

AN ABSTRACT OF THE THESIS OF

RICHARD JOHN WITHYCOMBE for the DOCTOR OF EDUCATION  
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Title: AN ANALYSIS OF ATTITUDE CHANGE OCCURRING AMONG  
INTERN TEACHERS DURING THEIR INTERNSHIP YEAR IN  
THE PORTLAND URBAN TEACHER EDUCATION PROGRAM

Abstract approved: \_\_\_\_\_

*Redacted for Privacy*

Dr. Henry TenPas

Purpose of the Study

The study was designed to determine the attitudes of intern teachers toward specified concepts as they began their internship in the Portland Urban Teacher Education Program and upon completion of their intern training, prior to receiving certification through Oregon State University. The direction and intensity of attitude change across the entire training population was studied. Also, the direction and intensity of attitude change between selected segments of the training population was analyzed. The specific questions formulated to investigate this study were:

1. Over a three year P. U. T. E. P. training period, will black male and female interns perceive concepts differently than the white male and female interns trained over the same three year period?

2. Over a three year P. U. T. E. P. training period, will black and white interns under 30 years of age perceive concepts differently than black or white interns over 30 years of age?
3. Over the three year P. U. T. E. P. training period, will black and white interns with social science teaching norms perceive concepts differently than black and white interns who have non-social science teaching norms?
4. Will black and white interns trained during the first year of P. U. T. E. P. (1969-70), perceive concepts differently than black and white interns trained during the program's second year?
5. Will black and white interns trained during the second year of P. U. T. E. P. (1970-71), perceive concepts differently than black and white interns trained during the program's third year?
6. Will black and white interns trained during the first year of P. U. T. E. P. perceive concepts differently than black and white interns trained during the third year (1971-72)?

### Procedure

The procedure utilized to measure the change in intern's attitude from the time of entry into P. U. T. E. P. to the time of certification was for the investigator to administer the Semantic Differential

(Appendix A) in a pre-test/post-test design as outlined by Snider and Osgood (1969). The raw scores were compiled and recorded according to population category.

The Semantic Differential administered in the study had three basic elements: 1) the concept to be evaluated in terms of its semantic or attitudinal properties, 2) the polar adjective pairs anchoring the scale, and 3) a series of undefined scale positions arranged to represent a seven-step series. Approximately 10 months of training took place between the administration of the pre-test and the post-test.

Ten specified concepts were included in the Semantic Differential used in the study. These were:

- |               |                 |
|---------------|-----------------|
| 1. Teacher    | 6. Disciplining |
| 2. Objectives | 7. Adolescent   |
| 3. Evaluation | 8. Drop-Out     |
| 4. Curriculum | 9. Supervision  |
| 5. Learning   | 10. Success     |

Each of the ten concepts was later included in the final analysis of intern's attitudinal change.

#### Analysis of Data

One basic statistical tool was utilized for this study: the two-way analysis of covariance with unequal n's utilizing the F test. As Courtney and Sedgwick (1969) described it, the analysis of covariance

is a statistical technique which combines the concepts of variance and regression to handle situations where the researcher cannot completely control all the variables in his study. The analysis of covariance was used as a statistical procedure for testing the significance of differences among means, accounting for the influence of uncontrolled factors in the experiment.

### Summary of Findings

1. The racial differences within the P. U. T. E. P. intern population was significant in relationship to attitudes held by groups of interns within any of the three training cycles. Black interns perceived concepts differently at the end of their training. So did white interns. However, white intern's perceptions were quite different from black intern's perceptions.
2. The age of the intern effected attitude toward four of the ten concepts. These four concepts were EVALUATION, DROP-OUT ADOLESCENT, and DISCIPLINING.
3. The teaching norm field of interns was not a viable determinant in the attitudinal change which did occur within the total intern group. On nine of the ten concepts utilized in the study, interns with social science teaching norms did not perceive the concepts in a significantly different way than interns with non-social science teaching norms. Only on the concept CURRICULUM

was there an instance of significant difference.

4. The particular year or training cycle which interns participated in P. U. T. E. P. was an indicator of intern's attitudinal change. During each of the three training cycles included in the study, there were significant differences in intern perception between any two of the three years.

An Analysis of Attitude Change Occurring Among Intern  
Teachers During Their Internship Year in the  
Portland Urban Teacher Education Program

by

Richard John Withycombe

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Professor of Vocational, Adult, and Community  
College Education

in charge of major

*Redacted for Privacy*

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Dean of School of Education

*Redacted for Privacy*

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Dean of Graduate School

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Typed by Illa W. Atwood for Richard J. Withycombe

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Dr. Thomas Hogg, Graduate Representative  
Dr. Carvel Wood  
Dr. Jerry Becker  
Dr. Kenneth Patterson

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AN ANALYSIS OF ATTITUDE CHANGE OCCURRING AMONG  
INTERN TEACHERS DURING THEIR INTERNSHIP  
YEAR IN THE PORTLAND URBAN  
TEACHER EDUCATION PROGRAM

I. INTRODUCTION

Background to the Problem

The Portland Urban Teacher Education Program (P. U. T. E. P.) began as a specially designated preservice teacher training internship program in June, 1969, operating within the Portland School District No. 1, Multnomah County. With renewed funding support in 1970-71, 1971-72, and 1972-73, coming from Title V, Part B, Subpart 2 of the Education Professions Development Act of 1968 and from School District No. 1, P. U. T. E. P. continues to recruit, train, and certificate adults who can work with students in the inner-city schools of Portland.

P. U. T. E. P. was designed and initiated simultaneously with the opening of John Adams High School, Portland, Oregon. Because it had been intended that the certificated staff of Adams would approximate the ethnic population of the high school's student body, minority teachers were sought for teaching vacancies within the school. After substantial search, few minority teachers, with secondary certification, could be found in the state of Oregon.

Despite the increasing number of elementary and secondary

certificated persons who are failing to find contracted teaching employment in Portland, the need for certificated minority teachers in the inner-city schools continues to represent a critical shortage. Also, the need has increased with the advance of Portland's volunteer administrative transfer program designed to achieve school integration.

In the face of a continuing need for qualified, certificated minority teachers throughout Portland's public schools, the goals of the Portland Urban Teacher Education Program have remained the same: (1) to certificate black and other minority teachers, and (2) to provide instruction to the economically and socially disadvantaged students attending schools in the urban center.

The goals of P.U.T.E.P. are incorporated into a twelve-month certification program. The general characteristics of this program have been described by Parker (1971). They are:

1. Substantial use of both federal and school district financial support.
2. Shift in locus of teacher preparation from the university to the school district.
3. Shift in responsibility of teacher preparation from the university to the school district.
4. Maximum linkage with numerous compatible programs operating within the city center.

5. Maximum instructional individualization and use of total group resources, both cognitive and affective.

None of these characteristics, looked at individually, is particularly innovative. This combination of program components, however, is unique and bears examination. Indeed, it is this combination of program components, in conjunction with the program's basic goals, which tend to differentiate graduates of P. U. T. E. P. from graduates of other certification programs operating between training institutions and school districts in Oregon.

### The Problem

In this study, attitudes of intern teachers toward specified concepts as they began their internship in the Portland Urban Teacher Education Program will be compared against these same interns' attitudes toward the same concepts at the completion of their intern training, prior to receiving certification through Oregon State University. Emphasis will be placed on analyzing the significance of the change in interns' personal perceptions of these concepts from the time of entry into the program to the point of program completion. The direction and intensity of the change, and the relative change occurring generally across the entire training population and specifically, between segments of the training population will be analyzed.

To focus the problem of this study, six major questions were studied. These were:

Question No. 1. Over a three-year P.U.T.E.P. training period, will black male and female interns perceive concepts differently than the white male and female interns trained over the same three-year period?

Question No. 2. Over a three-year P.U.T.E.P. training period, will black and white interns under 30 years of age perceive concepts differently than black or white interns over 30 years of age?

Question No. 3. Over the three-year P.U.T.E.P. training period, will black and white interns with social science teaching norms perceive concepts differently than black and white interns who have non-social science teaching norms?

Question No. 4. Will black and white interns trained during the first year of P.U.T.E.P. (1969-70), perceive concepts differently than black and white interns trained during the program's second year?

Question No. 5. Will black and white interns trained during the second year of P.U.T.E.P. (1970-71), perceive concepts differently than black and white interns trained during the program's third year?

Question No. 6. Will black and white interns trained during the first year of P.U.T.E.P. perceive concepts differently than black and white interns trained during the third year (1971-72)?

#### Importance of the Study

Numerous studies have been completed in an attempt to capture the personal characteristics of successful and less successful teachers. In this area, important contributions have been made by A. S. Barr (1929), B. J. Biddle and W. J. Ellena (1964), M. L. Cogan (1958), and W. F. Hart (1934). Unfortunately, each of these studies has had only limited success in identifying the variables which may be most positively associated with teacher effectiveness. The bulk of these works have been conducted on populations of experienced, practicing teachers or populations of students involved in university-based preservice teacher education programs.

It seems clear that investigations related to the question of teaching effectiveness should and will continue. It is not the purpose of this research to replicate or necessarily invalidate any previous findings. Rather, the research design followed in this study encourages adding dimension to the present search for reliable criteria related to general teacher effectiveness.

Unlike the majority of earlier studies conducted to better determine the characteristics of more effective teachers or teacher

candidates, this study does have several important differences.

These are:

1. The changes in student perceptions toward specified concepts being measured in this study are comparisons across a full, integrated, calendar year of preservice training; not the more typical short student teaching experience, single course, or in-service class experience, and
2. The subjects of this study, interns within P.U.T.E.P., do not appear to represent the individual or collective personal characteristics usually associated with "normality" in candidates for teacher certification in Oregon.

Parker and Withycombe (1973) write:

The high proportion of black adults, and the social orientation of most of the whites, adds up to a group which holds views decidedly divergent from the mainstream of white, middle-class values. Many interns do not, initially, express positive regard for traditional public schooling. Many interns do not respect established authority figures such as a school district superintendent, a building principal, or a cooperating teacher.

Unfortunately, few studies can be found which attempt, at all, to identify either entry attitudes of teacher education candidates about to become involved in a full year of intensified field-based teacher training, or studies which propose to analyze attitudinal change coming within and across distinctly heterogeneous groups of certification candidates following such a full year of training.



In support of the importance of such a research effort, Ronald G. Rex (1968), in his design of a "Conceptual Model of the Internship in Professional Training," asserts:

One of the most neglected areas of formal and institutionalized training is the facet of the learning process which focuses upon the individual's personal identification with something to be learned or mastered. The intrinsic changes which take place in learning are slighted in favor of the extrinsic and overt manifestations of learning. Response and performance rather than attitude and molar perceptions are measured and equated with learning and competence.

Rex concludes:

Formation of an adequate concept of one's capacities and abilities is essential to meeting the demands imposed by professional practice. It would seem that during the internship, personal identification with basic concepts and the meanings of these concepts should begin to form which are based on actual performance rather than upon naive desire or other forms of unrequited motivation.

In a summary of measurements and predictions of teacher effectiveness, A. S. Barr (1968a) states:

For many reasons many individuals do not live up to expectancy. These discrepancies may arise from many reasons: lack of interest in pupils, teaching, and the subjects taught; lack of physical energy, determination and drive; lack of adaptability, flexibility, or the ability to adjust to different needs, persons, and situations; personality conflicts, rigid value systems, and attitudes unacceptable to majority teachers, parents, pupils, administrators, supervisors and all others with whom the feeling components of behavior may come in contact and find expression.

Barr continues:

Possibly a study of just how teachers perceive the many things associated with teaching, the concepts they hold, and their connections between the symbolic world and the realities of

life, might provide new insights into teaching efficiency and effectiveness.

If the selection, recruitment, education, and assignment of teachers to particular teaching positions is to be done in an approximately reliable manner, one must have more precise information about the many meanings each prospective teacher associates with teaching in general, and in particular situations. To the extent that it is possible to accurately measure the changes which occur in differing individuals' personal perceptions of concepts related directly with the role of teaching from the time of their entry into training until their graduation, important data may be added to the growing research focusing on teacher effectiveness and the relationship between preservice training design and specific concept formation and change.

#### Assumptions for the Study

In this study of the attitudes of 52 intern teachers who have been participants in the Portland Urban Teacher Education Program during the years 1969-70, 1970-71, and 1971-72, there are several assumptions which will be applied to the research design, the research procedures, and the treatment of data.

The various assumptions enforced within the study are essentially of two types: (1) those assumptions which grow internally out

of the nature of the P. U. T. E. P. internship, and (2) those assumptions which have been specifically adopted by the researcher and which represent externally manipulated design controls.

### Internal Assumptions

During each year of the three completed years of the Portland Urban Teacher Education Program, the program goals have remained the same: (1) to certificate black and other minority teachers, and (2) to provide instruction to the economically and socially disadvantaged students attending Title I schools in Portland, Oregon.

While there are variations between interns and between each of the completed P. U. T. E. P. training years, there are notable commonalities within the intern population and between the training years which will be assumed. These common factors include:

1. All interns recognized the basic goals and limitations of the P. U. T. E. P. training program prior to their selection and participation in P. U. T. E. P. Persons lacking teacher certification, desiring to teach, and not wishing to train with a minority dominated group or not wishing to teach in an inner-city classroom, generally did not apply to become an intern in P. U. T. E. P.

2. All interns selected into the training program had either completed their undergraduate degree or were within 30 quarter hours of completing their degree work. This condition has been a

derivative of the federal guidelines governing Title V, Part B, Subpart 2 of the Education Professions Development Act of 1968.

3. All interns, as a condition of participation in P.U.T.E.P., had to be officially enrolled at Oregon State University in either the School of Education or the Graduate School. In turn, Oregon State University and the School of Education became the certifying institution for each intern completing the entire training program.

4. The majority of all interns within P.U.T.E.P. had not been previously enrolled at Oregon State University or in formal courses leading to teacher certification at any other university. During preliminary candidate screening, many applicants for intern positions expressed "absolutely no interest" in acquiring certification through a university-based teacher education program.

5. All interns, as a condition of participation, were formally under contract to the Portland School District No. 1 for the duration of their internship year. In this context, all applicants considered to be finalists for P.U.T.E.P. internships made application for employment with the Portland School District and received pre-internship interviews with a personnel officer of the district. Upon final selection, each intern received a salary from School District No. 1 roughly equal to two-thirds of the salary received by a certificated, first-year teacher in Portland. Additionally, each intern under contract had district employee benefits roughly equal to two-thirds of the

benefits normally received by a fully employed classroom teacher, e.g., health plans, personal leave days, and substitute days.

### External Assumptions

Because it is impossible to completely limit all the variables associated with, and which might affect, intern's attitudinal projections either within one training year or across the three training years, certain externally manipulated controls will be employed and can be assumed. These are:

1. Only interns actually trained within the Portland Urban Teacher Education Program during 1969-70, 1970-71, and 1971-72 will be included in this study. While an experimental design would dictate the inclusion of a research control group (a group not receiving some specified treatment), this research will not utilize such a control group design.

2. Because of the likely variability both within and between the three training years, this study will utilize the two-way analysis of covariance with unequal n's and the F test. The analysis of covariance, described by Courtney and Sedgwick (1969), combines the concepts of analysis of variance and regression to handle situations where the researcher cannot completely control all the study's variables. As reported by Courtney and Sedgwick (1969a)

although the assumptions of homogeneity of variance and normality are considered to be requirements before using the F statistic, there is considerable evidence to support the contention that departures from normality as well as substantial differences in variance do not greatly effect the use of the technique for decision-making purposes. This consideration further substantiates the robustness of the F statistic for testing means.

### Terminology Pertinent to This Study

The definitions listed below are those adhered to in this study. Those definitions associated directly with the Portland Urban Teacher Education Program and with the teaching internship will be program-specific.

Analysis of Covariance. This is a statistical technique which combines the concepts of analysis of variance and regression to handle situations where the researcher cannot completely control all the variables in his study. It is a procedure for testing the significance of differences among means, accounting for the influence of uncontrolled factors in the experiment. The analysis of covariance adjusts the means for uncontrolled factors using regression analysis procedures.

Attitude. Anderson and Fishbein (1965) define attitude as the evaluative dimension of a concept, after Osgood et al (1957). They further suggest that the attitude toward an object is the sum of the

strength of beliefs about the object and the evaluative aspect of these beliefs.

Minority Teachers. Persons who come from a minority group, e.g., Black, Chicano, or Native American.

Portland Urban Teacher Education Program. A specially designated preservice teacher education training internship program operating within the Portland School District No. 1, Multnomah County, which receives funding from School District No. 1 and from Title V, Part B, Subpart 2 of the Education Professions Development Act of 1968.

Semantic Differential. This is a method of measuring the meaning of concepts, developed by Osgood et al. (1957a). In practice, it has two applications: (1) to measure objectively the semantic properties of words or concepts in a tri-dimensional semantic space; and more commonly, (2) as an attitude scale, restricted in focus to the affective domain or the evaluative dimension.

Teaching Internship. A period of supervised teaching in an actual school setting. In the Portland Urban Teacher Education Program, all teaching interns are employees of the Portland School District No. 1, under contract for a period of one full school year with teaching responsibility not to exceed two-thirds of the responsibility

normally assigned to fully certified teaching personnel. In addition, the internship includes participation in Oregon State University, School of Education, courses taught during each of four consecutive college quarters in Portland at John Adams High School. These courses, totaling 51 credit hours, are required to achieve certification in the state of Oregon.

Title I Schools. Those schools designated to receive special federal funding under Title I of the Elementary and Secondary Education Act of 1965. According to Title I guidelines (1969), Title I funds are available for supplemental education "to local education agencies serving areas with concentrations of children from low-income families. . . ."



## II. REVIEW OF RELATED LITERATURE

The widespread interest in developing a functional, more workable fit between teacher training programs and the complexities and demands of the teaching experience has produced a diversity of program models. Among these various models, there are reports of instructional and teacher-resource laboratories, internship-residencies, community involvement, work-study programs, clinical teams, and crisis centers, all in various stages of proposal and implementation.<sup>1</sup>

The models often draw in familiar ways--structurally, or at least metaphorically--on aspects of medical training and practice. Most frequently, model descriptions emphasize the potential of better integrating theory in education with the actual practices of education, bringing teachers more quickly into the "real world of teaching," and utilizing experienced teachers in more significant ways throughout the entire education of emerging professionals.

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<sup>1</sup> Examples of such model descriptions include: Remaking the World of the Career Teacher, National Commission on Teacher Education and Professional Standards, Washington, D. C., 1966; Theory Into Practice, Vol. 6, College of Education, the Ohio State University, Columbus, December, 1967; Social Education, Vol. 34, March, 1970; B. Othanel Smith and others, Teachers for the Real World, Washington, D. C., American Association of Colleges for Teacher Education, 1969; William E. Engbretson, "Analysis and Evaluation of Plans for Comprehensive Elementary Teacher Education Models," Final Report, Philadelphia, Temple University, 1969.

In this study, major emphasis was given to only one of the several possible models of undergraduate teacher training; the field-based, teaching internship. Additionally, not every aspect of the teaching internship structure was considered. Areas of potential research interest such as the relationship between the internship experience and the cognitively-oriented skills gains, the political process of program development and survival, and the significance of building inter-institutional linkages for program instructional support, while substantive aspects of each teacher education model, did not fall within the scope of this study.

It was important in this study to analyze the attitudes of intern teachers toward specified concepts as they began their internship in the Portland Urban Teacher Education Program, and to compare these entry perceptions with the same interns' attitudes toward these same concepts at the completion of their intern training. In order to formulate both the theoretical and practical constructs requisite for such a study, the following factors were considered:

1. The historical development of the teaching internship as a distinct model of teacher preparation,
2. The affective domain of teacher performance,
3. The relationship between the teaching internship as an educational training system and client attitude change, and
4. The measurement of meaning in affective domain research.

This review of literature summarized the findings with respect to the above factors. To obtain the opinions and evidence related to these factors, a review of research articles and studies was conducted. A summative condensation of these findings is included in this section of the study.

### The Historical Development of the Teaching Internship

In their description and discussion of the "Teaching Complex," B. Othanel Smith, Saul B. Cohen, and Arthur Pearl called for greater attention to the teaching internship as a viable system for training teachers "for the real world" (1969). Unfortunately, they felt that the teaching internship form of preparation had been too little used in professional education, and had only received significant attention in medical careers training.

Medicine is the only profession which has utilized the internship with any degree of consistency over a long period of time (1968). Consequently, most of the support, as well as some of the critical reserve, which attaches to the internship stems from the record established in the training of physicians. Within medical education, however, there has been little evidence that the internship, as an isolated or unique experience, has ever been studied or analyzed with reference to its unique educational value (1968a).

The Association of Student Teaching, in their Forty-Seventh

Yearbook, concluded that the teaching internship and its educational potential had not stimulated much serious investigation since the publication of the Flexner Report (1910). The Association concluded:

No significant study has gone beyond gathering opinions about internships, defining purposes for internships, or perhaps identifying and classifying administrative standards for internships.

No one seems to have asked the simple question: What happens to a person when he becomes an intern? and What unique learning opportunities become available to a person who reaches the intern stage of professional preparation? Once we ask these questions and find no answers, it becomes apparent that no intensive research has been conducted with reference to internship because no intensive body of theory, no hypothesis, no conceptual schemes or models of internship seem to exist. (1968b)

### The Graduate Internship

In a study sponsored by the U. S. Office of Education, Harap reported that the "chief sources of external direct aid (for internship programs) were the Federal Government, State agencies, foundations, philanthropic organizations, and business institutes." He further stated that during the 1959-60 academic year, 462 participating institutions offered 1,976 fifth-year teacher education programs, including 49 that provided the internship as a vital part of their program (1962).

While no more recent analysis of the graduate internship program has been made, there are clear indications that the internship has suffered considerable setback since the 1960's. The cost of the

internship year has forced many institutions to void the internship program from their offerings.

### The Undergraduate Internship

A second type of internship in teacher education was established in the latter part of the 1950's: a four- to five-year sequence leading to a teaching credential and a bachelor's degree. The University of Wisconsin, as part of their Wisconsin Improvement Program; the Elementary Internship Program at Michigan State University; and, a final variation of the internship developed by Central Michigan University were among the leading institutions in the design and implementation of the undergraduate internship.

Like the graduate internship program, these historical attempts to design and implement an internship as an integral portion of a pre-service teacher education program were either curtailed or greatly limited in their scope and design (1965).

In 1965, six regional seminars throughout the United States discussed and evaluated a sample of fifth-year and MAT programs. The composite report of this study clearly implied the need for (a) improved communications between the university and the cooperating schools, (b) specialized preparation for school supervisors of interns, (c) greater acceptance of responsibility by schools for providing supervision of interns and financial support of teacher education

programs, (d) curriculum revision, especially in the MAT programs, to achieve a greater integration between theory and practice, and (e) a comprehensive evaluation of the internship as a distinctive model of teacher preparation (1965a).

### The Affective Domain of Teacher Performance

Considerable study has been done on the question of "helping relationships" in the helping professions. While much of this work is relatively new, growing out of the "Humanist Movement," research had made some important, initial impact on defining the important characteristics of effective teachers and the personal characteristics of these effective teachers.

By and large, most research efforts aimed at investigating teacher effectiveness have attempted to probe one or more of the following dimensions of teacher personality and behavior: (1) personal characteristics, (2) instructional procedures and interaction styles, (3) perceptions of self, (4) perceptions of others.

#### Personal Characteristics

Hart (1934) conducted a study based upon the opinions of 3,725 high school seniors concerning best-liked and least-liked teachers and found a total of 43 different reasons for "liking Teacher A best" and 30 different reasons for "liking Teacher Z least." Over 51% of

the students said they liked best those teachers who were "helpful in school work, who explained lessons and assignments clearly, and who used examples in teaching." Those teachers assessed most negatively were "unable to explain clearly, were partial to brighter students, and had superior, aloof, overbearing attitudes." Study by Bousfield (1940) tended to support the conclusion that a teacher's knowledge, what the teacher knows, is less important to a student than the teacher's personal style in communicating what he knows.

Cogan (1958) found that warm, considerate teachers got an unusual amount of original poetry and art from their high school students. Heil, Powell, and Fieffer (1960) compared various pupil-teacher personality combinations and found that the well-integrated (healthy, well-rounded, flexible) teachers were the most effective with all types of students.

### Instructional Procedures and Interaction Styles

Flanders (1960) found that classrooms in which achievement and attitudes were superior were likely to be conducted by teachers who did not pursue a single behavioral-instructional path to the exclusion of other possibilities. The more successful teachers tended to use multiple approaches to assignment-giving, to in-classroom study, and to approaching each child in the room. The least successful teachers tended to have a more highly regimented style of

instructional delivery, relied heavily on a single textbook, and made daily assignments from the single text as a routine part of each class day. Barr's earlier study (1929) introduced these findings.

Combs, Avila, and Purkey (1971) conclude:

The role of the helper derived from the view of man we have described in this chapter is essentially one of administering to people. It does not seek to direct or control its subjects but to free them. It is a matter of manipulation of processes rather than of people. It is a question of aiding, helping, facilitating, encouraging, and assisting rather than forcing, coercing, cajoling, bribing, or exhorting people to better things. It is a matter of working with the organism rather than against it, of seeing helper and helpee as teammates rather than antagonists.

### Perceptions of Self

Combs, in his book The Professional Education of Teachers (1965), cites the research of Lynch (1961), McClendon (1962), and Ryans (1960) for contributing significantly to better understanding of self-perception related to teacher effectiveness. In these studies, the following conclusions were reached:

1. Good teachers see themselves as identified with people rather than withdrawn, removed, apart from, or alienated from others.
2. Good teachers feel basically adequate rather than inadequate. They do not see themselves as generally unable to cope with problems.



3. Good teachers feel trustworthy rather than untrustworthy. They see themselves as reliable, dependable individuals with the potential for coping with events as they happen.
4. Good teachers see themselves as wanted rather than unwanted. They see themselves as likeable and attractive (in a personal sense) as opposed to feeling ignored and rejected.
5. Good teachers see themselves as worthy rather than unworthy. They see themselves as people of consequence, dignity, and integrity as opposed to feeling they matter little, can be overlooked and discounted.

In the broadest sense, Combs concludes that good teachers are more likely to see themselves as good people; their self-perceptions are primarily positive and optimistic.

### Perceptions of Others

Ryans (1960a) reported several studies which have produced findings that there are differences in how good and poor teachers view others. He found, among other things, that good teachers differed in at least five significant ways from poor teachers. The good teachers had (1) more favorable opinions of students, (2) more favorable opinions of democratic classroom behavior, (3) more favorable opinions of administrators and colleagues, (4) a greater

expressed liking for personal contacts with other people, and (5) more favorable estimates of other people generally.

### The Teaching Internship and Attitude Change

Only two studies could be found that sought to determine, in any way, the impact of the internship experience on the attitudes of the interns who had participated directly in the internship program. This almost total omission from the professional research of teacher education, should indicate the historical lack of importance that has been placed on internship training and the relationship of such training to attitudinal change.

Martin (1967) studied the relationship among selected personality characteristics and constructive teaching behaviors of intern teachers and first-year teachers. Standardized instruments were used for psychological assessment. Data from rating scales and personal evaluations were collected during two years of professional work. Two assumptions were drawn from the study: (1) teaching candidates should be, above all else, effectively functioning human beings, and (2) teaching success may be related to a particular type of teaching position.

Millett (1967) conducted a study to determine whether specific oral behaviors of intern teachers and their pupils could be changed by different training procedures. Unstructured discussion, oral

instruction, demonstrations, and oral instruction plus demonstrations were the four types of training used in the study. Results indicated that certain oral behaviors of interns could be changed by comparatively short presentation-type training sessions. It was also found that oral instruction, demonstration, and oral instruction plus demonstration methods effected changes in the specific behaviors, with the latter procedure appearing to be more effective than any of the others taken singly.

#### The Measurement of Meaning in Affective Domain Research

Since first published in 1957, Charles E. Osgood's The Measurement of Meaning has been used as a sourcebook on the Semantic Differential technique which was utilized in this study. The Semantic Differential has, since this publication date, been used by psychologists, educators, politicians, and consumer researchers in an effort to determine the meaning a respondent attaches to a concept or a sentence. However, because of the proliferation of literature in which the technique has been used, an understanding of it has become increasingly difficult to obtain.

In its original form, the Semantic Differential was not designed as a linguistic tool but as a psychological one--to assess certain symbolic processes assumed to occur in people when signs are received and produced.

The generality of affective meaning systems, both intra-culturally and cross-culturally, has been attested to by a wide range of studies (Jakobovits, 1966; Osgood, 1960, 1962; Osgood, Suci, and Tannenbaum, 1957; Tanaka, 1962; Tanaka and Osgood, 1965; Tanaka, Oyama, and Osgood, 1963; Triandis and Osgood, 1958). The three pervasive affective meaning dimensions E, P, and A (Evaluation, Potency, and Activity), have emerged across 24 language/culture communities (Jakobovits, 1966a) and have tended to be invariant within the American culture with respect to various demographic variables (Bopp, 1955; McClelland, Whitaker, and First, 1962; Ware, 1958).

Despite the general findings of intra- and inter-cultural comparability of semantic dimensions and their extension into the personality realm, a few exceptions to the usual lack of individual differences in meaning structure have been noted by Krieger (1964) and Tanaka et al. (1963). In addition, Wiggins and Fishbein (1967) have proposed that there is indeed a difference in semantic structure; that adjective pairs that serve as valid indicants of a meaning dimension for one individual may be inappropriate as indicants of the same dimension for another individual.

While this latter concern is, or could become, a substantive issue related to the validity of the Semantic Differential to adequately measure "meaning," even the study of Wiggins and Fishbein has not found notable research support.

### III. DESIGN OF THE STUDY

The following is a description of the design and procedures employed in the study. Each step taken in the investigation is detailed.

#### The Preservice Training Program

The specific preservice training program around which this study was focused is the Portland Urban Teacher Education Program. The Portland Urban Teacher Education Program began as a specially designated preservice teacher training internship program in June, 1969, operating within the Portland School District No. 1, Multnomah County. P.U.T.E.P. continues to recruit, train, and certificate adults who can work with students in the inner-city schools of Portland or in other settings where there are concentrations of students with special learning problems.

The goals of P.U.T.E.P. are incorporated into a twelve-month certification program. The general characteristics of this program include:

1. Substantial use of both federal and school district financial support.
2. Shift in locus of teacher preparation from the university to the school district.
3. Shift in responsibility of major portions of teacher

preparation from the university to the school district.

4. Maximum linkage with numerous compatible programs operating within the city center.
5. Maximum instructional individualization and use of total group resources, both cognitive and affective.

While P.U.T.E.P. is currently entering its fifth year of intern preparation, only those participants in the first three years of the program were included in the pre-test and post-test of the Semantic Differential analyzed in this study.

#### Population of the Study

The population included in this study were all interns within the Portland Urban Teacher Education Program during its first three operational years, 1969-70, 1970-71, and 1971-72. While each year of P.U.T.E.P. began with 20 interns, a total of eight students did not complete the entire training experience and receive their certification to teach. These eight students were excluded automatically from total population of the study. The 52 remaining interns were all included in the study's population.

#### Selected Groupings

The population groups investigated were:

- Ia. Twenty-eight black interns who graduated and were

certified through P. U. T. E. P.

- Ib. Twenty-four white interns who graduated and were certified through P. U. T. E. P.
- Ic. Twenty black interns with a social science norm field and eight white interns with a social science teaching norm field.
- Id. Eight black interns with a non-social science norm field and 16 white interns with a non-social science teaching norm field.
- Ie. Twelve black interns under 30 years of age and 19 white interns under 30 years of age.
- If. Sixteen black interns over 30 years of age and five white interns over 30 years of age.
- Ig. Fifteen black male interns and 15 white male interns.
- Ih. Thirteen black female interns and nine white female interns.
- Ii. Nine black interns enrolled in Cycle I and six white interns enrolled in Cycle I.
- Ij. Thirteen black interns enrolled in Cycle II and seven white interns enrolled in Cycle II.
- Ik. Six black interns enrolled in Cycle III and 11 white interns enrolled in Cycle III.

Because only 52 interns made up the total, graduating population

of P. U. T. E. P. over its first three training years, and because of the relatively large number of selected groupings utilized within the study, many interns were included in more than one grouping. Major groupings included: norm field, sex, age, Cycle I, Cycle II, and Cycle III. The two primary racial groups were compared across each of these first six groupings.

### Procedure

The procedure utilized to measure the change in intern's attitude from the time of entry into P. U. T. E. P. to the time of certification was for the investigator to administer the Semantic Differential (Appendix A) in a pre-test/post-test design as outlined by Snider and Osgood (1969). The raw scores were compiled and recorded according to population category.

The Semantic Differential administered in the study had three basic elements: (1) the concept to be evaluated in terms of its semantic or attitudinal properties, (2) the polar adjective pairs anchoring the scale, and (3) a series of undefined scale positions arranged to represent a seven-step series. Approximately 10 months of training took place between the administration of the pre-test and the post-test.

Ten specified concepts were included in the Semantic Differential used in the study. These were:



- |               |                 |
|---------------|-----------------|
| 1. Teacher    | 6. Disciplining |
| 2. Objectives | 7. Adolescent   |
| 3. Evaluation | 8. Drop-Out     |
| 4. Curriculum | 9. Supervision  |
| 5. Learning   | 10. Success     |

Each of the ten concepts was later included in the final analysis of intern's attitudinal change.

Ten polar adjective pairs were used to anchor the seven-step scale. These adjective pairs were arranged so that the favorable, potent, or active end of the scale was randomly placed in a right or left position to avoid position habits in the response pattern of each intern. The following adjective pairs were used:

1. Good . . . . . Bad
2. Friendly . . . . . Unfriendly
3. Kind . . . . . Cruel
4. Meaningful . . . . . Meaningless
5. Important . . . . . Unimportant
6. Active . . . . . Passive
7. Complex . . . . . Simple
8. Interesting . . . . . Boring
9. Sensitive . . . . . Insensitive
10. Productive . . . . . Destructive

Again, each of these ten polar adjective pairs was later considered in determining the nature of intern's attitudinal change.

### Collection of Data

The following steps were followed in the collection of the data included in this study:

1. The instruments were locally printed as exhibited in Appendix A.
2. The investigator administered the pre-test on the first day of the preservice training program. Each intern participant was advised of the purpose of the pre-test and was encouraged to react to each concept in accordance with the view he/she held. Since, at the time of test administration, each intern was fully enrolled in P.U.T.E.P., it was reaffirmed to each intern group that the test had no effect on intern selection or placement.
3. Following each intern's completion of the test, the investigator collected all the instruments.
4. Following approximately 10 months of training, on the next-to-last day of each year's program, an identical Semantic Differential was administered to each intern remaining in the P.U.T.E.P. program in exactly the same manner that the pre-test had been administered.

5. Following each intern's completion of the post-test, the investigator collected all the instruments.

### Analysis of Data

One basic statistical tool was utilized for this study: the two-way analysis of covariance with unequal n's utilizing the F test. As Courtney and Sedgwick (1969) described it, the analysis of covariance is a statistical technique which combines the concepts of variance and regression to handle situations where the researcher cannot completely control all the variables in his study. The analysis of covariance was used as a statistical procedure for testing the significance of differences among means, accounting for the influence of uncontrolled factors in the experiment.

#### Two-Way Analysis of Covariance With Unequal n's

The two-way analysis of covariance with unequal n's was used to test all hypotheses included within the study. To do this, six 2 X 2 population groups were created. These groupings are shown in Figures I through VI.

The data was collected for individual scores and mean scores which were computed for each of the six categorized population group. On each test, the pre-test was designated as the covariant for comparisons with the post-test on each of the 100 items on either

Figure I  
Norm Field

	SS	NSS
B		
W		

Figure II  
Age

	U30	O30
B		
W		

Figure III  
Sex

	M	F
B		
W		

Figure IV  
Cycle I and II

	I	II
B		
W		

Figure V  
Cycle I/III

	I	III
B		
W		

Figure VI  
Cycle II/III

	II	III
B		
W		

the pre-test or the post-test (10 concepts X 10 adjective pairs).

Since the six categorized population groupings were not equal in size, the two-way analysis of covariance with unequal n's was utilized.

As Courtney and Sedgwick (1969b) indicate:

Analysis of covariance has its most frequent use in situations where little or no control has been exercised over the independent variable used in the study. As far as design is concerned, covariance analysis increases precision by controlling error. The regression influence of the technique removes those effects which have not been controlled by matching.

#### IV. ANALYSIS OF DATA

The central focus of this study was on comparing the entry and exit perceptions of interns within the Portland Urban Teacher Education Program toward a set of specified concepts related to the general theme of teaching. Only interns who had graduated from P.U.T.E.P. in 1969-70, 1970-71, and 1971-72 were included in the studies' population.

The Semantic Differential, developed by Charles E. Osgood, was used as the research instrument. As used in this study, the Semantic Differential had three basic elements: (1) the concept to be evaluated in terms of its semantic or attitudinal properties, (2) the polar adjective pairs anchoring the scale, and (3) a series of undefined scale positions arranged to represent a seven-step series.

The ten specified concepts included in the Semantic Differential used in this study are:

- |               |                 |
|---------------|-----------------|
| 1. Teacher    | 6. Disciplining |
| 2. Objectives | 7. Adolescent   |
| 3. Evaluation | 8. Drop-Out     |
| 4. Curriculum | 9. Supervision  |
| 5. Learning   | 10. Success     |

Each of the ten concepts were included in the final evaluation of intern's perceptual change.

Ten polar adjective pairs were used to anchor the seven-step scale. These adjective pairs were arranged so that the favorable, potent, or active end of the scale was randomly placed in a right or left position to avoid position habits in the response pattern of interns.

The following adjective pairs were used:

1. Good . . . . . Bad
2. Friendly . . . . . Unfriendly
3. Kind . . . . . Cruel
4. Meaningful . . . . . Meaningless
5. Important . . . . . Unimportant
6. Active . . . . . Passive
7. Complex . . . . . Simple
8. Interesting . . . . . Boring
9. Sensitive . . . . . Insensitive
10. Productive . . . . . Destructive

Six 2 X 2 population sub-groups were drawn from within the total 52 intern population. These six 2 X 2 designs, described in Chapter Three, were fixed to focus on racial group (black or white) in relationship to norm group (social science or non-social science), sexual group (male or female), age group (under 30 or over 30), training cycle I, training cycle II, and training cycle III.

With 10 concepts, 10 polar adjective pairs, and six 2 X 2 population designs being used, a total of 2400 separate items were subject

to evaluation. Each separate item was studied using a two-way analysis of covariance with unequal n's and an F test. The pre-test was designated as the covariant for comparisons with the post-test on each item. Using this technique with each of the 2400 separate items, 217 different items proved to be significant at the .05 level. These 217 items are evaluated in relationship to the ten specified concepts utilized in the study.

### TEACHER

#### Good-Bad

On the adjective pair "good-bad," only three significant changes were determined. These occurred within the Race X Sex, and the Race X Cycle I and II population sub-groups. These significant changes are shown in Table 1.



Table 1. Two-way analysis of covariance of the concept TEACHER;  
adjective pair "Good- Bad. "

Group	Covariance	Post-Test	Effect
RACE X SEX			
BM	5.33	5.40	
BF	6.08	6.15	
WM	6.00	5.33	
WF	5.56	4.33	Racial Group*
CYCLE I/II			
BM	5.56	6.22	
BF	5.38	5.38	
WM	5.67	5.00	
WF	6.00	4.43	Racial Group* & Covariant*

\* Significant at the .05 level

### Friendly-Unfriendly

Five significant changes in intern perception of TEACHER as "friendly-unfriendly" were present in the data. These occurred in the Race X Norm, Race X Age, Race X Sex, Race X Cycle I and II, and Race X Cycle I and III population sub-groups. These are shown in Table 2.

Table 2. Two-way analysis of covariance of the concept TEACHER; adjective pair "Friendly-Unfriendly."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	5.40	5.65	
BNSS	6.50	5.63	
WSS	6.13	4.88	
WNSS	5.50	5.00	Covariant*
RACE X AGE			
BO30	6.31	5.81	
BU30	4.92	5.42	
WU30	5.63	4.89	
WO30	6.00	5.20	Covariant*
RACE X SEX			
BM	5.33	5.47	
BF	5.92	5.85	
WM	5.73	5.20	
WF	5.67	4.56	Covariant*
CYCLE I/II			
BI	5.78	6.00	
BII	5.62	5.15	
WI	5.83	4.67	
WII	5.71	4.86	Covariant*

\* Significant at .05 level.

### Kind-Cruel

Interns expressed significant change in their perceptions of the "kind-cruel" dimension of the concept TEACHER. These were present in the Race X Norm, Race X Age, Race X Sex, and Race X Cycle I and II population groups. Five instances of significant change on this item are shown in Table 3.

Table 3. Two-way analysis of covariance of the concept TEACHER; adjective pair "Kind-Cruel."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	5.15	5.60	
WSS	6.50	6.00	
BNSS	5.50	4.88	
WNSS	5.63	5.00	Covariant*
RACE X AGE			
BO30	6.19	5.94	
BU30	4.66	5.42	
WO30	6.20	5.60	
WU30	5.42	4.79	Covariant*
RACE X SEX			
BM	5.40	5.47	
BF	5.69	6.00	
WM	5.73	5.40	Racial Group*
WF	5.33	4.22	& Covariant*
RACE X I/II			
BI	5.78	5.89	
BII	5.38	5.38	
WI	6.00	4.83	
WII	5.29	4.43	Covariant*

\* Significant at .05 level.

#### Meaningful-Meaningless

The polar adjective pair "meaningful-meaningless" remained substantially unchanged according to intern responses. The one instance of change is shown in Table 4.

Table 4. Two-way analysis of covariance in the concept TEACHER; adjective pair "Meaningful-Meaningless."

Group	Covariance	Post-Test	Effect
RACE X II/III			
BII	5.62	5.46	
BIII	6.17	6.17	
WII	5.86	4.71	
WIII	6.00	5.27	Covariant*

\* Significant at .05 level.

#### Important-Unimportant

Five instances of significant change occurred on this adjective pairing. These were present in the Race X Norm, Race X Age, Race X Sex, Race X Cycle I and II, and Race X Cycle I and III population groups. These five significant changes are recorded in Table 5.

Table 5. Two-way analysis of covariance of the concept TEACHER; adjective pair "Important-Unimportant."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	5.95	5.85	
BNSS	6.63	6.77	
WSS	6.50	5.88	
WNSS	6.31	5.44	Covariant*
RACE X AGE			
BU30	5.58	5.92	
BO30	6.56	6.25	
WU30	6.26	5.53	
WO30	6.80	5.80	Covariant*
RACE X SEX			
BM	6.00	5.93	
BF	6.31	6.31	
WM	6.47	5.67	
WF	6.22	5.44	Covariant*
RACE X I/II			
BI	6.44	6.33	
BII	5.69	5.62	
WI	6.50	5.67	
WII	6.71	5.29	Covariant*
RACE X I/III			
BI	6.44	6.33	
BIII	6.67	6.83	
WI	6.50	5.67	
WIII	6.09	5.72	Racial Group*

\* Significant at .05 level.

#### Active-Passive

On the dimension "active-passive," four separate cases of significant change in intern's perception occurred. These were evident

in the groupings Race X Norm, Race X Age, Race X Sex, and Race X Cycle I and III. These changes are shown in Table 6.

Table 6. Two-way analysis of covariance of the concept TEACHER; adjective pair "Active-Passive."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	5.50	5.55	
BNSS	6.38	6.00	
WSS	6.38	6.63	
WNSS	5.75	5.13	Covariant*
RACE X AGE			
BU30	5.08	5.67	
BO30	6.25	6.00	
WU30	5.84	5.37	
WO30	6.40	5.60	Covariant*
RACE X SEX			
BM	5.87	5.60	
BF	5.62	6.15	
WM	6.00	5.53	
WF	5.89	5.22	Covariant*
RACE X I/III			
BI	5.78	5.67	
BIII	6.50	6.17	
WI	5.83	5.00	
WIII	5.64	5.09	Covariant*

\* Significant at .05 level.

### Complex-Simple

The perception of interns on the element of "complex-simple" were essentially stable throughout each of the three training years.

Only interns between Cycle II and III showed any change in perception. This is shown in Table 7.

Table 7. Two-way analysis of covariance of the concept TEACHER; adjective pair "Complex-Simple."

Group	Covariance	Post-Test	Effect
RACE X II/III			
BII	4.77	4.54	
BIII	5.83	6.17	
WII	6.00	5.86	
WIII	5.45	5.27	Covariant*

\* Significant at .05 level.

### Interesting-Boring

On the polar adjective pair "interesting-boring," only two significant changes in perception occurred. These were reflected in the grouping Race X Age, and Race X Cycle II and III. This is shown in Table 8.

Table 8. Two-way analysis of covariance of the concept TEACHER; adjective pair "Interesting-Boring."

Group	Covariance	Post-Test	Effect
RACE X AGE			
BU30	4.92	5.00	
BO30	6.31	6.19	
WU30	5.74	5.16	
WO30	6.20	5.40	Covariant*
RACE X CYCLE II/III			
BII	5.38	5.54	
BIII	6.17	6.17	
WII	6.14	5.14	
WIII	5.55	5.00	Covariant*

\* Significant at .05 level.

#### Sensitive-Insensitive

The single instance of change on the dimension "sensitive-insensitive" occurred in the grouping Race X Norm. This is shown in Table 9.

Table 9. Two-way analysis of covariance of the concept TEACHER; adjective pair "Sensitive-Insensitive."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	4.95	5.30	
BNSS	5.75	5.13	
WSS	6.13	5.00	
WNSS	5.25	5.06	Covariant*

\* Significant at .05 level.



Productive-Destructive

The polar adjective pair "productive-destructive" was among the most fluctuating elements related to the general concept TEACHER. Interns expressed five significant changes on this item. These occurred in the groupings Race X Norm, Race X Age, Race X Sex, and Race X Cycle II and III. This is shown in Table 10.

Table 10. Two-way analysis of covariance of the concept TEACHER; adjective pair "Productive-Destructive."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	5.70	5.35	
BNSS	6.38	6.00	
WSS	6.00	4.63	
WNSS	5.50	5.38	Covariant*
RACE X AGE			
BU30	5.08	5.08	
BO30	6.50	5.88	
WU30	5.58	5.00	
WO30	6.00	5.60	Covariant*
RACE X SEX			
BM	5.93	5.20	
BF	5.85	5.92	
WM	5.87	5.33	
WF	5.33	4.78	Covariant*
RACE X CYCLE II/III			
BII	5.85	5.00	
BIII	6.17	6.17	Cycle II & III*
WII	5.71	4.43	
WIII	5.45	5.45	Covariant*

\* Significant at .05 level.

OBJECTIVES

Good-Bad

On the adjective pair "good-bad," two separate response changes occurred. These were in the groupings Race X Cycle I and II, and Race X Cycle I and III. This is shown in Table 11.

Table 11. Two-way analysis of covariance of the concept OBJECTIVES; adjective pair "Good-Bad."

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/II			
BI	6.33	6.44	
BII	5.69	5.77	
WI	5.83	6.50	
WII	6.29	5.00	Cycle I and II*
RACE X CYCLE I/III			
BI	6.33	6.44	
BIII	5.83	6.00	
WI	5.83	6.50	
WIII	5.18	4.90	Cycle I & III*

\* Significant at .05 level.

Friendly-Unfriendly

The most frequent change on any single adjective pair relating to the concept OBJECTIVES occurred with the adjective pair "friendly-unfriendly." Six separate instances of such change took place. These are recorded in Table 12.

Table 12. Two-way analysis of covariance of the concept OBJECTIVES; adjective pair "Friendly-Unfriendly."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	4.90	5.10	
BNSS	5.38	5.00	
WSS	3.75	4.13	
WNSS	4.50	4.88	Covariant*
RACE X AGE			
BU30	5.00	5.25	
BO30	5.06	4.94	
WU30	4.42	4.68	
WO30	3.60	4.40	Covariant*
RACE X SEX			
BM	5.00	5.00	
BF	5.08	5.15	
WM	4.27	4.73	
WF	4.22	4.44	Covariant*
RACE X CYCLE I/II			
BI	5.44	5.56	
BII	4.54	4.77	Cycle I and II*
WI	4.67	5.83	
WII	4.00	3.86	Covariant*
RACE X CYCLE I/III			
BI	5.44	5.56	
BIII	5.50	5.00	
WI	4.67	5.83	
WIII	4.18	4.45	Covariant*

\* Significant at .05 level.

### Kind-Cruel

On the adjective pair "kind-cruel," only one instance of significant change occurred. This appeared in the grouping of Race X Cycle I and II, and is shown in Table 13.

Table 13. Two-way analysis of covariance of the concept OBJECTIVES; adjective pair "Kind-Cruel."

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/II			
BI	5.44	5.33	
BII	4.38	5.00	
WI	4.83	6.00	
WII	4.00	4.00	Covariant*

\* Significant at .05 level.

#### Meaningful-Meaningless

The grouping Race X Norm indicated a change in perception on this adjective pair item. No other group showed a significant change. Table 14 indicates the change which occurred on this item.

Table 14. Two-way analysis of covariance of the concept OBJECTIVES; adjective pair "Meaningful-Meaningless."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	6.05	6.05	
BNSS	6.38	6.63	
WSS	5.88	4.88	
WNSS	5.38	5.75	Racial Group*

\* Significant at .05 level.

#### Important-Unimportant

On the adjective pair "important-unimportant," there were five

significant examples of change which occurred in the perceptions of interns. These changes took place with the groups Race X Norm, Race X Sex, Race X Cycle I and II, and Race X Cycle II and III. This is shown in Table 15.

Table 15. Two-way analysis of covariance of the concept OBJECTIVES; adjective pair "Important-Unimportant."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	6.35	6.15	
BNSS	6.50	6.75	
WSS	6.38	5.38	
WNSS	5.56	5.44	Covariant*
RACE X SEX			
BM	6.20	6.13	
BF	6.62	6.54	
WM	5.80	5.33	
WF	5.89	5.56	Racial Group*
RACE X CYCLE I/II			
BI	6.33	6.56	
BII	6.46	6.08	Cycle I & II*
WI	5.67	6.50	
WII	6.14	4.86	Covariant*
RACE X CYCLE II/III			
BII	6.46	6.08	
BIII	6.33	6.50	
WII	6.14	4.86	
WIII	5.72	5.18	Racial Group*

\* Significant at .05 level.

### Complex-Simple

Five instances of change occurred on the adjective pair "complex-simple." These changes took place in the groupings Race X

Norm, Race X Age, Race X Sex, Race X Cycle I and II, and Race X Cycle II and III. Like the adjective pair "important-unimportant," this item reflected the second greatest shift on the concept OBJECTIVES. This is shown in Table 16.

Table 16. Two-way analysis of covariance of the concept OBJECTIVES; adjective pair "Complex-Simple."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	4.95	5.15	
BNSS	4.75	5.38	
WSS	5.00	4.75	
WNSS	5.06	5.19	Covariant*
RACE X AGE			
BU30	5.00	5.83	
BO30	4.81	4.75	
WU30	4.79	5.00	
WO30	6.00	5.20	Covariant*
RACE X SEX			
BM	4.93	5.13	
BF	4.85	5.31	
WM	4.93	5.13	
WF	5.22	4.89	Covariant*
RACE X CYCLE I/II			
BI	4.89	5.56	
BII	4.31	4.85	
WI	5.33	5.67	
WII	4.14	3.86	Covariant*
RACE X CYCLE II/III			
BII	4.31	4.85	
BIII	6.17	5.50	
WII	4.14	3.86	
WIII	5.45	5.45	Covariant*

\* Significant at .05 level.

Interesting-Boring

On the adjective pair "interesting-boring," there was only one case of significant change. This occurred in the grouping Race X Cycle I and III. This change is indicated in Table 17.

Table 17. Two-way analysis of covariance of the concept OBJECTIVES; adjective pair "Interesting-Boring."

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/III			
BI	5.78	5.33	
BIII	5.50	6.00	
WI	5.50	6.17	
WIII	4.45	4.09	Covariant*

\* Significant at .05 level.

Sensitive-Insensitive

The groupings Race X Norm, Race X Age, Race X Sex, and Race X Cycle II and III each showed a change in the perception toward the adjective pair "sensitive-insensitive." These four instances of change are shown in Table 18.

Table 18. Two-way analysis of covariance of the concept OBJECTIVES; adjective pair "Sensitive-Insensitive."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	5.35	5.65	
BNSS	5.13	5.00	
WSS	5.38	4.13	
WNSS	4.38	4.94	Covariant*
RACE X AGE			
BU30	5.58	5.83	
BO30	5.06	5.19	
WU30	4.68	4.42	
WO30	4.80	5.60	Covariant*
RACE X SEX			
BM	4.93	5.45	
BF	5.69	5.46	
WM	4.40	4.67	
WF	5.22	4.67	Covariant*
RACE X Cycle II/III			
BII	4.92	5.54	
BIII	5.67	5.67	
WII	4.86	3.71	
WIII	4.18	4.45	Racial Group*

\* Significant at .05 level.

### Productive-Destructive

On the adjective pair "productive-destructive," two separate instances of significant change occurred. These changes were indicated by the groupings Race X Sex, and Race X Cycle II and III. This is shown in Table 19.



Table 19. Two-way analysis of covariance of the concept OBJECTIVES; adjective pair "Productive-Destructive."

Group	Covariance	Post-Test	Effect
RACE X SEX			
BM	5.45	6.00	
BF	6.31	5.77	
WM	5.67	4.87	
WF	5.67	5.00	Racial Group*
RACE X Cycle II/III			
BII	5.31	5.77	
BIII	6.50	6.17	
WII	5.71	4.00	
WIII	5.55	4.82	Racial Group*

\* Significant at .05 level.

### EVALUATION

#### Good-Bad

On Table 20, the three instances of significant change occurring on the "good-bad" dimension of the concept EVALUATION are recorded. These three changes took place in the groupings Race X Age, and Race X Cycle I and II.

Table 20. Two-way analysis of covariance of the concept EVALUATION; adjective pair "Good-Bad."

Group	Covariance	Post-Test	Effect
RACE X AGE			
BU30	5.17	4.92	
BO30	6.00	5.88	
WU30	5.32	4.26	
WO30	5.80	6.20	Age Group*
RACE X CYCLE I/II			
BI	5.33	5.89	
BII	5.85	5.23	Racial Group*
WI	5.83	5.17	
WII	6.29	4.14	Cycle I and II*

\* Significant at .05 level.

#### Friendly-Unfriendly

Two instances of significant change were indicated on the adjective pair "friendly-unfriendly." These took place in the groupings Race X Norm, and Race X Age. This is shown on Table 21. No other fluctuation of significance appeared on this element.

Table 21. Two-way analysis of covariance of the concept EVALUATION; adjective pair "Friendly-Unfriendly."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	4.70	4.50	
BNSS	5.25	4.63	
WSS	4.00	5.00	
WNSS	4.94	4.38	Covariant*
RACE X AGE			
BU30	4.42	4.25	
BO30	5.19	4.75	
WU30	4.58	4.21	
WO30	4.80	6.00	Age Group*

\* Significant at .05 level.

Meaningful-Meaningless

On the adjective pair "meaningful-meaningless," three separate examples of significant change occurred. These occurrences were in the groupings Race X Norm, Race X Age, and Race X Sex. This is shown in Table 22.

Table 22. Two-way analysis of covariance of the concept EVALUATION; adjective pair "Meaningful-Meaningless."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	5.80	5.45	
BNSS	6.62	6.13	
WSS	5.88	5.63	
WNSS	5.63	5.31	Covariant*
RACE X AGE			
BU30	5.42	5.00	
BO30	6.50	6.13	
WU30	5.68	5.16	
WO30	5.80	6.40	Age Group*
RACE X SEX			
BM	6.13	5.40	
BF	5.92	5.92	
WM	6.07	5.47	
WF	5.11	5.33	Covariant*

\* Significant at .05 level.

Important-Unimportant

On this adjective pair, four separate instances of significant change did occur in the groupings Race X Norm, Race X Age, Race X Sex, and Race X Cycle I and III. This is shown in Table 23.

Table 23. Two-way analysis of covariance of the concept EVALUATION; adjective pair "Important-Unimportant."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	5.90	5.65	
BNSS	6.63	6.25	
WSS	5.75	5.38	
WNSS	5.63	5.06	Covariant*
RACE X AGE			
BU30	5.58	5.42	
BO30	6.50	6.13	
WU30	5.58	4.95	
WO30	6.00	6.00	Covariant*
RACE X SEX			
BM	6.20	5.73	
BF	6.00	5.92	
WM	5.87	5.27	
WF	5.33	5.00	Covariant*
RACE X CYCLE I/III			
BI	5.67	6.00	
BIII	6.17	6.00	
WI	6.33	5.33	
WIII	5.00	5.18	Covariant*

\* Significant at .05 level.

#### Active-Passive

One individual case of significance was established with the adjective pair "active-passive." This took place in the grouping Race X Norm and is shown in Table 24.

Table 24. Two-way analysis of covariance of the concept EVALUATION; adjective pair "Active-Passive."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	4.85	4.85	
BNSS	5.00	4.00	
WSS	4.88	5.38	
WNSS	5.31	5.56	Racial Group*

\* Significant at .05 level.

#### Interesting-Boring

On the adjective pair "interesting-boring," only one example of significant change appeared. This was within the grouping Race X Age. The change is shown in Table 25.

Table 25. Two-way analysis of covariance of the concept EVALUATION; adjective pair "Interesting-Boring."

Group	Covariance	Post-Test	Effect
RACE X AGE			
BU30	5.08	4.58	
BO30	5.94	5.75	
WU30	5.16	4.58	
WO30	5.40	5.40	Covariant*

\* Significant at .05 level.

#### Sensitive-Insensitive

Four separate cases of significant change took place on the

adjective pair "sensitive-insensitive." These were in the groupings Race X Norm, Race X Age, Race X Sex, and Race X Cycle I and II. This is shown in Table 26.

Table 26. Two-way analysis of covariance of the concept EVALUATION; adjective pair "Sensitive-Insensitive."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	4.75	5.15	
BNSS	5.50	4.88	
WSS	5.13	4.75	
WNSS	5.31	5.13	Covariant*
RACE X AGE			
BU30	4.67	4.58	
BO30	5.19	5.44	
WU30	5.16	4.68	
WO30	5.60	6.20	Covariant*
RACE X Sex			
BM	5.00	5.00	
BF	4.92	5.15	
WM	5.73	5.07	
WF	4.44	4.89	Covariant*
RACE X CYCLE I/II			
BI	4.56	4.89	
BII	4.92	4.92	
WI	6.17	5.00	
WII	5.00	5.29	Covariant*

\* Significant at .05 level.

### Productive-Destructive

Of the ten adjective pairs used to describe the concept EVALUATION, the adjective pair "productive-destructive" proved to be the

least stable. Five instances of significant change occurred in this dimension within the groupings Race X Norm, Race X Age, Race X Sex, Race X Cycle I and II, and Race X Cycle II and III. Table 27 shows this change.

Table 27. Two-way analysis of covariance of the concept EVALUATION; adjective pair "Productive-Destructive."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	5.30	5.20	
BNSS	6.25	5.88	
WSS	5.25	4.63	
WNSS	5.25	4.94	Covariant*
RACE X AGE			
BU30	4.91	4.91	
BO30	6.06	5.75	
WU30	5.21	4.68	
WO30	5.40	5.40	Covariant*
RACE X SEX			
BM	5.67	5.27	
BF	5.46	5.53	
WM	5.73	5.00	
WF	4.44	4.56	Covariant*
RACE X CYCLE I/II			
BI	5.44	5.56	
BII	5.46	5.23	
WI	5.83	4.83	
WII	5.71	4.86	Covariant*
RACE X CYCLE II/III			
BII	5.46	5.23	
BIII	6.00	5.50	
WII	5.71	4.86	
WIII	4.64	4.82	Covariant*

\* Significant at .05 level.

CURRICULUM

Kind-Cruel

The adjective pair "kind-cruel" proved to be quite stable with respect to the concept CURRICULUM. The one instance of significant change that occurred in this dimension was within the grouping Race X Cycle I and III. Table 28 shows this change.

Table 28. Two-way analysis of covariance of the concept CURRICULUM; adjective pair "Kind-Cruel."

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/III			
BI	5.89	5.00	
BIII	5.00	6.50	
WI	5.00	5.17	
WIII	5.27	5.64	Cycle I & III*

\* Significant at .05 level.

Meaningful-Meaningless

The adjective pair "meaningful-meaningless" proved to be quite stable with respect to the concept CURRICULUM. The one instance of significant change that occurred in this dimension was within the grouping Race X Norm. Table 29 shows this change.



Table 29. Two-way analysis of covariance of the concept CURRICULUM; adjective pair "Meaningful-Meaningless."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	6.25	6.10	
BNSS	6.75	6.75	
WSS	5.50	5.75	
WNSS	6.19	6.69	Norm*

\* Significant at .05 level.

#### Important-Unimportant

The adjective pair "important-unimportant" proved quite stable with respect to the concept CURRICULUM. The one instance of significant change that occurred in this dimension was within the grouping Race X Cycle I and III. Table 30 shows this change.

Table 30. Two-way analysis of covariance of the concept CURRICULUM; adjective pair "Important-Unimportant."

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/III			
BI	6.22	6.67	
BIII	6.67	7.00	
WI	6.67	6.33	
WIII	5.73	6.73	Cycle I & III*

\* Significant at .05 level.

Active-Passive

The adjective pair "active-passive" proved to be fairly unstable with respect to the concept CURRICULUM. There were four instances of significant change in this dimension, within the groupings Race X Norm, Race X Age, Race X Sex, and Race X Cycle I and III. Table 31 shows these changes.

Table 31. Two-way analysis of covariance of the concept CURRICULUM; adjective pair "Active-Passive."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	5.45	5.75	
BNSS	6.00	6.75	
WSS	5.00	6.38	
WNSS	5.56	6.06	Covariant*
RACE X AGE			
BU30	5.75	6.08	
BO30	5.50	6.00	
WU30	5.53	6.11	
WO30	4.80	6.40	Covariant*
RACE X SEX			
BM	5.53	5.87	
BF	5.69	6.23	
WM	5.40	6.00	
WF	5.33	6.44	Covariant*
RACE X CYCLE I/II			
BI	5.56	6.33	
BII	5.31	5.62	
WI	5.67	6.17	
WII	5.00	6.57	Covariant*

\* Significant at .05 level.

Sensitive-Insensitive

Seven instances of significant change occurred on the adjective pair "sensitive-insensitive" with respect to the concept CURRICULUM. These were in the groupings Race X Norm, Race X Age, Race X Sex, and Race X Cycle I and II. Of the ten adjective pairs, this showed the greatest instability. Table 32 shows these changes.

Table 32. Two-way analysis of covariance of the concept CURRICULUM; adjective pair "Sensitive-Insensitive."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	5.55	5.30	
BNSS	5.75	5.25	Racial Group*
WSS	5.38	6.13	
WNSS	5.81	6.44	Covariant*
RACE X AGE			
BU30	5.75	5.42	
BO30	5.50	5.19	Racial Group*
WU30	5.77	6.26	
WO30	5.20	6.60	Covariant*
RACE X SEX			
BM	5.27	5.13	
BF	6.00	5.46	Racial Group*
WM	5.67	6.20	
WF	5.67	6.56	Covariant*
RACE X CYCLE I/II			
BI	5.67	5.33	
BII	5.31	4.85	
WI	6.67	6.33	
WII	5.00	6.00	Covariant*

\* Significant at the .05 level.

LEARNINGGood-Bad

There were two instances of significant change on the adjective pair "good-bad" with respect to the concept LEARNING. These occurred in the grouping Race X Cycle I and III. Table 33 shows the change.

Table 33. Two-way analysis of covariance of the concept LEARNING; adjective pair "Good-Bad."

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/III			
BI	5.89	6.00	
BIII	6.67	5.83	Cycle I & III*
WI	6.83	6.67	
WIII	6.18	4.36	Covariant*

\* Significant at .05 level.

Kind-Cruel

The adjective pair "kind-cruel" showed quite a lot of stability with respect to the concept LEARNING. The single instance of significant change occurred in the grouping Race X Cycle II and III.

Table 34 shows this change.

Table 34. Two-way analysis of covariance of the concept LEARNING; adjective pair "Kind-Cruel. "

Group	Covariance	Post-Test	Effect
RACE X CYCLE II/III			
BII	5.54	5.85	
BIII	5.50	5.00	
WII	4.71	4.86	
WIII	5.27	3.64	Racial Group*

\* Significant at .05 level.

#### Meaningful-Meaningless

There were two instances of significant change on the adjective pair "meaningful-meaningless" for the concept LEARNING. These occurred in groupings Race X Cycle I and III, and Race X Cycle II and III. Table 35 shows this change.

Table 35. Two-way analysis of covariance of the concept LEARNING; adjective pair "Meaningful-Meaningless. "

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/III			
BI	6.11	6.11	
BIII	6.67	5.33	
WI	6.67	6.33	
WIII	6.36	4.64	Cycle I & III&
RACE X CYCLE II/III			
BII	6.61	6.08	
BIII	6.67	5.33	
WII	6.14	5.86	
WIII	6.36	4.64	Cycle II & III*

\* Significant at .05 level.

Important-Unimportant

The two instances of significant change on the adjective pair "important-unimportant" for the concept LEARNING occurred in groupings Race X Cycle I and II, and Race X Cycle I and III. Table 36 shows this change.

Table 36. Two-way analysis of covariance of the concept LEARNING; adjective pair "Important-Unimportant."

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/II			
BI	6.00	6.00	
BII	6.54	6.08	
WI	6.17	6.33	
WII	6.14	5.86	Covariant*
RACE X CYCLE I/III			
BI	6.00	6.00	
BIII	6.67	5.67	
WI	6.17	6.33	
WIII	6.45	4.64	Cycle I & III*

\* Significant at .05 level.

Active-Passive

There was a single instance of significant change on the adjective pair "active-passive" for the concept LEARNING. This occurred in the grouping Race X Cycle I and II. This is shown in Table 37.

Table 37. Two-way analysis of covariance of the concept LEARNING; adjective pair "Active-Passive."

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/II			
BI	5.56	5.78	
BII	5.23	5.69	
WI	6.33	6.17	
WII	6.29	6.00	Covariant*

\* Significant at .05 level.

### Complex-Simple

There were three instances of significant change on the adjective pair "complex-simple" for the concept LEARNING. These occurred in groupings Race X Age, Race X Sex, and Race X Cycle I and II. This change is shown in Table 38.

Table 38. Two-way analysis of covariance of the concept LEARNING; adjective pair "Complex-Simple."

Group	Covariance	Post-Test	Effect
RACE X AGE			
BU30	5.08	5.50	
BO30	4.25	5.38	
WU30	5.95	5.84	
WO30	5.80	5.60	Covariant*
RACE X SEX			
BM	4.27	5.13	
BF	5.00	5.77	
WM	6.07	5.53	
WF	5.67	6.22	Covariant*
RACE X CYCLE I/II			
BI	4.22	5.33	
BII	4.08	5.54	
WI	6.17	5.83	
WII	6.14	6.00	Covariant*

\* Significant at .05 level.

### Interesting-Boring

Moderate instability was shown on the adjective pair "interesting-boring" for the concept LEARNING. The four instances of significant change occurred in groupings Race X Age, Race X Sex, Race X Cycle I and II, and Race X Cycle I and III, as shown in Table 39.



Table 39. Two-way analysis of covariance of the concept LEARNING; adjective pair "Interesting-Boring. "

Group	Covariance	Post-Test	Effect
RACE X AGE			
BU30	5.08	5.50	
BO30	6.31	5.75	
WU30	6.26	5.23	
WO30	5.80	5.60	Covariant*
RACE X SEX			
BM	5.67	5.80	
BF	5.92	5.45	
WM	6.07	4.93	
WF	6.33	6.00	Covariant*
RACE X CYCLE I/II			
BI	5.44	5.11	
BII	5.69	6.23	
WI	6.17	6.00	
WII	6.00	5.57	Covariant*
RACE X CYCLE I/III			
BI	5.44	5.11	
BIII	6.50	5.17	
WI	6.17	6.00	
WIII	6.27	4.82	Covariant*

\* Significant at .05 level.

### Productive-Destructive

The adjective pair "productive-destructive" proved extremely unstable for the concept LEARNING, with ten significant changes occurring in all six groupings. Table 40 shows these changes.

Table 40. Two-way analysis of covariance of the concept LEARNING; adjective pair "Productive-Destructive."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	5.85	5.80	
BNSS	5.88	6.00	Racial Group*
WSS	6.38	5.38	
WNSS	5.63	4.13	Covariant*
RACE X AGE			
BU30	5.00	5.33	
BO30	6.50	6.25	
WU30	5.48	4.42	
WO30	6.00	5.00	Racial Group*
RACE X SEX			
BM	6.33	5.93	
BF	5.31	5.77	Racial Group*
WM	5.80	4.20	
WF	6.00	5.11	Covariant*
RACE X CYCLE I/II			
BI	5.44	5.67	
BII	6.00	6.00	
WI	5.67	5.67	
WII	5.86	5.14	Covariant*
RACE X CYCLE I/III			
BI	5.44	5.67	
BIII	6.17	5.83	Cycle I & III*
WI	5.67	5.67	Racial Group*
WIII	6.00	3.55	Covariant*
RACE X CYCLE II/III			
BII	6.00	6.00	
BIII	6.17	5.83	
WII	5.86	5.14	
WIII	6.00	3.55	Racial Group*

\* Significant at .05 level.

DISCIPLININGGood-Bad

There were six instances of significant change on the adjective pair "good-bad" for the concept DISCIPLINING. These changes occurred in the groupings Race X Norm, Race X Age, Race X Sex, Race X Cycle II and III, and Race X Cycle II and III. Table 41 shows this. Of the ten adjective pairs for this concept, this was the most unstable.

Table 41. Two-way analysis of covariance of the concept DISCIPLINING; adjective pair "Good-Bad."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	5.55	5.35	
BNSS	5.25	5.63	
WSS	4.25	4.38	
WNSS	4.31	3.75	Racial Group*
RACE X AGE			
BU30	5.25	5.17	
BO30	5.63	5.63	
WU30	3.89	3.63	
WO30	5.80	5.20	Covariant*
RACE X SEX			
BM	5.33	5.27	
BF	5.62	5.62	
WM	4.07	3.80	
WF	4.67	4.22	Racial Group*
RACE X CYCLE I/III			
BI	5.56	5.56	
BIII	4.17	5.17	
WI	4.67	4.33	
WIII	4.27	4.00	Covariant*
RACE X CYCLE II/III			
BII	6.00	5.46	
BIII	4.17	5.17	Racial Group*
WII	4.00	3.57	
WIII	4.27	4.00	Covariant*

\* Significant at .05 level.

Friendly-Unfriendly

There were two instances of significant change on the adjective pair "friendly-unfriendly" for the concept DISCIPLINING. These occurred in groupings Race X Sex and Race X Cycle II and III. Table 42 shows this.

Table 42. Two-way analysis of covariance of the concept DISCIPLINING; adjective pair "Friendly-Unfriendly."

Group	Covariance	Post-Test	Effect
RACE X SEX			
BM	4.47	5.13	
BF	4.54	4.15	
WM	4.07	3.87	
WF	4.56	3.67	Racial Group*
RACE X CYCLE II/III			
BII	4.69	5.23	
BIII	3.67	4.67	
WII	4.29	3.29	
WIII	4.18	3.90	Racial Group*

\* Significant at .05 level.

Kind-Cruel

There were five instances of significant change on the adjective pair "kind-cruel" for the concept DISCIPLINING. These occurred in groupings Race X Age, Race X Cycle I and II, Race X Cycle I and III, and Race X Cycle II and III, as shown in Table 43.

Table 43. Two-way analysis of covariance of the concept DISCIPLINING; adjective pair "Kind-Cruel."

Group	Covariance	Post-Test	Effect
RACE X AGE			
BU30	4.17	4.08	
BO30	4.81	5.13	Age Group*
WU30	3.84	3.53	
WO30	5.80	5.80	Covariant*
RACE X CYCLE I/II			
BI	4.33	4.00	
BII	5.00	5.15	
WI	4.33	4.50	
WII	4.43	3.43	Covariant*
RACE X CYCLE I/III			
BI	4.33	4.00	
BIII	3.83	4.67	
WI	4.33	4.50	
WIII	4.09	4.09	Covariant*
RACE X CYCLE II/III			
BII	5.00	5.15	
BIII	3.83	4.67	
WII	4.43	3.43	
WIII	4.09	4.09	Racial Group*

\* Significant at .05 level.

### Meaningful-Meaningless

There were only two instances of significant change on the adjective pair "meaningful-meaningless" for the concept DISCIPLINING. These occurred in the grouping Race X Cycle II and III as shown in Table 44.

Table 44. Two-way analysis of covariance of the concept DISCIPLINING; adjective pair "Meaningful-Meaningless."

Group	Covariance	Post-Test	Effect
RACE X CYCLE II/III			
BII	6.15	5.77	
BIII	4.83	5.83	Racial Group*
WII	5.43	4.00	
WIII	4.73	4.90	Cycle II & III*

\* Significant at .05 level.

#### Important-Unimportant

There were two instances of significant change on the adjective pair "important-unimportant" for the concept DISCIPLINING. These occurred in groupings Race X Cycle I and II, and Race X Cycle II and III. This is shown in Table 45.

Table 45. Two-way analysis of covariance of the concept DISCIPLINING; adjective pair "Important-Unimportant."

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/II			
BI	5.89	5.22	
BII	6.15	6.23	
WI	5.83	5.67	
WII	6.00	4.71	Covariant*
RACE X CYCLE II/III			
BII	6.15	6.23	
BIII	5.67	5.50	
WII	6.00	4.71	
WIII	4.64	5.00	Covariant*

\* Significant at .05 level.

Active-Passive

There were two instances of significant change on the adjective pair "active-passive" for the concept DISCIPLINING. These occurred in groupings Race X Cycle I and II, and Race X Cycle I and III, as shown in Table 46.

Table 46. Two-way analysis of covariance of the concept DISCIPLINING; adjective pair "Active-Passive."

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/II			
BI	4.89	4.11	
BII	5.38	5.30	
WI	5.83	5.50	
WII	5.57	5.71	Covariant*
RACE X CYCLE I/III			
BI	4.89	4.11	
BIII	5.00	5.33	
WI	5.83	5.50	
WIII	5.27	5.90	Covariant*

\* Significant at .05 level.

Complex-Simple

There were four cases of significant change on the adjective pair "complex-simple" for the concept DISCIPLINING. These occurred in groupings Race X Norm, Race X Age, Race X Sex, and Race X Cycle I and III, as shown in Table 47.

Table 47. Two-way analysis of covariance of the concept DISCIPLINING; adjective pair "Complex-Simple."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	4.50	5.10	
BNSS	5.13	5.38	
WSS	5.25	5.25	
WNSS	5.38	5.31	Covariant*
RACE X AGE			
BU30	5.00	5.25	
BO30	4.44	5.13	
WU30	5.11	5.11	
WO30	6.20	6.00	Covariant*
RACE X SEX			
BM	4.47	5.27	
BF	4.92	5.08	
WM	5.27	5.27	
WF	5.44	5.33	Covariant*
RACE X CYCLE I/III			
BI	4.89	4.44	
BIII	5.17	5.83	
WI	5.33	5.50	
WIII	5.54	5.72	Covariant*

\* Significant at .05 level.

### Interesting-Boring

There were only two instances of significant change on the adjective pair "interesting-boring" for the concept DISCIPLINING.

These occurred in groupings Race X Age and Race X Cycle I and III, as shown in Table 48.



Table 48. Two-way analysis of covariance of the concept DISCIPLINING; adjective pair "Interesting-Boring."

Group	Covariance	Post-Test	Effect
RACE X AGE			
BU30	3.91	4.33	
BO30	4.88	4.88	
WU30	4.31	3.74	
WO30	5.00	5.20	Age Group*
RACE X CYCLE I/III			
BI	4.33	4.44	
BIII	3.83	5.16	
WI	4.00	4.17	
WIII	4.54	4.18	Covariant*

\* Significant at .05 level.

#### Sensitive-Insensitive

There were three instances of significant change on the adjective pair "sensitive-insensitive" for the concept DISCIPLINING.

These occurred in groupings Race X Norm, Race X Age, and Race X Cycle I and II, as shown in Table 49.

Table 49. Two-way analysis of covariance of the concept DISCIPLINING; adjective pair "Sensitive-Insensitive."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	4.80	4.55	
BNSS	5.75	4.86	
WSS	5.63	3.75	
WNSS	4.25	4.75	Covariant*
RACE X AGE			
BU30	4.83	4.25	
BO30	5.25	4.94	
WU30	4.42	3.84	
WO30	5.80	6.60	Age Group*
RACE X CYCLE I/II			
BI	4.89	4.56	
BII	5.30	4.77	
WI	4.83	4.50	
WII	5.14	3.71	Covariant*

\* Significant at .05 level.

#### Productive-Destructive

There were five instances of significant change on the adjective pair "productive-destructive" for the concept DISCIPLINING. These occurred in groupings Race X Age, Race X Cycle I and II, Race X Cycle I and III, and Race X Cycle II and III. These are shown in the Table 50.

Table 50. Two-way analysis of covariance of the concept DISCIPLIN-  
ING; adjective pair "Productive-Destructive."

Group	Covariance	Post- Test	Effect
RACE X AGE			
BU30	4.75	4.33	
BO30	5.50	5.50	Age Group*
WU30	4.05	3.58	
WO30	6.00	6.40	Covariant*
RACE X CYCLE I/II			
BI	4.89	4.67	
BII	5.62	5.23	
WI	5.17	4.50	
WII	4.29	3.14	Covariant
RACE X CYCLE I/III			
BI	4.89	4.67	
BIII	4.67	5.00	
WI	5.17	4.50	
WIII	4.18	4.64	Covariant*
RACE X CYCLE II/III			
BII	5.62	5.23	
BIII	4.67	5.00	
WII	4.29	3.14	
WIII	4.18	4.64	Covariant*

\* Significant at .05 level.

### ADOLESCENT

#### Meaningful-Meaningless

There was only one instance of significance in change on the adjective pair "meaningful-meaningless" for the concept ADOLESCENT. This occurred in the grouping Race X Cycle I and II, as shown in Table 51.

Table 51. Two-way analysis of covariance of the concept ADOLESCENT; adjective pair "Meaningful-Meaningless."

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/II			
BI	6.00	5.22	
BII	5.85	5.85	
WI	6.17	5.67	
WII	5.57	5.71	Covariant*

\* Significant at .05 level.

#### Active-Passive

There was just one instance of significant change on the adjective pair "active-passive" for the concept ADOLESCENT. This occurred in the grouping Race X Cycle II and III, as shown in Table 52.

Table 52. Two-way analysis of covariance of the concept ADOLESCENT; adjective pair "Active-Passive."

Group	Covariance	Post-Test	Effect
RACE X CYCLE II/III			
BII	5.15	5.62	
BIII	6.17	5.17	
WII	5.71	5.86	
WIII	5.36	4.00	Cycle II & III*

\* Significant at .05 level.

Complex-Simple

There was just one instance of significant change on the adjective pair "complex-simple" for the concept ADOLESCENT. This occurred in grouping Race X Cycle I and III, as shown in the Table 53.

Table 53. Two-way analysis of covariance of the concept ADOLESCENT; adjective pair "Complex-Simple."

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/III			
BI	5.00	4.56	
BIII	6.17	5.83	
WI	6.00	4.67	
WIII	6.18	5.18	Covariant*

\* Significant at .05 level.

Interesting-Boring

There was only one instance of significant change on the adjective pair "interesting-boring" for the concept ADOLESCENT. This occurred in the grouping Race X Age, as shown in Table 54.

Table 54. Two-way analysis of covariance of the concept ADOLESCENT; adjective pair "Interesting-Boring."

Group	Covariance	Post-Test	Effect
RACE X AGE			
BU30	5.08	4.67	
BO30	6.50	5.56	
WU30	6.11	4.42	
WO30	5.80	6.00	Age Group*

\* Significant at .05 level.

### DROP-OUT

#### Good-Bad

There was only one instance of significant change on the adjective pair "good-bad" for the concept DROP-OUT. This occurred in the grouping Race X Cycle I and III, as shown in the Table 55.

Table 55. Two-way analysis of covariance of the concept DROP-OUT; adjective pair "Good-Bad."

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/III			
BI	5.33	5.56	
BIII	4.33	6.33	
WI	5.50	4.00	
WIII	3.73	5.18	Racial Group*

\* Significant at .05 level.

Meaningful-Meaningless

There was just one instance of significant change on the adjective pair "meaningful-meaningless" for the concept DROP-OUT. This occurred in the grouping Race X Cycle I and II, as shown in Table 56..

Table 56. Two-way analysis of covariance of the concept DROP-OUT; adjective pair "Meaningful-Meaningless."

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/II			
BI	5.33	5.89	
BII	5.23	5.00	
WI	5.83	4.83	
WII	4.71	4.86	Covariant*

\* Significant at .05 level.

Important-Unimportant

There were five instances of significant change on the adjective pair "important-unimportant" for the concept DROP-OUT. These occurred in groupings Race X Norm, Race X Age, Race X Sex, and Race X Cycle I and III, as shown in Table 57.

Table 57. Two-way analysis of covariance of the concept DROP-OUT; adjective pair "Important-Unimportant."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	5.95	5.80	
BNSS	5.75	6.50	
WSS	6.12	5.75	
WNSS	6.19	5.75	Covariant*
RACE X AGE			
BU30	5.92	5.92	
BO30	5.88	6.06	
WU30	6.00	5.79	
WO30	6.80	5.60	Covariant*
RACE X SEX			
BM	5.73	5.73	
BF	6.08	6.31	
WM	6.13	5.53	
WF	6.22	6.11	Covariant*
RACE X CYCLE I/III			
BI	6.33	5.78	
BIII	4.67	6.50	Cycle I & III*
WI	6.00	5.17	
WIII	6.18	6.18	Covariant*

\* Significant at .05 level.

### Complex-Simple

There were six instances of significant change on the adjective pair "complex-simple" for the concept DROP-OUT. This was the most unstable of all the dimensions for this concept. The changes occurred in groupings Race X Norm, Race X Age, Race X Sex, Race X Cycle I and II, and Race X Cycle II and III, as shown in Table 58.



Table 58. Two-way analysis of covariance of the concept DROP-OUT; adjective pair "Complex-Simple."

Group	Covariance	Post-test	Effect
RACE X NORM			
BSS	5.30	5.35	
BNSS	5.13	5.75	
WSS	6.13	5.75	
WNSS	5.25	4.69	Covariant*
RACE X AGE			
BU30	5.42	5.58	
BO30	5.13	5.38	Racial Group*
WU30	5.26	5.37	
WO30	6.60	3.80	Age Group*
RACE X SEX			
BM	5.07	5.27	
BF	5.46	5.69	
WM	5.60	4.67	
WF	5.44	5.66	Covariant*
RACE X CYCLE I/II			
BI	5.22	5.22	
BII	5.23	5.54	
WI	5.67	4.33	
WII	4.71	4.86	Covariant*
RACE X CYCLE II/III			
BII	5.23	5.54	
BIII	5.33	5.67	
WII	4.71	4.86	
WIII	6.00	5.55	Covariant*

\* Significant at .05 level.

### Interesting-Boring

There are two instances of significant change on the adjective pair "interesting-boring" for the concept DROP-OUT. These

occurred in groupings Race X Cycle I and III, and Race X Cycle II and III, as shown in Table 59.

Table 59. Two-way analysis of covariance of the concept DROP-OUT; adjective pair "Interesting-Boring."

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/III			
BI	5.11	4.67	
BIII	5.50	5.67	
WI	5.67	4.17	
WIII	6.09	6.00	Cycle I & III*
RACE X CYCLE II/III			
BII	5.15	5.46	
BIII	5.50	5.67	
WII	5.14	5.29	
WIII	6.09	6.00	Covariant*

\* Significant at .05 level.

### SUPERVISION

#### Good-Bad

There were three instances of significant change on the adjective pair "good-bad" for the concept SUPERVISION. These occurred in groupings Race X Age, Race X Sex, and Race X Cycle I and III, as shown in Table 60.

Table 60. Two-way analysis of covariance of the concept SUPERVISION; adjective pair "Good-Bad."

Group	Covariance	Post-Test	Effect
RACE X AGE			
BU30	4.08	3.75	
BO30	5.00	3.44	
WU30	3.95	3.84	
WO30	2.80	2.80	Covariant*
RACE X SEX			
BM	5.53	3.80	
BF	3.54	3.31	
WM	3.73	3.87	
WF	3.67	3.22	Covariant*
RACE X CYCLE I/III			
BI	2.67	3.00	
BIII	6.00	3.33	
WI	3.50	3.00	
WIII	3.55	3.36	Covariant*

\* Significant at .05 level.

### Friendly-Unfriendly

There were four instances of significant change on the adjective pair "friendly-unfriendly" for the concept SUPERVISION. These occurred in groupings Race X Norm, Race X Age, Race X Sex, and Race X Cycle I and III, shown in Table 61.

Table 61. Two-way analysis of covariance of the concept SUPERVISION; adjective pair "Friendly-Unfriendly."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	4.40	4.75	
BNSS	4.13	3.13	
WSS	4.25	4.13	
WNSS	3.19	4.19	Covariant*
RACE X AGE			
BU30	3.75	4.42	
BO30	4.75	4.19	
WU30	3.68	4.21	
WO30	3.00	4.00	Covariant*
RACE X SEX			
BM	4.93	4.60	
BF	3.62	3.92	
WM	3.73	4.27	
WF	3.22	4.00	Covariant*
RACE X CYCLE I/II			
BI	2.56	3.78	
BII	5.38	4.92	
WI	3.50	3.83	
WII	4.00	5.00	Covariant*

\* Significant at .05 level.

### Kind-Cruel

There were four instances of significant change on the adjective pair "kind-cruel" for the concept SUPERVISION. These occurred in groupings Race X Norm, Race X Age, Race X Sex, and Race X Cycle II and III, shown in Table 62.

Table 62. Two-way analysis of covariance of the concept SUPERVISION; adjective pair "Kind-Cruel."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	4.15	4.60	
BNSS	4.25	3.25	
WSS	3.88	4.38	
WNSS	3.44	3.75	Covariant*
RACE X AGE			
BU30	4.00	4.33	
BO30	4.32	4.13	
WU30	3.79	4.00	
WO30	2.80	3.80	Covariant*
RACE X SEX			
BM	4.33	4.53	
BF	4.00	3.85	
WM	3.93	4.13	
WF	3.00	3.66	Covariant*
RACE X CYCLE II/III			
BII	4.77	4.92	
BIII	5.00	3.67	
WII	4.00	5.29	
WIII	3.00	3.36	Cycle II & III*

\* Significant at .05 level.

### Meaningful-Meaningless

There were three instances of significant change on the adjective pair "meaningful-meaningless" for the concept SUPERVISION. These occurred in groupings Race X Cycle I and III, and Race X Cycle II and III, shown in Table 63.

Table 63. Two-way analysis of covariance of the concept SUPERVISION; adjective pair "Meaningful-Meaningless."

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/III			
BI	4.22	5.00	
BIII	5.83	3.33	Cycle I & III*
WI	4.67	5.00	
WIII	5.18	4.73	Covariant*
RACE X CYCLE II/III			
BII	5.69	5.62	
BIII	5.83	3.33	
WII	5.14	5.57	
WIII	5.18	4.73	Cycle II & III*

\* Significant at .05 level.

#### Important-Unimportant

There were three instances of significant change on the adjective pair "important-unimportant" for the concept SUPERVISION.

These occurred in groupings Race X Sex, Race X Cycle I and II, and Race X Cycle I and III, shown in Table 64.

Table 64. Two-way analysis of covariance of the concept SUPERVISION; adjective pair "Important-Unimportant."

Group	Covariance	Post-Test	Effect
RACE X SEX			
BM	6.27	6.20	
BF	5.15	4.69	
WM	5.80	6.20	
WF	5.33	6.22	Racial Group*
RACE X CYCLE I/II			
BI	4.56	5.33	
BII	6.38	6.15	
WI	6.67	6.33	
WII	4.86	6.00	Covariant*
RACE X CYCLE I/III			
BI	4.56	5.33	
BIII	6.17	4.33	
WI	6.67	6.33	
WIII	5.55	6.27	Racial Group*

\* Significant at .05 level.

### Active-Passive

There was only one instance of significant change on the adjective pair "active-passive" for the concept SUPERVISION. This was the most stable of all dimensions for this concept. The change occurred in the grouping Race X Cycle I and II, shown in Table 65.

Table 65. Two-way analysis of covariance of the concept SUPERVISION; adjective pair "Active-Passive."

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/II			
BI	4.67	4.22	
BII	5.23	5.62	
WI	4.83	5.00	
WII	5.14	5.86	Cycle I & II*

\* Significant at .05 level.

#### Complex-Simple

There were five instances of significant change on the adjective pair "complex-simple" for the concept SUPERVISION. These occurred in groupings Race X Norm, Race X Cycle I and II, Race X Cycle I and III, and Race X Cycle II and III, shown in Table 66.



Table 66. Two-way analysis of covariance of the concept SUPERVISION; adjective pair "Complex-Simple."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	5.05	4.70	
BNSS	5.00	5.13	
WSS	5.38	5.38	
WNSS	4.69	5.94	Covariant*
RACE X CYCLE I/II			
BI	4.78	5.22	
BII	4.69	4.62	
WI	5.17	5.17	
WII	5.14	5.00	Covariant*
RACE X CYCLE I/III			
BI	4.76	5.22	
BIII	6.17	4.67	
WI	5.17	5.17	
WIII	4.64	6.55	Covariant*
RACE X CYCLE II/III			
BII	4.69	4.62	
BIII	6.17	4.67	Racial Group*
WII	5.14	5.00	
WIII	4.64	6.55	Covariant*

\* Significant at .05 level.

### Interesting-Boring

There were two instances of significant change on the adjective pair "interesting-boring" for the concept SUPERVISION. These occurred in groupings Race X Norm, and Race X Sex, shown in Table 67.

Table 67. Two-way analysis of covariance of the concept SUPERVISION; adjective pair "Interesting-Boring."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	4.95	5.40	
BNSS	4.00	4.00	
WSS	4.88	5.38	
WNSS	4.25	5.50	Covariant*
RACE X SEX			
BM	5.07	5.53	
BF	4.23	4.38	
WM	4.40	5.20	
WF	4.56	5.89	Covariant*

\* Significant at .05 level.

#### Sensitive-Insensitive

There were eight instances of significant change on the adjective pair "sensitive-insensitive" for the concept SUPERVISION. This was the least stable of the ten dimensions for the concept. Change occurred in groupings Race X Norm, Race X Age, Race X Sex, Race X Cycle I and III, and Race X Cycle II and III, shown in Table 68.

Table 68. Two-way analysis of covariance of the concept SUPERVISION; adjective pair "Sensitive-Insensitive."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	4.85	4.75	
BNSS	5.25	3.63	Racial Group*
WSS	5.125	5.38	
WNSS	4.13	5.06	Covariant*
RACE X AGE			
BU30	5.33	4.67	
BO30	4.68	4.25	
WU30	4.58	5.11	
WO30	4.00	5.40	Covariant*
RACE X SEX			
BM	5.07	4.93	
BF	4.85	3.85	Racial Group*
WM	4.67	4.93	
WF	4.11	5.56	Covariant*
RACE X CYCLE I/III			
BI	5.00	4.78	
BIII	5.33	3.17	
WI	6.33	5.67	
WIII	3.55	4.55	Covariant*
RACE X CYCLE II/III			
BII	4.77	4.77	
BIII	5.33	3.17	Racial Group*
WII	4.29	5.71	
WIII	3.55	4.55	Cycle II & III*

\* Significant at .05 level.

#### Productive-Destructive

There were two instances of significant change on the adjective pair "productive-destructive" for the concept SUPERVISION. These occurred in groupings Race X Cycle I and III, and Race X Cycle II and III, shown in Table 69.

Table 69. Two-way analysis of covariance of the concept SUPERVISION; adjective pair "Productive-Destructive."

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/III			
BI	3.78	4.78	
BIII	5.33	3.00	
WI	3.67	4.00	
WIII	3.82	3.27	Cycle I & III*
RACE X CYCLE II/III			
BII	5.23	4.54	
BIII	5.33	3.00	
WII	4.29	5.14	
WIII	3.82	3.27	Cycle II & III*

\* Significant at .05 level.

### SUCCESS

#### Good-Bad

There was one instance of significant change on the adjective pair "good-bad" for the concept SUCCESS. This occurred in grouping Race X Cycle I and II, shown in Table 70.

Table 70. Two-way analysis of covariance of the concept SUCCESS; adjective pair "Good-Bad."

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/II			
BI	5.33	5.56	
BII	6.38	6.48	
WI	5.33	5.83	
WII	6.57	5.42	Covariant*

\* Significant at .05 level.

Friendly-Unfriendly

There was only one instance of significant change on the adjective pair "friendly-unfriendly" for the concept SUCCESS. This occurred in grouping Race X Cycle I and II, shown in Table 71.

Table 71. Two-way analysis of covariance of the concept SUCCESS; adjective pair "Friendly-Unfriendly."

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/II			
BI	5.00	4.89	
BII	5.92	5.23	
WI	5.33	5.83	
WII	5.86	4.86	Covariant*

\* Significant at .05 level.

Kind-Cruel

There were three instances of significant change on the adjective pair "kind-cruel" for the concept SUCCESS. These occurred in groupings Race X Norm, Race X Age, and Race X Sex, shown in Table 72.

Table 72. Two-way analysis of covariance of the concept SUCCESS; adjective pair "Kind-Cruel."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	5.45	5.45	
BNSS	4.50	5.00	
WSS	5.38	4.63	
WNSS	4.88	4.75	Covariant*
RACE X AGE			
BU30	5.25	5.58	
BO30	5.13	5.13	
WU30	5.21	4.84	
WO30	4.40	4.20	Covariant*
RACE X SEX			
BM	5.27	5.40	
BF	5.08	5.23	
WM	4.93	4.93	
WF	5.22	4.33	Covariant*

\* Significant at .05 level.

### Meaningful-Meaningless

There was only one instance of significant change on the adjective pair "meaningful-meaningless" for the concept SUCCESS. It occurred in the grouping Race X Cycle I and II, shown in the Table 73.

Table 73. Two-way analysis of covariance of the concept SUCCESS; adjective pair 'Meaningful-Meaningless. '

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/II			
BI	5.67	5.89	
BII	6.46	6.23	
WI	6.00	6.17	
WII	6.42	5.14	Covariant*

\* Significant at .05 level.

#### Important-Unimportant

There were two instances of significant change on the adjective pair 'important-unimportant' for the concept SUCCESS. These occurred in grouping Race X Cycle I and II, shown in Table 74.

Table 74. Two-way analysis of covariance of the concept SUCCESS; adjective pair 'Important-Unimportant. '

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/II			
BI	5.56	6.57	
BII	6.62	6.23	Cycle I & II*
WI	6.33	6.50	
WII	6.43	5.29	Covariant*

\* Significant at .05 level.

#### Complex-Simple

There were three instances of significant change on the

adjective pair "complex-simple" for the concept SUCCESS. These occurred in groupings Race X Norm, Race X Sex, and Race X Cycle I and II, shown in Table 75.

Table 75. Two-way analysis of covariance of the concept SUCCESS; adjective pair "Complex-Simple."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	4.70	5.20	
BNSS	6.38	6.00	
WSS	6.63	6.25	
WNSS	6.13	6.44	Covariant*
RACE X SEX			
BM	5.40	5.67	
BF	4.92	5.15	
WM	6.07	6.33	
WF	6.67	6.44	Covariant*
RACE X CYCLE I/II			
BI	5.33	5.78	
BII	4.96	5.08	
WI	6.83	6.50	
WII	6.28	6.14	Covariant*

\* Significant at .05 level.

### Interesting-Boring

There were seven instances of significant change on the adjective pair "interesting-boring" for the concept SUCCESS. This was the least stable dimension for the concept. The changes occurred in groupings Race X Norm, Race X Age, Race X Sex, Race X Cycle I and II, and Race X Cycle I and III, as shown in Table 76.



Table 76. Two-way analysis of covariance of the concept SUCCESS; adjective pair "Interesting-Boring."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	6.10	5.70	
BNSS	5.50	5.50	
WSS	6.38	6.00	
WNSS	5.63	6.44	Covariant*
RACE X AGE			
BU30	5.92	5.58	
BO30	5.94	5.69	Racial Group*
WU30	5.74	6.11	
WO30	6.40	7.00	Covariant*
RACE X SEX			
BM	6.40	6.00	
BF	5.38	5.23	
WM	5.73	6.47	
WF	6.11	6.00	Covariant*
RACE X CYCLE I/II			
BI	5.11	5.33	
BII	6.46	6.08	
WI	6.67	6.67	
WII	6.43	5.71	Covariant*
RACE X CYCLE I/III			
BI	5.11	5.33	
BIII	6.00	5.17	Racial Group*
WI	6.67	6.67	
WIII	5.09	6.45	Cycle I & III*

\* Significant at .05 level.

#### Sensitive-Insensitive

There were two instances of significant change on the adjective pair "sensitive-insensitive" for the concept SUCCESS. These

occurred in groupings Race X Cycle I and II, and Race X Cycle I and III, shown in Table 77.

Table 77. Two-way analysis of covariance of the concept SUCCESS; adjective pair "Sensitive-Insensitive."

Group	Covariance	Post-Test	Effect
RACE X CYCLE I/II			
BI	5.78	6.11	
BII	5.00	5.38	
WI	6.67	6.33	
WII	6.00	5.14	Cycle I & II*
RACE X CYCLE I/III			
BI	5.78	6.11	
BIII	6.33	5.00	
WI	6.67	6.33	
WIII	4.73	5.73	Cycle I & III*

\* Significant at .05 level.

#### Productive-Destructive

There were three instances of significant change on the adjective pair "productive-destructive" for the concept SUCCESS. These occurred in groupings Race X Norm, Race X Age, and Race X sex, as shown in Table 78.

Table 78. Two-way analysis of covariance of the concept SUCCESS; adjective pair "Productive-Destructive."

Group	Covariance	Post-Test	Effect
RACE X NORM			
BSS	5.85	5.50	
BNSS	5.25	5.13	
WSS	5.88	5.25	
WNSS	5.19	4.88	Covariant*
RACE X AGE			
BU30	5.50	5.50	
BO30	5.81	5.31	
WU30	5.53	5.05	
WO30	5.00	4.80	Covariant*
RACE X SEX			
BM	6.07	5.47	
BF	5.23	5.31	
WM	5.40	5.20	
WF	5.44	4.67	Covariant*

\* Significant at .05 level.

## V. SUMMARY AND CONCLUSIONS

### The Problem

The study was designed to determine the attitudes of intern teachers toward specified concepts as they began their internship in the Portland Urban Teacher Education Program with these same interns' attitudes toward the same concepts at the completion of their training. The study also attempted to determine if there was significant differences in attitude between interns who are black, white, under 30 years of age, over 30 years of age, from an academic social science background, from a non-social science background, male, female, the first training year, the second training year, and the third training year.

The specific questions formulated to investigate in this study were:

1. Over a three-year P.U.T.E.P. training period, will black male and female interns perceive concepts differently than the white male and female interns trained over the same three-year period?
2. Over a three-year P.U.T.E.P. training period, will black and white interns under 30 years of age perceive concepts differently than black or white interns over 30 years of age?
3. Over the three-year P.U.T.E.P. training period, will

black and white interns with social science teaching norms perceive concepts differently than black and white interns who have non-social science teaching norms?

4. Will black and white interns trained during the first year of P.U.T.E.P. (1969-70), perceive concepts differently than black and white interns trained during the program's second year?
5. Will black and white interns trained during the second year of P.U.T.E.P. (1970-71), perceive concepts differently than black and white interns trained during the program's third year?
6. Will black and white interns trained during the first year of P.U.T.E.P. perceive concepts differently than black and white interns trained during the third year (1971-72)?

The major significance of this study was to investigate the total impact of year-long, preservice teacher training in the Portland Urban Teacher Education Program. Because of both the field-based setting of this training and the racially mixed group of interns involved each year in the training program, it was hoped that important data might be added to the growing research focused on teacher effectiveness and the relationship between preservice training design and specific concept formation and change.

### Procedure

A total of 52 students seeking teacher certification in Oregon through Oregon State University and the Portland Urban Teacher Education Program during the years 1969-70, 1970-71, and 1971-72 participated in the study. These 52 interns represented 87% of all the interns who received their certification through P. U. T. E. P. during this three-year interval.

The Semantic Differential, developed by Charles E. Osgood, was used as the primary research instrument. Administered as both a pre-test and a post-test to each of the 52 interns, the Semantic Differential had three basic elements: (1) the concept to be evaluated in terms of its semantic or attitudinal properties, (2) the polar adjective pairs anchoring the scale, and (3) a series of undefined scale positions arranged to represent a seven-step series. Approximately 10 months of training took place between the administration of the pre-test and the post-test.

Ten specified concepts were included in the Semantic Differential used in the study. These were:

- |               |                 |
|---------------|-----------------|
| 1. Teacher    | 6. Disciplining |
| 2. Objectives | 7. Adolescent   |
| 3. Evaluation | 8. Drop-Out     |
| 4. Curriculum | 9. Supervision  |
| 5. Learning   | 10. Success     |

Each of the ten concepts was included in the final evaluation of intern's attitudinal change.

Ten polar adjective pairs were used to anchor the seven-step scale. These adjective pairs were arranged so that the favorable, potent, or active end of the scale was randomly placed in a right or left position to avoid position habits in the response pattern of each intern. The following adjective pairs were used:

1. Good . . . . . Bad
2. Friendly . . . . . Unfriendly
3. Kind . . . . . Cruel
4. Meaningful . . . . . Meaningless
5. Important . . . . . Unimportant
6. Active . . . . . Passive
7. Complex . . . . . Simple
8. Interesting . . . . . Boring
9. Sensitive . . . . . Insensitive
10. Productive . . . . . Destructive

Again, each of these ten polar adjective pairs was considered in determining the nature of intern's attitudinal change.

Six 2 X 2 population sub-groups were drawn from within the total 52 intern population. These six 2 X 2 designs were fixed to focus on racial group in relationship to teaching norm field, sex, age, and training cycle. The number of interns who fell within each

2 X 2 design are shown in Table 79.

Table 79. Distribution of intern population by norm, age, sex, and training cycle.

Racial Group	Norm		Age		Sex		Cycle I	Cycle II	Cycle III
	SS	NSS	U30	O30	M	F			
Black	20	8	12	16	15	13	9	13	6
White	8	16	19	5	15	9	6	7	11

With 10 concepts, 10 polar adjective pairs, and six 2 X 2 population designs used, a total of 2400 separate items were available for study and interpretation. Of this total number, 217 different items proved to be significant at the .05 level.

#### Analysis of Data

The two-way analysis of covariance with unequal n's was used to analyze the statistical significance of data obtained from the 52 interns who served as participants in the study. The pre-test was designated as the covariant for comparisons with the post-test on each of the 100 items on either the pre-test or the post-test (10 concepts X 10 adjective pairs). In addition, an F test was computed on each item. The statistical analysis was accomplished by computer programming.



### Summary of Findings

1. Of the 10 primary concepts studied, the concepts DROP-OUT, ADOLESCENT, and CURRICULUM reflected the greater stability across the six sub-groups of interns studied. The concepts TEACHER, OBJECTIVES, EVALUATION, LEARNING, DISCIPLINING, SUPERVISION, and SUCCESS showed the greater amount of instability, with changes in intern perception toward these concepts occurring more frequently. The concept ADOLESCENT was the single most stable concept; the concept SUPERVISION was the single least stable concept.
2. On the concept TEACHER, no significant differences occurred between interns when grouped by norm field, age, sex, Cycle I and II, and Cycle I and III. When grouped Cycle II and III, black and white interns in Cycle II showed a significant decline in view toward the "destructive" nature of TEACHER while Cycle III interns held a higher, totally stable view of the productiveness of TEACHER.

When analyzed to determine racial differences in perception toward the concept TEACHER, there was an inclination for black interns to gain or remain stable in their view of TEACHER while white interns tended to have declining views of TEACHER.

Interns generally reflected a tendency toward declining

perceptions of the concept TEACHER from the time of pre-testing to the time of the post-test. Many interns came to regard TEACHER as more "unfriendly," more "cruel," more "unimportant," more "passive," and more "destructive."

3. On the concept OBJECTIVES, no significant differences occurred between interns when grouped by norm field, age, sex, and Cycle II and III. When grouped Cycle I and II, interns in Cycle I tended to feel OBJECTIVES were more "good," more "friendly," and more "important" than interns in Cycle II. In the same way, interns in Cycle I viewed OBJECTIVES as more "good" than Cycle III interns.

When analyzed to determine racial differences in perception toward the concept OBJECTIVES, black interns regarded the concept more positively than white interns. Black interns viewed OBJECTIVES as more "meaningful," more "important," more "sensitive," and more "productive" than their white counterparts.

Interns generally showed a tendency toward increasingly positive perceptions of the concept OBJECTIVES from the time of pre-testing to the time of the post-test. Many interns came to regard OBJECTIVES as more "friendly," more "kind," more "important," more "complex," and more "sensitive" than they had initially regarded the concept at the start of training.

4. On the concept EVALUATION, no significant differences occurred

between interns when grouped by norm field, sex, Cycle I and III, and Cycle II and III. When grouped by age, interns over 30 years of age tended to see EVALUATION as more "good," more "friendly," and more "meaningful" than interns under 30 years of age. Interns in Cycle I regarded EVALUATION as more "good" than interns in Cycle II.

When analyzed to determine racial differences in perception toward the concept EVALUATION, black interns regarded the concept as more "good" than white interns; however, white interns saw EVALUATION as more "active" than black interns.

Interns generally indicated a declining view of the concept EVALUATION from the time of the pre-test to the time of the post-test. This was true on all adjective dimensions but "kind-cruel," and "complex-simple" where there was no significant change in either direction.

5. On the concept CURRICULUM, no significant differences occurred between interns when grouped by age, sex, Cycle I and II, and Cycle II and III. When grouped by norm field, non-social science interns indicated their feeling that CURRICULUM was more "meaningful" than interns with social science backgrounds. Interns in Cycle III viewed CURRICULUM as more "kind" and more "important" than interns in the first cycle of training.

When analyzed to determine racial differences in perception

toward the concept CURRICULUM, white interns felt that the concept was more "sensitive" than black interns.

Interns generally indicated an increasingly positive view of the concept CURRICULUM. While the majority of adjective pairs showed no significant change, interns came to view CURRICULUM at the time of the post-test as significantly more "active" and more "sensitive" than they had at the time of the pre-test.

6. On the concept LEARNING, no significant differences occurred between interns when grouped by norm field, age, sex, and Cycle I and II. When grouped by Cycle I and III, interns in Cycle I viewed LEARNING as more "good," more "meaningful," more "important," and more "productive" than interns in Cycle III. In the grouping of Cycle II and III, interns in Cycle II were more positive that LEARNING was "important" than the interns in Cycle III.

When analyzed to determine racial differences in perception toward the concept LEARNING, black interns viewed LEARNING as significantly more "productive" than white interns. Also, black interns in Cycle II regarded LEARNING as more "kind" than white interns in either Cycle II or III.

Interns generally showed a tendency toward erratic gains and declines of the concept LEARNING from the time of pre-testing to the time of the post-test. White interns tended to show

marked decline in their perceptions of LEARNING over the course of the training year while black interns' perceptions tended, at the same time, to show a steady incline.

7. On the concept DISCIPLINING, no significant differences in perceptions occurred between interns when grouped by norm field, sex, Cycle I and II, and Cycle I and III. When the interns were grouped by age, interns over 30 tended to view DISCIPLINING as more "kind," more "interesting," more "sensitive," and more "productive" than interns who were under 30 years of age. Interns in Cycle III came to view DISCIPLINING as more "meaningful" than interns in Cycle II.

When analyzed to determine racial differences in perception toward the concept DISCIPLINING, black interns indicated significantly more positive views toward the concept than did white interns. Related to this dimension, black interns saw DISCIPLINING as more "good," more "friendly," more "kind," and more "meaningful" than white interns.

With exception of the adjective pairs "friendly-unfriendly" and "meaningful-meaningless," there tended to be substantial change in the perceptions of interns from the time of the pre-test to the time of the post-test. On each adjective pair where there was such significant change, black interns tended to view DISCIPLINING more positively over the course of the training year.

White interns tended to show a reverse pattern of responses and ended their training feeling quite negatively about the concept DISCIPLINING.

8. Although the concept ADOLESCENT was the most stable of all of the ten concepts interpreted in this study, there was some significant change which did occur. No significant differences in perception did occur, however, between interns who were grouped by norm field, sex, Cycle I and II, and Cycle I and III. When the interns were grouped by age, interns over 30 years old did perceive the concept ADOLESCENT as more "interesting" than interns under 30 years of age. Interns in Cycle II viewed ADOLESCENT as more "active" than interns in Cycle III.

No significant differences in perception were present between black and white interns on any of the adjective pairs relating to the concept ADOLESCENT.

There was significant change in interns' perceptions toward the concept ADOLESCENT on only two adjective dimensions from the time of the pre-test to the time of the post-test. In these two cases, interns in the groupings Cycle I and II, and Cycle I and III came to view the concept of ADOLESCENT as more "simple" and less "meaningful."

9. On the concept DROP-OUT, no significant differences in perception occurred between interns when grouped by norm field, sex,

Cycle I and II, and Cycle II and III. When the interns were grouped by age, interns under 30 years old indicated feeling that DROP-OUT was more "complex" than interns who were over 30 years of age. Cycle III interns viewed the concept of DROP-OUT as both more "important" and more "interesting" than interns in Cycle I.

When analyzed to determine racial differences in perception toward the concept DROP-OUT, black interns ended their training with a feeling that DROP-OUT was more "active" and more "good" than white interns felt toward the same concept.

From the time of the pre-test to the time of the post-test, there was some significant change in the perceptions of the interns. Generally, black interns came to see the concept DROP-OUT as more "important," more "complex," more "interesting," and more "sensitive" than did white interns who perceived the concept DROP-OUT less positively on each of these adjective dimensions.

10. On the concept SUPERVISION, no significant differences in perception occurred between interns when the interns were grouped by norm field, age, and sex. In the grouping of Cycle I and II, interns in Cycle II came to view SUPERVISION as more "active" than interns enrolled in Cycle I. Interns in Cycle I perceived SUPERVISION as more "meaningful" and more "productive"

than interns in Cycle III. Between the interns in Cycle II and III, interns in Cycle II viewed the concept SUPERVISION as more "meaningful," more "sensitive," more "kind," and more "productive" than interns in Cycle III.

When analyzed to determine racial differences in perception toward the concept of SUPERVISION, white interns viewed the concept significantly higher than black interns. White interns perceived SUPERVISION as more "important," more "interesting," more "complex," and more "sensitive" than black interns.

From the time of the pre-test to the post-test at the completion of each training year, there was substantial significant change in the perceptions of many interns toward the concept SUPERVISION. While this change is quite mixed, there was a tendency for white intern's post-test scores to be more positive than their pre-test scores. With black interns, the reverse trend appeared more typical on most adjective pairs. Only the adjective pairs "active-passive" and "productive-destructive" did not undergo significant change during the treatment period.

11. On the concept SUCCESS, no significant differences in perception occurred between interns when the interns were grouped according to norm field, age, sex, and Cycle II and III. In the grouping Cycle I and II, interns in Cycle I regarded the concept



of SUCCESS as both more "important" and more "sensitive" than interns in Cycle II. Interns in Cycle I also indicated that SUCCESS was more "sensitive" than did interns in Cycle III.

When analyzed to determine racial differences in perception toward the concept SUCCESS, white interns came to regard the concept as more "interesting" than black interns. No other adjective pair reflected a significant difference in racial view.

From the time of the pre-test to the time of the post-test there was significant change within all adjective pairs but two. The pairs "active-passive" and "sensitive-insensitive" did not change significantly. There was mixed direction for this change and no general tendencies were apparent.

### Conclusions

Several conclusions can be drawn from the findings of this study. These conclusions relate directly with the six substantive questions which were the basis of this study. In order, the study does tend to support the following conclusions:

1. The racial difference within P. U. T. E. P. intern population was significant in relationship to attitudes held by groups of interns within any of the three training cycles. Black interns did, in fact, perceive concepts differently at the end of their training. So did white interns. However, white interns' perceptions were

quite different from black interns' perceptions. Only on the concept ADOLESCENT was there no significant indication of differences in attitude between black and white interns. On the remaining nine concepts, black interns and white interns viewed each concept differently on at least one adjective pair dimension.

Black interns generally ended their training experience with a more positive view of the concepts TEACHER, OBJECTIVES, LEARNING, DISCIPLINING, and DROP-OUT than white interns. On the other hand, white interns completed their training feeling more positive toward the concepts CURRICULUM, SUPERVISION, and SUCCESS than black interns. While there was a significant difference in perception toward the concept EVALUATION, this was not clearly viewed as more positive by one group than the other.

Again, the implications related to differing racial group perceptions of concepts are difficult to determine. An inherent racial bias may have existed toward individual concepts prior to training, e.g., DISCIPLINING, DROP-OUT, CURRICULUM, and SUCCESS. The differences in employment opportunities at the completion of training may also have influenced the perceptions of each group, e.g., TEACHER, LEARNING, SUPERVISION, and SUCCESS.

2. The age of the intern did effect attitude toward four of the ten

concepts. These four concepts were EVALUATION, DROP-OUT, ADOLESCENT, and DISCIPLINING. While interns under 30 years of age viewed the DROP-OUT as significantly more "complex" than interns over 30, interns over 30 felt that the ADOLESCENT was more "interesting" than interns under 30 years of age. Related to these two concepts in a contextual sense, interns over 30 were more positive in their views of DISCIPLINING than interns under 30 years old. On this latter concept, older interns regarded DISCIPLINING as more "kind," "interesting," "sensitive," and "productive." On the concept EVALUATION interns over 30 viewed the concept as more "good," "friendly," and more "meaningful" than interns under 30 years old.

While different views of these findings could be held, it does appear possible that older interns may be inclined to a more parental view of youth than younger interns. Whereas the ADOLESCENT is "interesting" to the intern closer in age to adolescence. In the same way, the DROP-OUT is "complex" for the younger intern; more "simple" for the older intern.

The disparity in attitude toward DISCIPLINING may also relate, in part, to a more parent vantage point. As views of child rearing have changed in a general sense in American society, specific views toward disciplining have also undergone change. Younger interns in this study may be reflecting the

attitudes of their general age group in the same way that older interns in P. U. T. E. P. were expressing some generalizable feelings of their age group.

The more positive attitudes of older interns toward EVALUATION may indicate a greater internal security with self; greater confidence in 'whom I am' in relationship to external assessments made by others. For younger interns, EVALUATION carried with it some apparent anxiety and apprehension. If student-EVALUATION is considered rather than self-EVALUATION, the data may again reflect differences in attitude both toward and away from a prevalent 'do your own thing' life view.

3. The teaching norm field of interns was not a viable determinant in the attitudinal change which did occur within the total intern group. On nine of the ten concepts utilized in the study, interns with social science teaching norms did not perceive the concepts in a significantly different way than interns with non-social science teaching norms. Only on the concept CURRICULUM was there an instance of significant difference.
4. The particular year or training cycle which interns participated in P. U. T. E. P. was an indicator of interns' attitudinal change. During each of the three training cycles included in the study, there were significant differences in intern perception between any two of the three years.

Between Cycle I and II, interns in those two years felt differently toward the concepts OBJECTIVES, EVALUATION, SUPERVISION, and SUCCESS on at least one adjective pair dimension. Between Cycles I and III, interns ended their training with different perceptions toward the concepts OBJECTIVES, CURRICULUM, LEARNING, DROP-OUT, SUPERVISION, and SUCCESS on at least one adjective pair dimension. Lastly, between Cycles II and III, the interns in these two training years left P. U. T. E. P. with different perceptions toward the concepts TEACHER, LEARNING, DISCIPLINING, ADOLESCENT, and SUPERVISION. These differences toward each concept existed on at least one adjective pair dimension.

The actual number of possible reasons why attitude may have changed between any two different years of training are numerous and somewhat confounding. No definitive single reason is probably justifiable or supportable. There were major differences in the training personnel involved with the interns during each consecutive training cycle. Also, whereas Cycle I was exclusively composed of interns involved in secondary school placement and training, Cycle II and Cycle III each had an increasing number of interns training on elementary school sites. John Adams High School was the primary training site for the majority of interns trained during Cycle I and Cycle II; by Cycle

III, P.U.T.E.P. was involved in nine different schools within the inner-city of Portland.

The racial composition of the three training years was erratic. During both Cycle I and Cycle II, black interns represented the majority of enrollments in P.U.T.E.P. In Cycle III, white interns filled the majority of internship positions within the training program.

One last difference between the three training years was the circumstances associated with the teacher job market in the Portland area and specifically, in the Portland School District No. 1. More teaching vacancies existed in 1969-70 than in 1970-71 or or 1971-72. As a result, more interns in Cycle I were offered contracts to teach in Portland at the conclusion of their training. Fewer interns in either Cycle II or Cycle III were offered teaching contracts at the completion of their training. The possibility does exist that the availability of jobs at the end of specialized training may be a substantive factor in the semantic values that one places on concepts that directly relate to elements of that training. The length of the training year and the highly intense and emotional nature of both the P.U.T.E.P. training setting (inner-city) and the training program may serve to extend interns' perceptions of teacher-related concepts in a polar-like manner when teaching positions were scarce following training.

### Recommendations

The primary purpose of this study was to determine the effect of year-long, field-based intern teacher training on the perceptions held by interns enrolled in the Portland Urban Teacher Education Program toward 10 specified concepts. The following recommendations are offered to further research in this area.

1. The study should be repeated longitudinally within other specialized teacher training programs to determine the uniqueness of the findings of this study.
2. Further studies should be conducted to isolate factors which may substantively effect attitudinal change, e.g., length of the training experience, setting of the training experience, composition of the training population, and the actual substance of the training.
3. Further study appears needed on the dimensions of race and age within preservice teacher training. Adding new adjective pairs to anchor the 10 concepts utilized in this study may serve to further refine and define attitudinal change within each concept studied.
4. A follow-up study of interns graduating from P.U.T.E.P. and both now teaching and not teaching may add considerable insight into the stability or instability of initial attitude change.
5. Studies of the attitudes expressed by preservice graduates hired

by school districts should be compared with studies of preservice graduates not hired by school districts. Since employability may not be as important to graduating students as actual professional employment, the relationship between attitude and employment should be critical.



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## APPENDIX

APPENDIX  
INSTRUMENTS

## THE SEMANTIC DIFFERENTIAL

The purpose of this study is to measure the meanings of certain things to various people by having them judge them against a series of descriptive scales. In taking this test, please make your judgments on the basis of what these things mean to you. On each page, you will find a different concept to be judged and beneath it, a set of scales. You are to rate the concept on each of these scales in order. Please do not omit any of the concepts or fail to make some of the scales.

Here is how you are to use these scales:

If you feel that the concept at the top of the page is very closely related to one end of the scale, you should place your checkmark as follows:

fair  X : : : : :  unfair  
 OR  
 fair  : : : : : X  unfair

If you feel the concept is quite closely related to one or the other end of the scale (but not extremely), you should place your checkmark as follows:

fair  : X : : : :  unfair  
 OR  
 fair  : : : : X :  unfair

If you feel the concept seems only slightly related to one side or to the other side, but is not really neutral, then you should place your checkmark as follows:

fair  : : X : : :  unfair  
 OR  
 fair  : : : : X :  unfair

The direction toward which you check, of course, depends upon which of the two ends of the scale seem most characteristic of the thing you are judging.

If you consider the concept to be neutral on the scale, both sides of the scale equally associated with the concept, or if the scale is completely irrelevant, unrelated to the concept, then you should place your checkmark in the middle space:

fair  : : : X : :  unfair

NAME \_\_\_\_\_

CONCEPT: \_\_\_\_\_ \*

Bad: \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ :Good

Friendly: \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ :Unfriendly

Kind: \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ :Cruel

Meaningful: \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ :Meaningless

Important: \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ :Unimportant

Passive: \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ :Active

Complex: \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ :Simple

Boring: \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ :Interesting

Sensitive: \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ :Insensitive

Destructive: \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ :Productive

\* An identical form was prepared for each of the following concepts:

OBJECTIVES  
 EVALUATION  
 DISCIPLINING  
 CURRICULUM  
 LEARNING  
 SUCCESS  
 SUPERVISION  
 ADOLESCENT  
 DROP-OUT  
 TEACHER