental group teachers were rated significantly higher by their pupils on the ITEQ, (a global instrument covering the

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areas of teaching method, teacher, teacher knowledge, and student interest). The higher ratings in teacher knowledge were felt to result from a halo effect based on the other three areas measured.

Data secured from cooperating teachers did not confirm the third hypothesis as no significant group differences were noted. The fourth hypothesis postulating higher Indirect/Direct ratios for the experimental group was not supported.

64. Linden, K.W., and Linden, J.D. A longitudinal study of teachers' attitudes and personality characteristics. Journal of Teacher Education, 1969, 20, 351-360.

Purpose. To identify the attitude and personality characteristics of beginning teacher education students that would differentiate between those who later entered the teaching profession and those who did not.

Procedure. The Guilford-Zimmerman Temperament Survey and the Minnesota Teacher Attitude Inventory were administered to 152 teacher education graduates of Purdue University three times: (1) upon entry into teacher education, (2) during student teaching and (3) one year after graduation.

Results. Only the MTAI distinguished between teacher education graduates who entered teaching and those who did not. However, it only did so when administered after graduation, not in the data collected prior to graduation. The MTAI distinguished between sexes and among subjects in given curricular areas and/or levels on all test administrations.



65. Lueck, W.R. Professional insecurities of prospective teachers. Teachers College Journal, 37(3), 1965.  
ED 013 802

Purpose. To determine which common teaching problems cause the greatest concern or insecurity among prospective teachers.

Procedure. Four hundred and forty-five juniors (243 in 1962-63 and 205 in 1963-64) taking a secondary school methods course were asked to rank twelve major problems in the order in which they caused concern. The problems were compiled from those occurring frequently in textbooks on methods of teaching in high school.

Results. It was found that (1) students expressed the greatest concern over the problems of conducting the class session effectively, asking stimulating questions, supervising studies. (2) Other major problems in order of their ranking by the students were (a) motivating student learning, getting students to study and master their lessons, (b) teaching students to study, including helping them to read more effectively, remember longer and develop better work habits, (c) planning for teaching, such as planning courses, units of work and daily assignments, (d) adjusting instruction to slow, average, and fast learners, and (e) attaining and maintaining good classroom discipline. (3) A prospective teacher's major subject has little influence on the inadequacies he feels toward the general problems of teaching. (4) A course in methods of teaching can cause significant changes in a student's feelings of inadequacy toward some (i.e. number 1, 2a, and 2c above), but not all of the general teaching problems. (ERIC abstract)

66. Lundquist, G., and Blackham, G.J. Simulation and group counseling in the training of prospective teachers. Journal of the Student Personnel Association for Teacher Education, 1970, 8(3), 85-89.

Purpose. To determine whether group counseling and simulation techniques could effect attitudinal changes in elementary school teachers.

Procedure. Forty undergraduate education majors were randomly assigned to experimental and control groups. The experimental group received eight 2-hour group counseling and simulation experiences. All members of both groups were given the Teacher Characteristics Schedule and the Semantic Differential at the end of the eight-week period.

Results. No significant differences between the groups were found on any of the scales of the TGS or on the evaluative dimension of the Semantic Differential. Significant differences were found between the groups on the potency dimension for the concepts public school teacher, parents, and parent-teacher conference. On the activity dimension, there was a significant difference on the concept disabled reader.

67. McClain, E.W., and Christiansen, M.A. Personality characteristics of students preparing to teach high school English. Research in the Teaching of English, 1970, 4(2), 149-156.

Purpose. To identify those personality characteristics of students preparing to teach English in the secondary schools which differentiated them from college students in general.

Procedure. Subjects were 171 English majors at the University of Tennessee, who were either doing their student teaching in English or were enrolled in special methods courses in the teaching of English. Each subject was given the Sixteen Personality Factor Questionnaire, Form A, 1962 edition.

Results. Significant factors isolated were: (1) outgoing (women only) ( $p < .01$ ); (2) more intelligent ( $p < .001$ ); (3) assertive ( $p < .001$ ); happy-go-lucky (women only) ( $p < .001$ ); expedient (as opposed to conscientious) ( $p < .05$ ); venturesome (women only) ( $p < .001$ ); tender-minded (as opposed to tough-minded) ( $p < .001$ ); imaginative (as opposed to practical) ( $p < .01$  men,  $p < .001$  women); experimenting ( $p < .001$  men,  $p < .01$  women); self-sufficient ( $p < .001$ ) and undisciplined self-conflict (women only) ( $p < .05$ ).

68. Initial Teaching in Poverty Versus Affluent Schools and  
Effect Upon Teacher Stress Attitudes and Career Choices.  
Los Angeles: California University, 1968. ED 024 649

Purpose. The University of California, Los Angeles (U.C.L.A.), Coordinators of Supervised Teaching in the elementary schools conducted a study to determine whether assignment to a poverty school (family income less than \$4,000 per year) as opposed to assignment in an affluent school (family income in upper 10 percent, high-middle income neighborhoods) would effect differences in terms of teacher stress, attitude, and willingness to accept a permanent teaching position in a poverty school.

Procedure. Attitude was determined by scores earned on the Minnesota Teacher Attitude Inventory, while stress was measured by a 14-item inventory. Ninety-seven candidates for the elementary school credential who met U.C.L.A. student teaching admission requirements were randomly assigned to either a poverty school or an affluent school for student teaching. After the first 10-week assignment (four hours a day, five days a week), student teachers exchanged assignments for a second 10 weeks.

Results. It was found that there was no significant difference in mean scores in stress level between those assigned to poverty and affluent schools, assignment in poverty schools depressed attitudes whether the experience was the first or second assignment, and there was little practical difference in numbers of teachers attracted permanently to poverty schools as a result of the kind of school encountered in a first assignment. (ERIC abstract)

69. Mazer, G.E. Attitude and personality change in student teachers of disadvantaged youth. Journal of Educational Research, 1969, 63, 116-120.

Purpose. To investigate the effects of a specialized intensive summer training program on the attitudes, personal values, and constructs of novice teachers of disadvantaged youth.

Procedure. Subjects were 53 student teachers at Western Michigan University who participated in a 15-week graduate program designed to motivate and prepare them for working either in inner-city classrooms or with migrant children. One part of this program was a paid internship during the latter half of the training. The Osgood Semantic Differential and the Personal Orientation Inventory were administered to subjects during the first and last week of the spring session, which comprised the early part of the program. The Semantic Differential was administered again at the end of the entire program. Twenty teachers enrolled in a graduate course served as controls during the spring. No controls were available during the summer session. All testing was conducted in a classroom context.

Results. Significant discrepancies between experimental and control group were apparent at the end of the spring session (first part of program). In the experimental group significant ( $p < .01$ ) differences between scores at the end of the spring session and scores after the summer internship were noted.

70. Millett, G.B. Comparison of Training Procedures for Promoting Teacher and Learner Translation Behavior. Technical Report No. 9. California: Stanford University Center For Research and Development in Teaching, 1969.  
ED 035 600

Purpose. To compare the effectiveness of four training procedures in changing translation behaviors of intern teachers and their pupils in secondary school social studies classes.

Procedure. The four training procedures or treatments (applied to four randomly assigned groups of intern teachers) were: an unstructured discussion of material that was to be taught later in social studies class; (2) oral instruction on how to teach the material; (3) videotaped demonstration of how to teach the material; and (4) a combination of the oral instruction and demonstration procedures. "Translation" was defined as "statements about the meanings of written words and combinations of written words in light of the context in which the words were used" and was classified and measured according to (1) pupil translation statements (oral and written) and (2) seven types of teacher behavior ("translation strategies").

Results. Analysis of tapes of classroom presentations and discussions indicated significant differences (.01 level) between the four treatments: i.e., the unstructured discussion procedure was the least effective; and the demonstration plus presentation procedure was most effective (.05 level of significance). No differences were indicated between treatments on the written test scores. (ERIC abstract)

71. Moravek, M. The Relationship of Self Concept of the Beginning Teachers to Selected Aspects of Their Verbal Behavior as a Basis for Recommendations for Home Economics Education. (Ed. D. dissertation, Oklahoma State University) 1970. ED 042 048

Purpose. To compare self concept of beginning teachers at two stages, identify classroom verbal behavior patterns, and determine if a correlation exists between self concept and verbal behavior.

Procedure. Fifteen 1968-1969 home economics education graduates who would be beginning teachers during the 1969-70 school year participated. The Total Positive Score of the Tennessee Self Concept Scale was administered in the fall and spring, and verbal behavior was recorded during four 20-minute observations by using the Flanders System of Interaction Analysis.

Results. Data analysis revealed: (1) No significant change in self-concept had taken place between the fall and spring, but nine teachers showed a less positive concept at the second date, (2) Participants used fewer statements than the average teacher in the areas of accepting or clarifying student feelings or emotions, giving directions, and initiating student talk, and (3) Correlation of self concept with verbal behavior patterns was not strong enough to indicate a significant relationship. Future studies might include a more in-depth analysis of the dimensions of the self concept and categories of verbal and non-verbal behavior. (ERIC abstract)

72. Morgan, J.G., and Woerdshoff, F.J. Stability of student teacher behaviors and their relationship to personality and creativity factors. Journal of Educational Research, 1969, 62(6), 251-254.

**Purpose.** To investigate whether there are significant relationships between specific personality and creativity factors and classroom behavior of student teachers.

**Procedure.** The subjects for this study were 34 social studies student teachers, at the secondary level, who were enrolled in a six week student teacher course for seniors at Purdue University. Each subject received the Guilford-Zimmerman Temperament Survey (to measure certain personality factors) and The Creativity Self-Rating Scale (developed by Feldhausen in 1965 to measure gross creativity). These instruments were administered one week prior to the beginning of the course. Classroom behaviors were recorded using the Flanders Interaction Analysis Record during the first and last week of the student teaching period.

**Results.** The authors state that because of the size of the sample their findings are only tentative. Their findings do indicate that the teaching process can be analyzed quantitatively and that the results do provide pertinent information for the student teacher and the supervisor. Statistical analysis indicates relationships between certain personality factors and creative traits.



73. Masella, D.J. Perceptual-cognitive style as related to self-evaluation and supervisor rating by student teachers. Journal of Experimental Education, 1969, 37(3), 51-55.

Purpose. The present study represents an effort to determine the relationship between dogmatism and self-evaluation in teaching, and between dogmatism and the evaluation of supervising personnel.

Procedure. The subjects consisted of 128 junior year student teachers, 32 male and 93 female, who were enrolled in the elementary education program of the State University College at Cortland, New York. The students were selected according to their initial teaching experience provided during the preceding year. The students were, in general, considered to be of above-average ability by their supervising teachers. The supervising teacher group consisted of five male and eleven female teachers of grades N through 6. All teachers were full-time personnel, and supervised the subjects in the study for a period of eight weeks.

From the student sample, two groups were identified: the upper 25% scoring high in dogmatism (closed-minded student teacher--CST), and the lower 25% scoring low on dogmatism (open-minded student teacher--OST). The instruments used in the study were: the Dogmatism Scale (D scale-Form E) developed by Rokeach; the Teacher Personal Characteristics Inventory (TPCI); and the Teacher Evaluation Form (TEF).

During the first week of student teaching, each student completed the D scale. After the conclusion of the eight week teaching experience, and after the supervisor had submitted the grades, each student teacher was asked to rate the supervising teacher and himself on the TEF. In addition, each student was asked to rate himself on the TPCI, and to select the five most essential traits for effective teaching from the list of positive traits on the TPCI.

Results. Closed-minded student teachers (CST) rated themselves higher on teaching effectiveness than did open-minded student teachers (OST). CST also rated supervisors lower on teaching effectiveness, rated themselves in more positive terms, and displayed less variability in their descriptions of self than did OST. OST and CST did not differ significantly in the selection of five characteristics most essential to effective teaching.

These results suggest that the rating of one's teaching, which

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may be considered a manifestation of the evaluation of the self in total, and the rating of one's superordinates is, in some respects, a function of the perceptual-cognitive style of the rater.

Comment. The author of the study admits to several limitations such as population size, population characteristics, measurement devices, and the quantity and quality of interpersonal contact.

74. Muuss, R.E. Differential effects of studying versus teaching on teachers' attitudes. Journal of Educational Research, 1970, 63(4), 185-189.

Purpose. To investigate the differential effects on attitudes toward children which result from being a student enrolled in a sequence of education courses and being a beginning teacher.

Procedure. The Minnesota Teacher Attitude Inventory was administered to 52 students in an experimental fifth-year graduate program in elementary education: (1) before classes began, (2) after completing the academic program, and (3) following an eighteen-week internship.

Results. During the academic program, MTAI scores increased significantly in the direction of becoming more tolerant and child-centered ( $p < .001$ ). MTAI scores decreased significantly during the internship ( $p < .001$ ).

75. Nelson, H.Y., and Gritzmacher, J. Evaluation of Student Teaching in Home Economics. Ithaca: State University of New York, 1967. ED 016 860.

Purpose. To construct a rating scale for evaluating student teaching performance.

Procedure. Critical incidents reflecting outstandingly effective behavior in student teaching of home economics were collected from college supervisors, cooperating teachers, and student teachers and categorized according to specific behaviors. The critical behaviors were used to describe quality levels on a five-point continuum of 112 unidimensional items. Analysis of this scale, RS-112, by the Darlington procedure with student grades as criterion measures resulted in a scale, RS-35, 35-item with at least one item in each of 10 major behavior categories. Use of the RS-35 gave a better distribution of ratings than RS-112.

Results. The majority of cooperating teachers and college supervisors reported using a rating scale. About half preferred RS-35 to RS-112 and over half liked it better than their present instrument. Most reported a 20-minute testing time. Two-thirds said they would use the rating scale, if available. More than half of the student teachers felt that it provided an important objective basis for looking at their behavior. Recommendations concern (1) refining the scale, (2) differentiating more clearly between levels 3 and 5, (3) using the five items emerging from multiple regression analysis for a shorter rating scale, (4) including a place for rater comments about student teacher growth, and (5) using the scale at the middle and conclusion of student teaching. Both scales, opinionnaires, categories of student behavior, and the information form for reporting critical incidents are included. (ERIC abstract)

76. Nowlis, V. et al. The Graduate Student as Teacher. American Council on Education Monograph #2. New York: Rochester University, 1968. ED 028 741

Although the task of preparing graduate assistants to be teachers is widely neglected, some universities are making an effort to make the apprenticeship a worthwhile experience for both teachers and their students. This report identified some of the critical problems and issues associated with graduate student instruction and presents examples of proper and improper use of graduate students. Four basic teaching roles of the graduate student are defined and 10 principles of effective student teacher programs are formulated. The principles were generated at a 2-day conference at the University of Rochester in June 1967 at which academic deans from a number of universities submitted reports on programs at their institutions. Their reports cover surveys of practices, attitudes and beliefs related to graduate student instructors and assistants at Rochester; interviews with departmental chairmen and graduate and undergraduate students; innovations in several departmental programs at Rochester; and reports from other universities and of other studies. The extensive appendices contain program descriptions used as a basis for discussion at the 1967 conference.  
(ERIC abstract)

77. Ohmacht, F.W. Factorial invariance of the Teacher Characteristics Schedule and measures of two cognitive styles. Journal of Psychology, 1968, 69(2), 193-199.

Purpose. A previous study described the factorial composition of a battery of tests consisting of the Teacher Characteristics Schedule (TCS), two measures of open-mindedness (The California F Scale and The Dogmatism Scale), and measures of analytic attitude (The Embedded Figures Test and the Closure Flexibility Test). The latter two measures were studied in order to determine their effect on teacher behavior. Specifically, subjects identified as being low analytic-high dogmatic scorers gave responses to the TCS which resulted in lower scores on a scale measuring original vs. dull classroom behavior. Since the total sample of the previous study was small (N=57), the present study addressed itself to the reproducibility of the original findings with a new sample of subjects.

Procedure. The sample consisted of 70 male secondary education majors enrolled in their last required course in professional education as undergraduates. Subjects were administered a battery of 14 scales which included the 10 scales of the TCS. Analytic attitude and open-mindedness were represented by the same measures as in the previous study. The measures obtained were intercorrelated and subjected to a principal components analysis.

Results. The resulting factor structure was found to be invariant with respect to the prior sample. The factors of analytic set and open-mindedness emerged as in the previous study, and the findings of significant differences on the scale measuring original vs. dull classroom behavior suggest that these constructs may be useful in exploring teaching behavior. Both studies give some support to the notion that cognitive styles of teachers are relevant variables which might be included in studies of actual teaching behavior.

V

78. Padgett, H.G. A Correlation Study of the Minnesota Teacher Attitude Inventory and Kerlinger's ES-VII. ED 029 820

Purpose. The two purposes of this investigation were: (1) to study the common variance in the Difference score of the Minnesota Teacher Attitude Inventory (MTAI) and the D score of Kerlingers' ESVII with respect to sex and college classification; and (2) to determine relationships between subgroups on the Difference score of the MTAI and the D score on the ESVII.

Procedure. The subjects were 103 future teachers enrolled in an initial education course at a large state university. All were administered the ESVII and the MTAI and their scores were ranked.

Results. Analysis of the data indicates that students ranking at the high end of the MTAI scale tend to score significantly progressive on the ESVII scale while those ranking low on the MTAI tended significantly to have a traditional philosophy. Only one t-test was significant: males and females differed at the .01 level on the Difference score of the MTAI.

The author states that these findings support the suggestion that the 30-item Likert-type scale (Kerlinger) may yield more consistent results than the more widely used MTAI.

79. Padgett, H.G., and Gazda, G.M. Effects of Group Guidance and Group Counseling on the Self Concept and Professional Attitudes of Prospective Teachers. Washington, D.C.: American Personnel and Guidance Association. ED 021 290

Purpose. To investigate the hypothesis that group guidance and group counseling procedures would produce positive changes in the self-concept and professional attitudes of prospective teachers.

Procedure. The 302 subjects were drawn from two courses at the University of Georgia. The control and experimental groups were subdivided into two classroom groups: "directed procedures" (Instructor I) and "group guidance procedures" (Instructor II).

All subjects received the Tennessee Self Concept Scale (Fitts, 1965), the TERP (ES-VII) Attitude Scale, and the Vocational Decision Questionnaire (developed for this test by the authors). After participating in classroom procedures under Instructor I or II plus group counseling (if they had volunteered for it), the subjects were retested with the same three instruments with the addition of an Attitudinal Questionnaire (author-devised).

Results. Analysis of the data indicates that Group Guidance and Group Counseling had a significantly positive effect upon the subjects' self-concept and professional attitudes.



80. Pal, S.K. Personality patterns of engineering, law, medical, and teacher-training students: A comparative study. Journal of Social Psychology, 1968, 74(2), 287-288.

Purpose. To compare the personality patterns of engineering, law, medical, and teacher-training students.

Procedure. Each professional group consisted of 50 male students at the University of Allahabad, India who were in their final year of study. All were individually given the Rorschach Ink-Blot Test which was scored after the manner of Klopfer.

Results. Teacher-training students appeared to have a more realistic relationship to everyday life than did law and medical students. For the teacher-training group, impulse life seemed to be dominated more by immediate needs for gratification than by long range goals. Teacher-training and law students were emotionally more labile and responsive to social environment than the other two groups. All four groups indicated the ability to appropriately act out their emotions according to outer reality and social demands, and indicated the use of constrictive control rather than spontaneous functioning.

The author concluded that engineering students indicated a better level of adjustment while the other three groups fell within the normal range. Each group was found to have distinctive personality problems.

Comment. There was no discussion of the possible reasons for the findings. Would findings have been the same with a female population?

81. Pale, R.T., and Dumas, W. Self concept change in elementary student teachers. SPATE Journal, 1970, 8, 115-121.

Purpose. To determine the nature and extent of student teachers' changes in self concept in the interval between the beginning and end of their student teaching.

Procedure. Sixty-four student teachers were administered the Fiedler Perception Scale (adapted by McCallon) at the beginning and end of their student teaching.

Results. No statistically significant negative changes occurred for any category. Positive change was most pronounced for the student teachers who worked with slow or disadvantaged children, and statistically significant positive changes were apparent for several other experience categories.

Comment. It was noted that students overloaded with college course work or part-time employment during student teaching perceived themselves as less successful. No statistical breakdown was given for this information.

82. Powell, J.A., and Benson, G.P. Attitudes toward young children. Journal of Home Economics, 1969, 61(9), 687-692.

Purpose. To reevaluate the relationships between the personality traits of child development students, as measured by the Minnesota Multiphasic Personality Inventory (MMPI), and their attitudes toward young children as measured by the Minnesota Teacher Attitude Inventory (MTAI).

Procedure. The subjects were 61 junior and senior female students enrolled in a five credit course in child development at Colorado State University.

The MMPI and MTAI were administered to this population during the last week of the course. MTAI scores used were retest scores since the MTAI had been administered during the first week of the course as part of another study.

Results. Analysis of the data indicate that the subjects who indicate high rapport attitudes toward children respond to test items in the "socially acceptable" manner more often than low rapport subjects. High rapport attitude toward children is positively correlated with such personality indicators as individualism, femininity, sensitivity, talkativeness and social extroversion.

Comment. This article is an excellent source of information about the tests used, the faults, strong points, etc. Good use of statistical analysis in interpretation of data. Researchers took everything into account that could have possibly affected their findings.

83. Price, J.A. An instrument for measuring student teacher morale. Journal of Educational Measurement, 1971, 8(1), 47-48.

Description of Purdue Teacher Opinionnaire

The PTO is 100-item standardized instrument devised to measure 10 dimensions of teacher morale. In its final form it measures 12 factors. The test expresses opinion and the testee is required to respond on a 4-point basis from agree through disagree.

The PTO was administered to 299 student teachers. The Kuder-Richardson internal consistency reliability coefficients for the 14 dimensions ranged from .59 to .93 with a reliability coefficient of .96 for the total scale.

84. Pugh, R.C. Evidence for the validity of the behavioral dimensions of Teaching-Characteristics Schedule Scales, Educational and Psychological Measurement, 1968, 28, 1173-1179.

Purpose. To test the validity of the Behavioral Dimensions of the Teaching-Characteristics Schedule by partitioning the variance of each of the five scales into three components: (a) the variance which was accounted for by Cattell's Sixteen Personality Factor Questionnaire, (b) true-score variance which was not accounted for by the 16 PF, and (c) error variance.

Procedure. The scales were administered to 125 students at Indiana University who had just completed student teaching. These data were used to establish matched-halves for each of the 5 scales. The BDT-CS scale and the 16 PF were administered to 87 graduate students in education who had taught at least one year in elementary school. The 87 graduate students were randomly assigned to two groups. One group was used to determine which 16 PF factors significantly accounted for variance of the five BDT-CS scales. The second group was used as a replication sample.

Results. Substantial true-score variance was shown to exist as evidenced by Spearman-Brown estimates, based on matched-halves, ranging from .57 to .74. Factors from the 16 PF accounted for .25-.27 of the variance in the BDT-CS warm-spontaneous scale, .23-.29 of the variance in the BDT-CS organization scale, and .11-.14 of the variance in the viewpoint scale. The BDT-CS involvement and viewpoint scales, which show substantial reliability (.74 and .70, respectively) show the largest proportion of unique variance of any of the BDT-CS scales. The variance components identified in this study tend to contribute to the overall validity of the five BDT-CS scales.

85. Raina, M.K. Creativity and teaching success. Psychological Reports, 1970, 26, 70.

Purpose. To use creative thinking ability as a factor in the prediction of teaching success.

Procedure. The nonverbal form of the Torrence Tests of Creative Thinking was administered to 55 education students at a college in India. Teaching success was measured by the marks obtained on a final teaching practice examination. The product-moment rs between pairs of dimensions of creativity and teaching practice marks were calculated. Scores in fluency, flexibility, originality, elaboration, and a total creativity score were derived.

Results. Coefficients between teaching practice marks and fluency, flexibility, and total creativity were positive but not significant.

Comment. These results appear preliminary and further research is needed to examine the role of creative thinking factors in teaching success.

86. Raina, T.M. Authoritarianism of Indian Teacher Educators.  
Journal of Teacher Education, 1969, 20(3), 317-322.

Purpose. To study the possible level of authoritarianism of Indian teacher educators and its relationship to the number of years in the profession, sex, age and level of education.

Procedure. The sample was composed of 81 males and 19 females who teach in the two colleges of education in the State of Rajasthan, India. All received the Adorno F-Scale which purports to tap antidemocratic potentials in ones value system or attitudes.

Results. Findings indicate that Indian teachers seek values that represent conventionalism and tend to condemn and reject those who violate conventional norms and values. They prize submission and idealize authority of an in-group. No significant differences were found between the various variables and authoritarianism, except with regard to sex. The females exceed the males at the .05 level.

87. Richek, H.G. A comparison of characteristics of prospective secondary school teachers enrolled in two different degree programs. California Journal of Educational Research, 1970, 21, 204-207.

Purpose. To determine if there are personality and attitudinal differences between prospective secondary school teachers enrolled in colleges of education and those enrolled in liberal arts colleges.

Procedure. In a southwestern university, all students seeking teaching certificates are required to complete a personality assessment packet which includes the Myers-Briggs Type Indicator, and the Bown Self-Report Inventory (Bown and Richek, 1967). The latter includes a six-item Children Scale. Scores on the SRI Children Scale and the MBTI Extroversion-Introversion (E-I) dimension were available on 156 female prospective secondary school teachers. Forty of these teachers were enrolled in the College of Education, and 116 were enrolled in the College of Arts and Sciences.

Results. While it was found that teachers enrolled in the College of Education who were English majors felt more warmly toward children than Arts and Sciences English majors ( $p < .05$ ), the overall hypothesis was not supported by the data.



88. Richek, H.G. Note on intercorrelations of scales of the Myers-Briggs Type Indicator. Psychological Reports, 1969, 25, 28-30.

Purpose. To discover whether the Extraversion/Introversion scales are independent of the other Myers-Briggs Type Indicator Scales in a population of prospective teachers.

Procedure. Subjects were 435 college students who were preparing to teach. They completed the Myers-Briggs Type Indicator (MBTI).

Results. For the men (N=70) a significant correlation between Extraversion/Introversion and Thinking/Feeling was found.

89. Rogers, C.H. Factors Associated with Supervising Teacher Effectiveness. (Ed.D. thesis, Cornell University) 1964.  
ED 018 653

Purpose. To identify certain personal and professional characteristics of supervising teachers which influenced the performance of their role and to determine the influence of various kinds and amounts of professional training on the performance of the supervising teachers.

Procedure. A scale developed with the aid of a jury of outstanding agricultural teacher educators evaluated the performance of supervising teachers who served in the North Atlantic and southern regions during the 1962-63 academic year. The most effective one-third and the least effective one-third of the supervising teachers were used as two study groups in the investigation. The data from 195 mailed questionnaires were analyzed using the t-test and the chi-square test. No differences were found between the two groups of supervising teachers regarding previous occupational experience in education, number of years of vocational agriculture teaching experience, number of years the teacher had taught at his present location, kind and amount of undergraduate and graduate professional training, and participation in supervising teacher workshops and professional and technical workshops and conferences, and the amount of special college training in student teaching supervision.

Results. The findings of this study corroborated the conclusions of earlier research which indicated that supervising teacher performance was influenced by previous experience as a supervising teacher, academic degree held, reading of professional literature, and participation in professional and local community organizations.  
(ERIC abstract)

90. Rogers, V., and David, O.L. Varying the Cognitive Levels of Classroom Questions: An Analysis of Student Teachers' Questions and Pupil Achievement in Elementary Social Studies. Paper read at American Educational Research Association Annual Meeting, 1970. ED 089 189

Purpose. In view of the tendency for teachers to engage in lower order questioning behavior, this study investigated whether student teachers' questioning strategy can be modified to increase their use of higher level cognitive questions and also whether student achievement was higher in classes where the teacher asked more high level questions.

Procedure. Twenty student teachers and their fifth-grade pupils served as subjects. Ten student teachers were assigned to the experimental group while the remainder comprised the control group. The experimental group met with the principle investigator for five two-hour seminars over a four week period. Seminars and source book focused on the purposes and use of varying cognitive levels of classroom questions, Audio and video tapes, micro-teaching, and role playing of questioning behavior were utilized. The control group received no special training.

All student teacher subjects planned and taught a four day instructional unit, with a culminating test, on the West Indies. Lessons were 30 to 45 minutes in length. The criterion measure was the Teacher Oral Questions Observation Schedule (TOQOS) which included a seven category cognitive question hierarchy covering aspects of memory, translation, interpretation, application, analysis, synthesis, and evaluation. Four additional non-cognitive categories were used--affective, procedural, textbook, and pupil-initiated. A trained observer using the TOQOS rated student teachers once prior to and on each of the four days for 30 minutes. Student teachers constructed unit examinations which were rated by the TOQOS but which were not administered. The researcher constructed the pupil achievement criterion test which was validated for appropriateness. Data were subjected to analysis of variance using computer programs based on multiple linear regression models.

Prior to experimental training, all subjects taught a unit on income tax so that initial questioning behavior differences between the two groups could be assessed. Results indicated that the two groups were assumed to be similar in their oral questioning behavior at the beginning of the experiment.

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**Results.** The data indicated significant differences on five of seven TOQOS category variables. Group C (control) subjects asked a higher percentage of application questions; no Group C subjects asked analysis, synthesis, or evaluative questions (the differences between the two groups were significant for these categories). Ten Group E (experimental) subjects asked very few high level questions. Group E subjects asked a significantly lower percentage of procedural questions than did Group C subjects. This analysis does reveal that specially trained student teachers do demonstrate significant differences in the cognitive emphasis of the questions they ask.

Results of the analysis of student teachers' test questions indicated that Group E subjects formulated a significantly higher percentage of questions on six of seven categories. The control group composed no questions from categories other than memory and interpretation.

There were no significant group differences in pupils' social studies achievement between classes taught by student teachers with preparation in the purposes and use of varying cognitive levels of questions and those taught by student teachers without special training. The non-differential pupil achievement result may be attributed to the limited time pupils were exposed to the higher level questions and to the probability that student teachers have little "power" to influence pupils in their test responses. Recommendations for further research are made in terms of the relationship between teacher behavior and student achievement. The place of question strategy training in teacher education needs further exploration.

91. Ross, C., and Swick, K. An explanatory study in the development of positive changes in student-teacher attitudes toward inner-city teaching. Education and Urban Society, 1969, 2(1), 112-117.

Purpose. To compare attitudes of a group of student teachers before and after participating in a program which required them to live in an inner-city environment and take part in community involvement activities while teaching in inner-city schools.

Procedure. Teachers. (N not given) were given the Purdue Teacher Opinionnaire prior to teaching. At the conclusion of student teaching, they were given the Purdue Teacher Opinionnaire and a Student Teacher Opinionnaire devised by the director of the project (details not given).

Results. As a group, the attitudes of the student teachers toward teaching improved significantly; they also held a more affirmative view toward the education establishment.

92. Rothbart, M., Dalfen, S., and Barrett, R. Effects of teacher's expectancy on student-teacher interaction. Journal of Educational Psychology, 1971, 62, 49-54.

Purpose. This study attempted to clarify processes mediating teacher expectation and changed pupil behavior. Teacher behavior in a simulated classroom setting was evaluated focusing on a) the teacher's allocation of time between "bright" and "dull" students, b) the amount of reinforcement (encouragement) directed towards the two groups, and c) the resulting verbal production of "bright" and "dull" pupils.

Procedure. Thirteen senior teacher trainees at McGill University were recruited for a "student interaction" study with 27 male and 25 female eighth and ninth grade student volunteers. Each discussion group consisted of one teacher trainee and four students. The four student subjects were randomly assigned to a high-expectancy or low-expectancy condition. Sessions were video taped by concealed apparatus and were also observed "live" by experimenters behind a one way mirror who recorded differential teacher attention time and student talk time. The teacher was told the objective was studying student behavior while students were told the objective was studying approaches to English literature. Following the session, teachers rated each student on a bipolar continuous rating scale as to intelligence, cooperation, appeal, curiosity, interest, need for approval, contribution to the discussion, and potential for future success.

Results. The data indicated that the teachers spent more time attending to the high expectation than low expectation students. A three-way analysis of variance was performed on students' verbal production and indicated a marginally significant difference towards a tendency for the high-expectation students to talk more than low-expectation students. Teachers saw the high-expectation students as somewhat more intelligent ( $p < .08$ , two-tailed test) and as having greater potential for future success ( $p < .02$ , two-tailed test); the low-expectation students were viewed as having higher need for approval ( $p < .01$ , two-tailed test).

These data suggest that teachers attend more to the "better" pupils and that these pupils respond in turn by talking more.

93. Salomon, G., and McDonald, F.J. Pretest and posttest reactions to self-viewing one's teaching performance on video tape. Journal of Educational Psychology. 1970, 61, 280-286.

Purpose. To examine changes in attitude and cue selection patterns resulting from teacher-trainees viewing video tapes of themselves teaching.

Procedure. Subjects were 38 teaching interns in a California state college. Each intern taught a 50 minute lesson to a 5th or 6th grade class; the lesson was video taped. At the end of the lesson the intern was given an attitude questionnaire containing eight concepts to be rated on a seven point scale. The concepts were taken from Osgood's potency, activity and evaluative factors. The intern was interviewed at this time. The next day he viewed a 20-minute selection of the video recording of his teaching. No comments were made about the lesson. At the end of the self-viewing, the intern again completed the attitude questionnaire and was interviewed.

Results. The eight concepts received different ratings by the interns before and after self-viewing ( $p < .001$ ). The concept Teacher Education received a significantly lower rating after self-viewing ( $p < .05$ ), while "My Appearance in the Classroom" received a significantly higher rating ( $p < .05$ ). In general, Institutional and Self-Non-Professional concepts received the highest ratings pre-viewing; post-viewing Self-Professional concepts and Professional concepts were higher while the Institutional concept dropped significantly.



94. Saxe, R.W. Motivation for teaching. Record, 1969, 70(4), 313-320.

Purpose. This investigation dealt with factors which influenced students' decisions to become teachers.

Procedure. The subjects were 94 students enrolled in senior education courses at Illinois Teachers College. Questionnaires requiring information about reasons and persons behind the decision to become teacher, as well as the time at which this decision was made, were filled out.

Results. The findings show that females make their decisions earlier than males. The bulk of the subjects became teachers for idealistic reasons and the most influential person involved in their decision making was a friend or relative who was a teacher.

There were no statistical analyses of the data. Because of the brevity of the questionnaires, personality, personal history, cultural and social background, etc., were not considered as variables.



95. Sparr, S. How to reduce authoritarianism among teachers: The human development approach. Journal of Educational Research, 1970, 63(8), 367-372.

Purpose. To compare attitudes of education students toward themselves and others before and after a course in human development.

Procedure. Subjects were 320 students taking a course in human development at the University of Maryland College of Education. All were given a questionnaire during the first and again during the last week of the semester. The questionnaire consisted of five attitude scales of 73 items, with a Likert measure from 1 to 6 for each item, ranging from "I agree very much" to "I disagree very much."

Results. Men had significantly higher F scale scores than women at the end of the semester ( $p < .05$ ). They had more authoritarian attitudes toward children both at the beginning and end of the semester ( $p < .05$ ). Both men and women had significantly lower F scale scores at the end of the semester ( $p < .001$ ) and significantly less authoritarian attitudes toward children at the end of the semester ( $p < .001$ ).

96. Schluck, C. Using the MMPI to Predict Teacher Behavior.  
Paper read at American Educational Research Association  
Annual Meeting, 1971. ED 049 313.

Purpose. To determine the relationship between a student's score on a personality inventory and his behavior as a teacher at a later time.

Procedure. Seventy students entering the M.A.T. program at Temple University were given the Minnesota Multiphasic Personality Inventory. Six months after they began teaching, data on their classroom performance were collected using two observational instruments (Smith's Observation Schedule and Record-Form 4V, and Flander's Interaction Analysis). Linear, multiple linear, and curvilinear relationships between the MMPI data and the observational data were studied.

Results. Using the .05 level of significance, prediction equations with significant regression coefficients were found for women for 5 of 8 OScAR factors and 19 of the 42 IA combinations. For men, prediction equations with significant coefficients were found for 4 of 9 OScAR factors and 25 of the 42 IA combinations. Thus, enough significant relationships were found to conclude that the MMPI might be useful in predicting future teacher behavior.

97. Seperson, M., and Joyce, B. The Teaching Styles of Student Teachers as Related to the Teaching Styles of Their Cooperating Teachers. Paper read at American Educational Research Association Annual Meeting, 1971. ED 051 080

Purpose. To explore the relationship between teaching styles of student teachers and cooperating teachers over a 15-week semester of contact.

Procedure. The subjects were 19 teacher candidates in a preservice teacher education program. The student teachers were liberal arts graduates in a year-long master's degree program which included "observation-participation" experiences in the fall semester and full-time student teaching in the spring semester. Nine behavioral samples were obtained at various times during the year. These samples were coded according to the Joyce Conceptual Systems Manual. Analyses included calculation of eight indices of teaching behavior for each student teacher and each cooperating teacher, and correlations between student teacher behavior and cooperating teacher behavior at the preteaching, early student teaching, and late student teaching levels.

Results. Prior to student teaching, no positive correlations were observed between initial teaching styles of cooperating and student teachers. Later correlations, on four of eight indices, indicated that the teaching behavior of the student teachers had become significantly related to cooperating teacher behavior early in student teaching and remained so related throughout student teaching.

Difference scores were computed and analyzed to follow patterns of influence over five lessons. Inspection of difference scores revealed no consistent pattern of influence once the early impact of the cooperating teacher had been felt. Thus, although important correlations were found between student teacher and cooperating teacher behavior, behavioral differences did exist and did not entirely diminish.

Comment. In explaining the early influence of the cooperating teacher, it was pointed out that the demands of setting as well as the verbal behavior of the cooperating teacher may play a central role in the type of behavior the student teacher must adopt. This study conflicts with previous findings attesting to the lack of significant relationships between teaching style of student teachers and cooperating teachers.

98. Shanks, J.L. Concept Achievement in Science and Its Relationship to Some Non-Intellectual Characteristics of Prospective Elementary Teachers. (Ph.D. dissertation, University of California) 1969. ED 054 926

Purpose. This study focuses on two major factors which predict success in science teaching; knowledge of the subject matter and the teacher's "teaching personality." The purpose of this study was to identify these influential characteristics which affect concept acquisition, while determining their relationships with the major projected patterns of teaching behavior.

Procedure. The samples for this study were females in an elementary science methods course. The subjects received instruments measuring acquisition of science concepts, cognitive style, personality traits, intelligence, comparative interests of elementary teachers, and teacher characteristics.

Results. The results revealed that high achievers of concepts of science demonstrated an analytical cognitive style, were described as goal oriented, self-directed women with a firmness of character and above average intelligence, but produced the lowest scores on the Elementary Teacher Scale of the Strong Vocational Interest Blank (SVIB). These women were seen as being impatient, stubborn, demanding, imaginative, and more emotionally insecure than the comparative group via SVIB. Those women who were low achievers of concepts of science demonstrated a non-analytical cognitive style, were described as lacking in self discipline and self-confidence that might have put their average intelligence to better use, but via SVIB were characterized as serious, sincere, industrious, responsible women manifesting a conservative life style. (ERIC abstract)

99. Shoudel, P.W. A Descriptive Research Study of Biracial Student Teacher Teams. Final Report. Little Rock, Arkansas: Philander Smith College, 1969. ED 032 280

Purpose. To determine whether racial attitudes change after one participates in a biracial program.

Procedure. The subjects were 71 student teachers drawn from various colleges in Arkansas. Sixty students worked in biracial teams; eleven worked in the schools with a cooperating teacher. The subjects worked under black teachers in black schools or under white teachers in white schools. A control group of 30 black and 30 white students was also used. All the subjects did their student teaching in ten different school systems over four semesters.

The subjects were asked to answer attitude questions about black and white pupils, both before and after the program experience. This questionnaire was also administered to the pupils and supervising teachers.

Results. Pre- and post-test analysis of the data indicates that close association and interpersonal relationships with people of another race bring about greater understanding and acceptance.

100. Smith, S.P. The effects of student teaching in biology on teacher attitudes. School Science and Mathematics, 1970, 70(8), 741-745.

Purpose. To determine the possibility of identifying attitudinal shifts with reference to the concepts "Biology" and "Inquiry Approach".

Procedure. The subjects were 30 students in a biology methods course. Prior to their student teaching experience each received the Semantic Differential (designed to measure the two concepts of "Biology" and "Inquiry Approach"). The identical test was re-administered one week after student teaching began.

Results. Analysis of the data indicates a significant attitude change in a positive direction between the pre- and post-test administration of the Semantic Differential. It was concluded that student teaching experience has a positive effect on the subjects' attitudes toward biology and the inquiry approach.

101. Soares, A.T., and Soares, L.M. Interpersonal Perceptions of Student Teachers. Paper read at American Educational Research Association Annual Meeting, 1971. ED 048 100

Purpose. (1) To assess how student teachers view themselves as prospective teachers; (2) To assess how student teachers think their college teachers and cooperating teachers view them as prospective teachers; and (3) To assess how college and cooperating teachers view the students as teachers and how they think the students view themselves as teachers.

Procedure. Seven forms of a self-perception inventory of 72 traits expressed as dichotomous pairs of a continuum were given to all three groups (student teachers, college supervising teachers, and cooperating teachers) after students had completed their internship. The study included 121 student teachers and 14 college supervisors. The number of cooperating teachers was not given.

Results. The students had significantly higher perceptions of themselves as teachers than either the cooperating teachers or supervisors had of them. Both groups of teachers rated the students lower than they thought the students rated themselves. The students thought their teachers would rate them higher as prospective teachers than they actually did.

102. Stallings, W.M. et al. Comparative course attitudes of student teachers and nonstudent teacher groups. Illinois School Research, 1970, 7(1), 25-29.

Purpose. To discover the effects of student teaching on student attitudes toward psychology, educational psychology and professional education courses; and to compare them with the attitudes of undergraduate education majors who had not done student teaching.

Procedure. Subjects (N not given) were undergraduate students enrolled in an educational psychology course. They were tested with a semantic differential on 3 concepts--professional education courses, educational psychology courses, and psychology courses using a seven-point basis for scoring each concept on 13 scales. They also responded to the Illinois Course Evaluation Questionnaire which uses a 4-point Likert-type scale to ascertain attitudes toward previous education and psychology courses. The same instruments were administered for posttesting.

Results. The difference in pretest attitudes toward previous education courses was not significant between the two groups. Pretest measures of attitudes toward educational psychology were significantly ( $p < .05$ ) more favorable than toward education courses. Attitudes toward the course decreased in favorability between the beginning and end of the semester, but the decrease was not significant. On the pretest, the non-student-teaching group had significantly more favorable attitudes toward psychology and education courses ( $p < .05$ ) than the student teachers. On the posttest all mean scores of non-student-teaching sections were higher than student teaching sections; however the difference was statistically significant only for education courses.



103. Strauch, J.D., Chester, P.N., and Rucker, C.N. Teacher aide attitudes toward the mentally retarded. Training School Bulletin, 1970, 67(1), 15-19.

Purpose. To evaluate the attitude change in teacher aides resulting from a six-week summer program at a residential institute for retarded children.

Procedure. Ten college students working as teacher aides in a resident facility for mentally retarded children were the subjects of this study. None of the students had prior experience with retarded children.

The Semantic Differential (Osgood, Suci, and Tannenbaum, 1957) was administered during an orientation session, and again six weeks later at the end of the program. Attitudes toward four concepts-- State Training School, Children I Work With, Normal Children, and Institutionalized Retarded Children--were determined.

Results. Analyses of the data indicate that the subjects' attitudes toward the institution and its patients improved as a result of contact. The pre- and posttest means differed significantly ( $p < .01$ ). The experience did not appear to reinforce stereotypic or negative attitudes.

104. Taylor, M., and Dropkin, S. Perceived Problems of Beginning Elementary School Teachers as Related to Student Teaching Placement and Job Location. Paper read at Educational Research Annual Convocation, 1965. ED 013 784

Purpose. To present the association of student teaching locale with job locale, and the congruence of student teaching, and job locale with the perceived difficulties of beginning teachers.

Procedure. The subjects were 136 of the 191 first year teachers in the June 1963 class of Queens College. The instrument used consisted of 70 items in seven areas for which the subject was to pick one of six statements that ranged from "cannot solve" to "do not consider this a problem."

Results. The data indicates the following as perceived areas of difficulty (in descending order): (1) discipline, (2) teaching methods, (3) parent relations, (4) evaluation of students, (5) classroom routines, (6) material and resources, (7) planning. The authors state that because of the lack of control on the student teaching variables, the null hypothesis relevant to the efforts of congruity could not be tested in an unequivocal manner.

Comment. There was no statement about the questionnaire, who developed it, etc. The study, in general, was rather sketchy in its approach to the problem at hand.

105. Torrance, E., Tan, G., and Allman, T. Verbal originality and teacher behavior: A predictive validity study. Journal of Teacher Education, 1970, 21, 335-341.

Purpose. To predict the behavior of elementary education majors by using scores on a test of creative thinking ability, administered at the time the subjects were college juniors, and self-reports on achievements and activities obtained six years later.

Procedure. Subjects were 325 elementary education majors (306 women and 19 men) in their junior year at the University of Minnesota. Predictor instruments were creative thinking batteries--Forms A and B of "How Good Is Your Imagination?"--which were administered at a regular class meeting, half the group receiving Form A, half receiving Form B. The rationale is based on a previous finding, with this instrument, that the measure of originality comes closest to the essence of creativity.

The criterion instrument, "A Teacher's Self-Inventory," attempted to translate the concept of creative behavior into a 127-item checklist of teacher behaviors.

Questionnaires were completed by 114 subjects and the data compared with the predictor scores. Sixty-nine of the 127 items differentiated between those high in originality (upper 27%) and those low in originality (lower 27%).

Results. In synthesizing the results, an emerging pattern is noted--the lack of compulsivity of the high originality group. This is seen as congruent with the theory that the creative person is not compulsively nonconforming but is free to conform or nonconform in response to what is effective, right, true, beautiful, etc. The practices of high group subjects seemed to be different from those of low group subjects: e.g. high more frequently reported that they occasionally used role playing, problem solving, panels, experiments, research, etc., while low tended not to employ these methods.

On the basis of item-analysis data, an empirical scoring key was developed for responses which were significantly differentiating. Inventories were then scored with this key and the scores correlated with the originality and total creative thinking scores. Correlation coefficients obtained were .62 and .57 respectively.

Since it was found that the more creative teachers tended not to disclose their original ideas to their supervisors and co-workers, it was suggested that teacher education programs should encourage highly original students to acquire skills in presenting and selling their ideas for the improvement of education.

106. Traylor, E.B. Authoritarianism and Time as Influences on Decision Making. Wichita: Kansas State University College of Education, 1969. ED 044 395

Purpose. To examine the decision-making process of prospective teachers to determine the extent to which time and authoritarianism influence decisions about the validity of categorical syllogisms with attitudinally relevant conclusions; to discover if practice in solving syllogisms and the induction of a set improve reasoning on attitude structured syllogisms for authoritarians; and to discover whether the improvement persists over time.

Procedure. One hundred students taking educational psychology, were given the Minnesota Teacher Attitude Inventory and the California F Scale. Selected statements from the MTAI were used as conclusions for syllogisms constructed for the Syllogism Test (40 syllogisms with a 2-point valid-invalid scale). Logically valid conclusions that the students disagreed with and judged to be invalid or logically invalid conclusions that the students agreed with and judged to be valid, were classified as attitude errors. Authoritarianism was determined by the F scale. Programmed instruction was given each student. Half the students were given the Syllogism Test immediately after the program; the other students were given the Syllogism Test after a delay of one week. Accompanying the second administration of the test was a page of information explaining the possible influence of the emotional content of the syllogism on the decision-making process, giving the student a "set" for the test.

Results. Students high in authoritarianism make more attitude errors in reasoning. Instruction and set reduce attitude errors in reasoning for both high and low authoritarians. The reduction is greatest for high authoritarians since they make more attitude errors initially. Time did not influence attitude errors.

Comment. An interesting use of the concept of cognitive dissonance.

107. Uchiyama, A., and Lindgren, H.C. Ideal teacher concepts: Attitude shift after practice teaching. Psychological Reports, 1971, 28, 470.

Purpose. To determine (1) whether supervisors of elementary teachers would characterize "an ideal female elementary teacher" in a manner similar to student teacher peer perceptions, and (2) whether students in practice teaching would be closer to supervisors perceptions than would students taking their first course in the teacher-training sequence.

Procedure. A 30-item forced choice test was constructed. This list was administered to 16 supervisors of elementary teachers, 16 elementary student teachers and 16 educational psychology students, who were asked to select the adjective in each pair that best characterized the ideal elementary teacher.

Results. Ideal teacher concepts held by practice teaching supervisors are closer to the personality stereotype that emerges from the peer judgments of high scorers on the student teacher scoring formula (an earlier study) than are the concepts held by students entering the teacher education program. Students actually engaged in practice teaching score closer to the supervisors mean than others.

Comment. A summary of an article in the Journal of Educational Psychology, 1968, 59, 119-127.

108. Veal, L., and Scott, O. Student Teaching Performance in English as Measured with Checklist of High School Class Activities. 1970. ED 040 130

Purpose. To examine the performance of University of Georgia student teachers in English on the six dimensions of the Checklist of High School Class Activities and to compare the evaluation with student teaching grades, academic grades, and scores on the National Teacher Examinations.

Procedure. The 74-item checklist was administered to the pupils in one class of each of 16 secondary school English student teachers at the end of one quarter, with classes of exceptionally high or low ability being eliminated.

Results. Although there was great variability in individual scores, the student teachers as a group tended to be highly rated by their pupils. These ratings, however, showed no significant correlation with student teaching grades, academic grades, or National Teacher Examination scores. Results indicate that pupil perception of a teacher's performance tends to differ from that of other evaluation sources. (ERIC abstract)

109. Veldman, D. Pupil evaluation of student teachers and their supervisors. Journal of Teacher Education, 1970, 21, 165-167.

Purpose. To provide data in reference to two questions: 1) Do student teachers and their cooperating teachers (supervisors) differ in their average levels of evaluation by pupils? 2) Is there a correlation between the scores of student teachers and their supervisors on pupils' evaluations?

Procedure. Pupils in 55 seventh grade public school classes in Austin, Texas completed the Pupil Observation Survey Report (POSR) twice -- once to evaluate their student teacher and once to evaluate their regular teacher. All teachers involved were female. In obtaining data for the first question above, a repeated measures analysis of variance was computed for each POSR factor variable. Data for the second question above were obtained by computing correlation coefficients between student and supervisor scores for each POSR factor variable.

Results. Results for the first question indicated significant differences in pupil perception of student teachers and their supervisors. Supervisors were rated as less friendly and cheerful, less lively and interesting, more poised and knowledgeable, more firmly controlling, and somewhat less directive than the student teacher assigned to them. There was a tendency for pupils to prefer student teachers over their supervisors.

The data concerning the second question indicated that if the pupil reports are valid evaluations of classroom behavior, there is no evidence present that supervisors influence the behavior of their student teachers appreciably. Evidence was present supporting the idea that, since student teachers first begin their classroom teaching several weeks after the start of the semester, supervisors establish the classroom atmosphere and structure class activities and student participation.

Comment. The results are not discussed in terms of psychological variables which may account for the higher ratings of student teachers. One such variable may be the pupil perception of the regular teacher as the authority figure in the classroom. Pupils may rate the regular teacher more negatively because of this factor. It is also possible that since student teachers do not bear ultimate responsibility for classroom behavior, they are more permissive to their pupils and consequently more favorably rated.



110. Victor, J.R., and Harootunian, B. Conceptual Systems Theory and Attitudes Toward Teaching. Paper read at American Educational Research Association Annual Meeting, 1971.  
ED 051 078

Purpose. To explore the relationship between the theoretical construct of Conceptual Level and the dimensions of the Questionnaire of Teacher's Belief.

Procedure. The Questionnaire of Teacher's Belief (Wehling and Charters, 1969) and Hunt's Paragraph Completion Test of Conceptual Level were administered to 83 teacher education undergraduates.

Results. Teachers high in dimensions that tend to illustrate short-range concerns (Teacher Direction) tend to be basically concrete in their perceptions ( $p < .01$ ). The correlation between student autonomy and conceptual level was not significant.



111. Wainon, M.D. et al. The Effects of Knowledge About Subject Matter on the Performance and Attitudes of Prospective Teachers. Normal: Illinois State University, 1971.  
ED 052 130

Purpose. To determine whether teachers trained in microplanning (1) would score higher on tests of teacher effectiveness; and (2) would hold more stable attitudes toward pupils and teaching.

Procedure. Ten secondary school social studies majors volunteered to take an experimental teacher education sequence involving microplanning; a control group for the experiment consisted of 10 secondary school social studies majors taking the regular sequence. All subjects were given the same statement of objectives and unit booklet and randomly assigned five to ten high school pupils. They planned and taught four half-hour lessons. The pupils were then administered a two-part test measuring recall of information and ability to reason using the material covered. The Minnesota Teacher Attitude Inventory and the Sorenson Teacher Role Preference Inventory were administered to the experimental group as pre- and posttests along with a course evaluation questionnaire.

Results. In eight out of ten instances the experimental subject outperformed the paired control subject in terms of mean pupil achievement. It was found that no significant change of attitude occurred as a result of the experimental program.

112. Walberg, H.J., Metaner, S., Todd, R.M., and Henry, P.M.  
Effects of tutoring and practice teaching on self-  
concepts and attitudes in education students. Journal  
of Teacher Education, 1968, 19(3), 283-291.

**Purpose.** This experiment studied the effects which being a tutor had on education students and contrasted the effects of tutoring with the effects of practice teaching on both self-concept and attitudes.

**Procedure.** The subjects of the practice group were 64 female college seniors and the subjects of the tutoring group consisted of 77 female college juniors.

The tutors worked with students from Boston's inner city schools while the practice teachers worked in suburban schools.

Before and after the experiment each group was administered three tests; (1) a 26-item, seven-point semantic differential scale measuring opposite adjectives; (2) a test (developed by D. Wright of the University of Chicago) which is similar to the first test but measures opposite phrases; (3) a modified version of the Minnesota Teacher Attitude Inventory.

**Results.** Statistical analysis of the data supports the theory that middle-class students trained for middle-class pupils have declining self-concepts when they encounter the realities of poverty. On the other hand, teachers in affluent communities, although declining on some aspects of professional self-concept and attitudes, appear to gain more personal satisfaction from their teaching.

Findings indicate that the decline in professional self-concept of practice teachers is related to the conflict between the personal-ity need to be close to children and the role demand to establish authority and discipline. This brings about a lowered self-evaluation in their teaching role.

113. Weil, P.E., and Weil, M. Professionalism: A study of attitudes and values. Journal of Teacher Education, 1971, 22, 314-318.

Purpose. To determine the relationship, if any, between the attitudes and values of students preparing to become teachers and degree of professionalism.

Procedure. Two questionnaires were devised. One consisted of ten items measuring professionalism and obtaining personal history background material. The other was a modification of the value scale developed by Morris Rosenberg and contained 70 items that classified sets of values as people-oriented, extrinsic reward, and expressive. These two questionnaires were administered to 442 college students during their sophomore year, and again in their senior year after they had completed practice teaching.

Results. On the first questionnaire 18.3% of the students fell into the low professionalism classification; 62.7% into the medium; and 19% into the high. With regard to values, 30.2% were predominantly people-oriented; 57.5% were predominantly expressive; and 12.3% fell into the extrinsic values category.

Further findings were that: (1) a student's degree of professionalism is independent of value orientations; (2) women students who plan to retire from teaching because of homemaking have a lower degree of professionalism than those who plan to remain in teaching until retirement, taking maternity leaves when necessary ( $p < .001$ ); (3) degree of professionalism appeared to be independent of the sex of the individual; (4) a significant relationship existed between degree of professionalism and the time at which the decision to become a teacher was made--the earlier the decision (7th through 10th grade) the higher the degree of professionalism ( $p < .001$ ); (5) no relationship was discovered between professionalism and the socio-economic status of students; (6) a significant relationship was found between professionalism and the belief that teachers should join teachers unions ( $p < .001$ ).

114. Weiser, J.C. Personality variables associated with creativity in prospective female teachers. SPATE Journal, 1970, 8, 77-84.

Purpose. To discover which, if any, personality characteristics associated with highly creative adults are possessed by a group of prospective female teachers, and to investigate the possibilities of identifying creative adults by simply asking them to identify themselves.

Procedure. Prospective teachers (N=180) were given parts of the Minnesota Test of Creative Thinking (Yamamoto, 1962) and the Adjective Check List (Gough and Heilbrun, 1963). The top and bottom 15% of the subjects were respectively designated as the high and low creative groups. Mean scores of the two groups were computed and t-tests of the mean scores obtained. F ratios were obtained for the 24 measures of the ACL and the Cochran Cox test of means was used whenever the ratio was significant. An overall F test between the groups was obtained, as well as a rank order correlation.

Results. The four scales on which means for the two groups significantly differed were: Favorable, Self-Control, Order, and Affiliation. The high creative group ranked below average on the first two scales, and the low creative group ranked above average on the last two scales. The two highest scores of the high creative group were Heterosexuality and Lability; the two lowest were Self-Control and Favorable. A rank order correlation between the two groups was not significant. Twenty adjectives on the ACL were selected significantly more often by the high creative group and three were selected significantly more often by the low creative group.

115. Widell, W., Merwin, W., and Newman, P. The Study of Student Achievement as a Result of Modification of Certain Identifiable Teacher Behaviors. La Crosse: Wisconsin State University, 1969. ED 053 062

Purpose. To determine whether changed teacher behavior resulted in increased student achievement. The study was based on the previous finding that changed teacher behavior can best be accomplished by including a cue discrimination in teaching sequence feedback.

Procedure. Behaviors identified were those in the Stanford Teacher Competence Appraisal Guide, and feedback was handled through replay of video tape sequences. The Stanford Appraisal Guide allowed for 11 categories of teacher competence which are rated on a seven-point scale. Behavioral change was also effected by the results of the Flanders Interaction Analysis and a supervisor. One American History junior high school class of 28 students was used for the experiment. The class was randomly divided into two teach and two reteach groups. Pupil achievement was measured by scores on nine tests given during a five week period with test items taken from a Standard American History test item inventory. The 12 student teachers involved experienced a five-week college classroom exposition followed by a four-cycle micro-teaching period. The 12 student teachers provided for 24 teach-reteach sessions or 48 teaching sessions of approximately 15 minutes in duration each. The four cycles were composed of a teaching situation followed by a review of the teacher rating while viewing a video tape recording of the session. This was followed by reteaching of the same lesson to another group of students. The 24 teach-reteach cycles were presented over a total of nine topics.

Results. The range of the rating distribution decreased as the cycle proceeded indicating a progression of change in teacher behavior in the 11 categories. Flanders Interaction Analysis data indicated increased indirect (extended) teacher talk from teach to reteach phase though use and acceptance of student ideas were not used. Overall, there was little change in Flanders categories from teach to reteach phase.

The student achievement criterion was defined as a six percent change in pupil test scores. The average score of the test group was 69.8% while the retest group score was 70.9%, indicating no difference in student achievement as a result of change in teacher behavior. Though no student achievement effect could be shown, this study supports the view that teacher behavior in the micro-teaching situation can be modified by viewing cued video tape feedback.

Widell, W., Merwin, W., and Newman, P.

Questions are raised as to what amount of teacher change results from the feedback process, what teacher behavioral changes are necessary to effect change in student achievement, what student behaviors are modified as a result of teacher change and what unit length is required for observable change in student achievement.

116. Williams, F. et al. Attitudinal Correlates of Children's Speech Characteristics. Final Report. Austin: Texas University Center for Communication Research, 1971.  
ED 052 213

Purposes. (1) To discover if a two-factor judgmental model of confidence-eagerness and ethnicity-nonstandardness could be replicated with the use of video tapes and other teacher and pupil populations.

(2) To determine if the judgmental process tended to reflect a social stereotype elicited quickly and by only a few cues, or whether it reflected a more detailed perception.

(3) To determine the relationship of teacher characteristics to children's speech.

(4) To determine what preliminary evidence might be obtained of the relation between judgment of speech and a teacher's expectation of academic performance.

Procedure: Study I. Six 1-minute video tapes were prepared for each of 6 ethno-status groups: Black-Middle (BM) and Black Lower (BL), Mexican-American-Middle (MM) and Lower (ML), and Anglo-Middle (AM) and Lower (AL). The tapes were viewed by 102 undergraduate female students enrolled in a course in speech for prospective teachers--most were freshman and sophomore and Anglo. The variations in presentation made of the tapes were: audio only (aud.), visual only (vis.), and audio-visual (AV). These were administered in a Lindquist (1953) Type IV testing design. Subjects were given standard instructions for prepared semantic differential scales and were told the task was to see how the children would differ in ratings.

Results: Study I. Children from the middle status group were consistently rated more favorably on confidence-eagerness than children from the low status group ( $p < .01$ ). Ethnicity-nonstandardness does not result in anticipated status differentiation when the child is seen, but not heard.

Procedure: Study II. Six two-minute stimulus video tapes were prepared using the same ethno-status distinctions as in Study I. These were presented to 15 teachers and prospective teachers from upper division and graduate summer courses (14 Anglo, one Black). Ten items from the semantic differential scale in Study I were used with the inclusion of five filler items.



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These scales were individually printed on Hollerith data cards. Subjects were tested individually and allowed to request playbacks of the tape. For each video tape presentation, subjects were given a shuffled deck of 15 scale cards and instructed to distribute them on a table and complete them in any order desired. The subject was to stop the tape and mark the scales as soon as he was able to make a judgment. As each scale was completed it was to be deposited in a box. Time taken and order of scale completion were noted.

Results: Study II. It was anticipated that scales pertinent to ethnicity-nonstandardness ratings would be used prior to those for confidence-eagerness. There was no significant variation. There was significant difference in latency of response involving the ethnic variable. The order of latencies were: B (96.5 sec.), M (91.1 sec.) and A (84.8 sec.). There was also a significant ethnicity-by-status interaction ( $p < .01$ ).

Procedure: Study III. The items from the Semantic Differential Scale (Study I) and 5 filler items were printed in randomized order on a sheet of paper. The subjects from Study II were requested to fill in stereotype response booklets consisting of six brief descriptions of the ethnic and status groups of children in the video tapes. All six descriptions were on one page, followed by six pages of semantic differential scales. This was done one week prior to the video tape presentation. Video tape testing was done individually (see Study II). Three to five days after video taping, subjects were once more requested to fill in the stereotype response booklets.

Results: Study III. Ratings of stereotyped descriptions of children and their video taped speech samples often corresponded in terms of the two judgmental dimensions: confidence-eagerness and ethnicity-nonstandardness ( $p < .05$ ). There was a high correspondence between pre- and post-test stereotype ratings.

Procedure: Study IV. Forty-four undergraduate education majors (42 female, 2 male), enrolled in a speech course for elementary teachers, were shown video tapes of individual 5th and 6th grade male children, representative of three ethnic groups. Each child was assembling a plastic model car while describing what he was doing and what he intended to do with his car. The audio portion of the tapes was dubbed. The Anglo child was always paired with



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the Anglo dub; however, two Anglo dubs were paired with the visual image of either a Mexican-American or Black Child. It was possible to compare ratings of standard English speech as paired with children of three ethnic types.

Two weeks prior to the video tape presentation, subjects completed a pretest response booklet requesting imagined ratings of a Black child, Anglo child, and Mexican-American child on evaluation forms.

Each group of 5 or 6 subjects saw a dubbed standard English tape of a Black or Mexican-American, a non-dubbed tape of a Black or Mexican-American, and an Anglo non-dubbed tape. They were asked to complete the Semantic Differential Scales (Study I).

Results: Study IV. Results of the analysis of variance of ethnicity-nonstandardness ratings revealed a significant main effect on the ethnicity dimension ( $p < .001$ ). Thus visual cues of ethnicity did bias teachers judgments of the same standard English samples.

Procedure: Study V. Two hundred eighty-eight teachers in an in-service training program were shown a series of video tapes described in previous studies. Each teacher saw 6 video tapes involving 4 test sequences. Subjects were asked to fill out test booklets which contained 15 speech evaluation scales, an evaluation form containing scales for assignments of a child to a graded class of 1-5, and 3 sheets of stereotype label stimuli. When the teachers had filled out the stereotype label stimuli, the video tapes were shown and the evaluation was completed.

Results: Study V. Low status children were rated as more ethnic and nonstandard than middle-class. Both Anglo and Black teachers rated Anglo children as the least ethnic and nonstandard. Mexican-American teachers differentiated only the Black children as the low and middle status groups. The only significant variation in confidence-eagerness ratings was in terms of ethnicity.

In terms of class assignments ethnicity-nonstandardness was the more salient predictor of class placement in language arts, math, and social studies predictions.

117. Williams, J., and Fox, A.S. Prediction of performance in student teaching. Educational and Psychological Measurement, 1967, 27(4, Pt.2), 1169-1170.

Purpose. To determine the extent to which the Minnesota Teacher Attitude Inventory (MTAI), the Thurstone Temperament Schedule (TTS), the Otis Mental Ability Test (IQ), the American College Test (ACT), and the grade-point ratio (GPR) in area of teaching specialization may be useful for prediction of performance in student teaching as measured by the Evaluation Sheet (ES) in use at Sam Houston State College.

Procedure. The subjects included 117 secondary and 88 elementary student teachers who were enrolled at the above institution for a semester of course work and student teaching experience which lasted eighteen weeks. During the nine weeks of course work (which preceded the student teaching) each subject took the MTAI and the TTS. Official college records were examined to obtain percentile scores on ACT, IQ measures, and GPR in area of specialization. The measure of performance of each subject was the mean score of three ESs completed by the student teacher and the supervisor individually at the end of five weeks, and a joint ES completed at the end of the semester.

Results. A significant relationship was found between the GPR and the measure of student teacher performance. Mean GPR for the 205 student teachers was 2.83 (4 point system).

Comment. None of the other relationships aside from the GPR and the measure of performance were reported. Furthermore, GPR is a very unstable factor which varies widely according to the teacher, the curriculum area covered, etc. Therefore, the results of this study cannot be generalized to student teachers in other institutions. In addition, the Evaluation Sheet (ES) used as a measure of predictive performance for student teachers was not given for examination by the reader.

118. Wittmer, J., and Henry, M. Teacher Corps interns in disadvantaged schools and regular teacher trainees: A personality comparison. SPATE Journal, 1969, 8, 1-8.

Purpose. To compare personality characteristics of Teacher Corps members interning in disadvantaged schools with those of other student teachers in disadvantaged schools.

Procedure. The 16 Personality Factor Questionnaire was administered to 52 Teacher Corps members and 52 other student teachers; both groups were teaching in inner-city disadvantaged schools.

Results. Five factors were found to be significantly different ( $p < .05$ ) between the groups: humble vs. assertive, expedient vs. conscientious, shy vs. venturesome, tough-minded vs. tender-minded, and relaxed vs. tense.

119. Yamamoto, K., and Disney, H.F. Mental health knowledge among student teachers. Community Mental Health Journal, 1968, 4(2), 171-176.

Purpose. To determine student teachers' perception of the incidence of mental illness.

Procedure. A four-item questionnaire was administered to 180 student teachers (70 males, 110 females) to assess their mental health knowledge. The subjects were enrolled in two sections of an educational psychology course at the University of Iowa. Means and standard deviation of estimates of the incidence and sex distribution of mental illness, institutionalization, and incarceration were obtained.

Results. The estimates of the incidence of mental illness were found to be approximately twice as large as the actual figures. These estimates may have been affected by the subjects' perception of the college environment. Estimates were significantly inter-correlated, with the exception of the sex variable, indicating intra-individual consistency or bias.

There were, however, consistent differences between the estimates given by the female and male subjects with the former group giving a larger estimate on every question.

Furthermore, the sex differences found appear to be based upon the cultural dictate that illness is a feminine weakness. Thus, women are more prone to worry or feelings of unhappiness; and respond accordingly.

These results are indicative of the current lack of factual knowledge being communicated to students in teacher education programs. Attitudes affect behavior, and attitudes, in turn, are affected by factual information or the lack of it. Hence, a re-examination of current practices in such programs is advised.

Comment. The isolated population used is not indicative of teacher education programs in general. Furthermore, the questionnaire method suffers from many inadequacies.

120. Yee, A.H. Do cooperating teachers influence the attitudes of student teachers? Journal of Educational Psychology, 1969, 60(4), 327-332.

Purpose. To study the relationship between student teacher attitudes and that of their cooperating teacher in the field.

Procedure. The subjects were 124 student teachers, 124 cooperating teachers and 12 college supervisors. All were administered a modified version of the Minnesota Teacher Attitude Inventory (MTAI) at the beginning of the semester and again 16 weeks later. This population was drawn from the University of Texas at Austin.

Results. Analysis of the data indicates that the cooperating teacher plays a significant role in changing student teachers' attitudes.

Comment. Yee has published a considerable number of articles in the area of teacher personality and attitudes but most are based on one study done in 1966. Each article seems to be an exercise in statistical gymnastics. His theories are interesting, his charts of data look impressive, but his findings are questionable.

121. Young, J.H. Authoritarianism in elementary student teachers and their supervising teachers. Journal of Teacher Education, 1971, 22(1), 70-71.

Purpose. To determine the relationships existing between elementary student teachers' and supervising teachers' pre-student-teaching authoritarian level and the student teachers' post-student-teaching authoritarian level.

Procedure. Subjects were 112 elementary student teachers and their supervising teachers. Both groups were given the California F-Scale at the beginning of the experiment. After 8 weeks of student teaching, the student teachers were given the F-Scale again and the Young Opinionaire (no information on this was provided) to analyze attitude change.

Results. Relationships between student teachers' and supervising teachers' F-Scale scores did not strengthen significantly. Student teachers did change significantly during student teaching--in a less authoritarian direction.

122. Zink, T.M. A Study of Attitudes and Employment Patterns of Teachers Who Received Pre-Service Teaching Experience with Disadvantaged Groups. Final Report. New Jersey: Glassboro State College, 1970. ED 040 975

**Purpose.** To determine whether Project Cope, which provided junior year elementary education students experience in teaching culturally disadvantaged children, caused a change in the attitudes and subsequent employment patterns of participants.

**Procedure.** Subjects were 147 graduates who had participated in Project Cope. They completed a Teacher Situation Reaction Test, the Rokeach "D" Scale, and a personal information questionnaire. Other data (available from college records) included: I.Q., college grade point average, and previous scores on the Teacher Situation Reaction Test, the Rokeach "D" Scale and the Minnesota Teacher Attitude Inventory.

**Results.** One hundred and forty-seven (87.7%) of the program graduates were contacted. Of these, 86% had entered teaching and 34.5% had taught in disadvantaged schools at least one year since graduating. No correlation was found between whether or not graduates were teaching in a disadvantaged school and post-graduate study. Also no correlation was found between teaching situation and pretest or posttest scores on the Rokeach "D" Scale.

## LIST OF ANNOTATIONS BY DESCRIPTOR CATEGORY

References are to entry numbers. Code letters for each category are indicated in parentheses following the descriptor listed. Code letters appear in the upper right hand corner on the first page of each entry in the body of the text.

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