

## DOCUMENT RESUME

ED 142 709

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CE 011 472

AUTHOR Ehresman, Norman D.; And Others .  
 TITLE The Development and Validation of an Inservice Program for Vocational Teachers of the Disadvantaged. Final Report.

INSTITUTION Western Kentucky Univ., Bowling Green. Center for Career and Vocational Teacher Education.

SPONS AGENCY Office of Education (DHEW), Washington, D.C.

BUREAU NO 498AH50100

PUB DATE Dec 76

GRANT G00-750-0437

NOTE 164p.; For a related document see CE 011 430 ; Some parts of appendix may not reproduce clearly due to print quality of the original document

EDRS PRICE MF-\$0.83 HC-\$8.69 Plus Postage.

DESCRIPTORS Business Education Teachers; Curriculum Research; \*Disadvantaged Youth; Distributive Education Teachers; \*Effective Teaching; \*Inservice Teacher Education; Occupational Home Economics; \*Program Development; Program Evaluation; Secondary Education; Teacher Education Curriculum; Vocational Education; \*Vocational Education Teachers

IDENTIFIERS Kentucky

## ABSTRACT

The major objective of the research project was to develop and implement an inservice education program designed to improve teaching effectiveness of vocational teachers of disadvantaged students in vocational programs. In addition, the authors sought to determine the effects of the inservice program on teachers and their students and to develop a handbook (available as a separate document) that would include the specific procedures and materials utilized in the inservice programs. Drawn from vocational secondary school programs of Kentucky's region 4, 32 teachers from the areas of business and office, distributive education, and home economics were randomly selected and assigned to experimental and control groups. The inservice program was developed, which consisted of a series of individualized modules utilizing written materials, worksheets, and films to be used individually or in six evening group sessions. Only the experimental group participated in the inservice program, but both groups received the posttest, which included seven major instruments (examples included in the appendix). Inservice and comprehensive evaluations and collected data from the posttest did reveal significant differences between the experimental and control groups. In all the areas measured, the inservice program appeared to have a definite positive effect upon the participants. (BM)

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FINAL REPORT

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Project No. 498AH50100

Grant No. G00-750-0437

The Development and Validation  
of an Inservice Program  
for Vocational Teachers of the Disadvantaged

Research Project in Vocational Education  
Conducted Under  
Part C of Public Law 90-576

The project report herein was performed pursuant to a grant from the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors or grantees undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position of policy.

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December 1976

U.S. DEPARTMENT OF HEALTH  
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## ACKNOWLEDGEMENTS

The reported study would not have been possible without the willingness and cooperation of the vocational teachers and their students who participated in the study. We are also indebted to the superintendents and principals of those participating teachers, for their consent and support.

Special acknowledgement is due Mr. Donald Britt, Mr. Keith Politi, Ms. Patricia Richardson, Ms. Kaye Willis, Mr. Robert Cobb, and Mr. Roger Vincent for their time and assistance in planning, conducting, and reporting this study.

The support given to the project personnel by the staffs of The Center for Career and Vocational Teacher Education and particularly Dr. Ronald Adams of The Office of Educational Research, Western Kentucky University, is also greatly appreciated. A special expression of gratitude goes to Ms. Cathie Bryant and Ms. Patricia Alexander for their professional secretarial skills utilized throughout the project and in the preparation of the final report and handbook.

## CHAPTER I

### INTRODUCTION

A pupil's learning is, in large measure, a function of the kind of teaching to which he is exposed; the extent to which a pupil masters a given set of academic tasks reflects not only his aptitudes and attitudes, but also the appropriateness of the particular approach by which he is taught.<sup>1</sup>

The disadvantaged student has special needs and characteristics which are evident to many, but often go unnoticed in the classroom. The disadvantaged student is commonly identified as one who is unable to succeed in a regular education program or one who is unable to fit into the mainstream of our society because of social, economic, or academic status.

The reported study reflects the results of efforts to develop, implement, and validate an inservice program designed to improve teaching effectiveness of vocational teachers having disadvantaged students in their classrooms. Variables measured included teacher-student classroom behavior and interaction, teacher affective and cognitive perceptions of students, student self concept, attitude toward the teacher, and student perceptions of their own cognitive achievement.

#### Need for the Study

Reissman (1962) and Brum (1967) suggest that 10 to 15 percent of the youth in the United States between 14 and 17 years of age are educationally disadvantaged, with this figure approaching 30 to 50 percent in some areas of the country. Numerous reports of projects have been disseminated that point to the special needs and characteristics of the disadvantaged. Various reviews and syntheses of research have been made that give the present state-of-the-art of vocational education for the disadvantaged (McCloskey, 1967; Feck, 1971). From these it becomes evident that there are a number of characteristics of disadvantaged youth that various authorities have identified. Among these are:

1. Low self concept
2. Poor record in academic and vocational school work

---

<sup>1</sup>Miriam L. Goldberg, "Adapting Teacher Style to Pupil Differences: Teachers For Disadvantaged Children," Merrill-Palmer Quarterly, Vol. 10, No. 2 (April, 1964); p. 161.

3. Lack of trust in authority figures
4. Poor attitude toward school and teachers
5. Tendency to drop out of school.

While basic descriptive characteristics of the problem have been identified, teacher preparation of how to work with disadvantaged students is ill-defined, if not non-existent. Harry Gideonse, past President of Brookly College, stated in a biennial report:

Except in a general way, authorities do not yet agree on the needed attributes for teaching disadvantaged children nor on what constitutes the best kind of preparation.<sup>2</sup>

The development of an inservice program for vocational teachers designed to improve the teaching of disadvantaged students would have particular applicability in states where vocational teachers are not required to have preparation in this area prior to teaching disadvantaged students. The hiring of vocational teachers in Kentucky, for example, does not require that new teachers have preservice training in teaching the disadvantaged. Since there are approximately 17,000 disadvantaged students reported in Kentucky vocational programs, a need does exist for such a program.<sup>3</sup>

Much of the literature has presented theoretical positions, primarily based on experience or survey data, from which programs designed to help teachers cope with disadvantaged students may be based. While knowledge and understanding of the disadvantaged youth are important aspects in planning vocational programs, also of equal importance are the teaching strategies and behaviors that are most effective with these students. Boss points out concerning working with disadvantaged youth, "The staff member who grows a beard and wears mod clothing to relate to students seldom becomes an effective employer. The student image of the school teacher is already fixed. Any attempt to be something else is viewed by the student as hypocritical. Being what you are is more important than being something you are not."<sup>4</sup>

<sup>2</sup>Samuel Miller Brownell, "Preparing Teachers of the Disadvantaged," North Central Association Quarterly, XLI (Winter, 1967), p. 250.

<sup>3</sup>Kentucky Bureau of Vocational Education Report to Department of Education, October 1, 1974.

<sup>4</sup>Richard Boss, What School Administrators Should Know About Vocational Education For Disadvantaged Youth in Urban Areas. Information Series No. 41. ERIC Clearinghouse on Vocational and Technical Education. (Columbus: The Ohio State University, 1971), p. 17.

In recent years, various approaches to preparing teachers of disadvantaged students have been attempted. In most cases, the training has been limited to some type of workshop or seminar designed to help teachers understand the disadvantaged youth and suggest methods or materials with the assumption that knowledge alone will provide for more effective teaching. However, there is little, if any, evidence to support this assumption. Consequently, there exists a need not only for an inservice program for vocational teachers of disadvantaged students, based on sound theory, but one that can be validated as to its effectiveness with teachers and students.

Techniques for evaluating inservice programs have traditionally consisted of an evaluation sheet designed to obtain participant impressions of the activities. This type of evaluation is only a superficial attempt to assess the impact of the program on teachers and attempts no assessment of impact on students. The desirability of validating the reported inservice program by applying a research design is evident. The validation process provides objective evidence of the actual impact of the program on the teacher and respective students as well.

#### Objectives of the Study

1. To develop and implement an inservice education program, designed to improve teaching effectiveness, for vocational education teachers of disadvantaged students in vocational programs.
2. To determine the significance of the effects of the inservice program on teachers and their students.
3. To develop a handbook that includes the specific procedures and materials utilized in the inservice program.

#### Null Hypotheses

The null hypotheses tested in this study were concerned with teacher behavior, classroom behavior, student self concept, student attitude toward the teacher, and teacher and student perceptions in the affective and cognitive domains. The following null hypotheses (for a directional test) were tested:

Null Hypothesis 1: Vocational teachers who participated in the inservice program demonstrate verbal teaching behavior similar to or less favorable than vocational teachers who did not participate in the inservice.

Null Hypothesis 2: Vocational teachers who participated in the inservice program demonstrate non-verbal teaching behavior similar to or less favorable than vocational teachers who did not participate in the inservice.

Null Hypothesis 3: Vocational teachers who participated in the inservice program possess affective perceptions of disadvantaged students similar to or less favorable than vocational teachers who did not participate in the inservice program.

Null Hypothesis 4: Vocational teachers who participated in the inservice program possess cognitive perceptions of disadvantaged students similar to or less favorable than vocational teachers who did not participate in the inservice program.

Null Hypothesis 5: Students of vocational teachers who participated in the inservice program demonstrate observable classroom behavior similar to or less favorable than students of vocational teachers who did not participate in the inservice program.

Null Hypothesis 6: Students of vocational teachers who participated in the inservice program possess self concepts similar to or less favorable than students of vocational teachers who did not participate in the inservice program.

Null Hypothesis 7: Students of vocational teachers who participated in the inservice program possess attitudes toward their teacher similar to or less favorable than students of vocational teachers who did not participate in the inservice program.

Null Hypothesis 8: Students of vocational teachers who participated in the inservice program possess perceptions of cognitive achievement similar to or less favorable than students of vocational teachers who did not participate in the inservice program.

#### Limitations of the Study

Thirty-two secondary level vocational teachers from the service areas of Business and Office, Distributive Education, and Home Economics were randomly selected from the Kentucky Vocational Region 4 and randomly assigned to experimental and control groups. The teachers were drawn from state and area vocational schools and public high schools.

The teacher had to agree to participate in the project. Approval by the respective school principal and superintendent was also required.

Teachers not willing to participate in the project were replaced by randomly selected alternates.

#### Definition of Terms

Disadvantaged Person -- Persons who have academic, socioeconomic, cultural, or other handicaps that prevent them from succeeding in vocational education or consumer and homemaking programs designed for persons without such handicaps, and who for that reason require specially designed educational programs or related services. The term

includes persons whose needs for such programs or services result from poverty, neglect, delinquency, or cultural or linguistic isolation from the community at large, but does not include physically or mentally handicapped persons unless such persons also suffer from the handicaps described in this paragraph.<sup>5</sup> Table I on page six provides further clarification of this definition.

Interaction Analysis System -- This classroom observational instrument is a 19-category system of interaction analysis containing 12 categories of teacher talk, three categories of student talk (including questions), and four nonverbal categories.<sup>6</sup>

Classroom Observation Record (COR) -- The COR is an observational instrument designed to measure four dimensions of pupil behavior (alert, responsible, confident, initiating) and 18 dimensions of teacher behavior (fair, democratic, responsive, understanding, kindly, stimulating, original, alert, attractive, responsible, steady, poised, confident, systematic, adaptable, optimistic, integrated, broad).<sup>7</sup>

Piers-Harris Children's Self Concept Scale -- This is a self report instrument designed for research on the development of children's self attitudes and correlates of these attitudes.<sup>8</sup>

Students' Evaluation of Teaching-I (SET-I) -- The purpose of the SET-I is economical measurement of the five major aspects of teacher classroom behavior: 1) friendly and cheerful; 2) knowledgeable and poised; 3) lively and interesting; 4) firm control (discipline); 5) Non-Directive (democratic procedure).<sup>9</sup>

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<sup>5</sup>The Kentucky Handbook For Planning and Evaluating Local Vocational Education Programs, (January, 1974). Bureau of Vocational Education, State Department of Education, Frankfort, Kentucky, p. L-1.

<sup>6</sup>J. T. Sandefur and Ronald D. Adams, "An Evaluation of Teaching: An Interim Research Report," Journal of Teacher Education, Vol. XXVII, No. 1 (Spring 1976), p. 72.

<sup>7</sup>Ibid.

<sup>8</sup>Ellen V. Piers, Manual For The Piers-Harris Children's Self Concept Scale (Nashville, Tennessee: Counselor Recordings and Tests, 1969), p. 2.

<sup>9</sup>Donald J. Veldman, Student Evaluation of Teaching, Research Methodology Monograph No. 10 (R & D Center For Teacher Education, The University of Texas at Austin, 1970), p. 1.

7

TABLE I -  
CLASSIFICATION SYSTEM FOR DISADVANTAGED<sup>10</sup>



CAUSE	EFFECT	CHARACTERISTICS
(1) Academic	Not succeeding or cannot be expected to succeed in a regional vocational education program because of at least one educational deficiency.	Poor speech, poor reading and writing ability; serious difficulty in comprehending computational concepts; retarded one or more years in academic achievement; low achievement records; irregular in school attendance; dropout or potential dropout.
(2) Socioeconomic or Non-Academic	Not succeeding or cannot be expected to succeed because of background or experience. Developed attitudes which severely limit their ability to perform successfully in a vocational education program.	Aggressive, anti-social, disruptive. Lack personal motivation; negative attitude toward learning; poor or negative self-image; higher incidence of involvement with juvenile court; underachiever; ill health; poor nutrition; unemployed or underemployed; geographically isolated; needs economic assistance to enter or stay in school.
(3) Culturally Disadvantaged	Not succeeding or cannot be expected to succeed because of cultural differences that limit their understanding of the educational and other everyday processes within community.	Social class differences in values, behavior patterns; style of living, language patterns, mores; generally highly mobile (migrants); lack stability within the community; unfamiliar with customs.
(4) "Other"	Other effects of a disadvantage not listed under the three (3) aforementioned categories: Should be restricted to special situations of a local individual nature.	Migrants, individuals in institutional settings.

<sup>10</sup>The Kentucky Handbook For Planning and Evaluating Local Vocational Education Programs (January, 1974). Bureau of Vocational Education, State Department of Education, Frankfort, Kentucky, p. L-2.

Students' Evaluation of Teaching-II (SET-II) -- This instrument obtains four additional factors of teacher classroom behavior: 1) rapport with children; 2) interactional competence; 3) unreasonable negativity; 4) fustenance of self-esteem.<sup>11</sup>

Inservice Program For Vocational Teachers Of Disadvantaged Students --

An inservice program that provides vocational teachers with teaching strategies, techniques and behaviors for working with disadvantaged persons. The inservice is designed with the intent to significantly change teachers' perception of and behavior toward the disadvantaged student, resulting in desirable change in the student.

Inservice Program Handbook -- A collection of procedures and materials utilized in the conduct of the developed inservice program for vocational teachers of disadvantaged students (See Handbook).

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<sup>11</sup>Ruth Adlof Haak et al. Student Evaluation of Teacher Instrument-II-Manual (The Research and Development Center For Teacher Education, The University of Texas at Austin, 1972), pp. 53-63.

CHAPTER II  
METHODS AND PROCEDURES

Introduction

The reported project was conducted in basically three phases. The first phase involved preparation leading to and development of the inservice for vocational teachers of disadvantaged students. The second phase consisted of the inservice meetings with the teachers. Validation of the inservice by means of data collection and analysis, and preparation of the final report and handbook constituted the third phase.

Research Design

A Posttest-Only Control Group Design<sup>12</sup> was employed to study the variables "teacher-student interaction," "classroom behavior," "student self concept," "student evaluation of teacher," "teacher affective and cognitive perception of students," and "students' cognitive perception of themselves."

The paradigm for the Posttest-Only Control Group Design is as follows:

R    X    O<sub>1</sub>  
R            O<sub>2</sub>

where: R = Random assignment to experimental or control group  
X = Treatment (inservice program)  
O = Observation (test/survey administration)

The Posttest-Only Control Group Design employed in this study can be effectively used in place of the Pretest-Posttest Control Group Design when randomization can be assumed.<sup>13</sup> The random selection and assignment of teachers to the experimental and control groups met this requirement.

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<sup>12</sup>Donald T. Campbell and Julian C. Stanley, Experimental and Quasi-Experimental Designs For Research (Chicago, Illinois: Rand McNally and Company, 1963), p. 25.

<sup>13</sup>Ibid.

## Program Preparation

### Project Personnel

The program development and operation required the services of a project director, four staff assistants, and four graduate assistants.

The project director was employed for 25 percent time on an 18 month basis (project duration). The project director rendered overall leadership to the conduct of the project, including the following responsibilities:

- a) Procurement of qualified personnel to assist in the conduct of the study.
- b) Supervision of procedures for proper project record keeping and administration.
- c) Coordination of project design, field testing, modification and implementation.
- d) Coordination of data collection, analysis, and preparation of final report.

Four staff assistants were employed for 100 percent time; one on a ten month basis, one on a sixteen month basis, and two on a five month basis. The staff assistants assisted the project director in the overall coordination and administration of the project, which included the following responsibilities:

- a) Review of related literature
- b) Identification and selection of population and sample
- c) Selected and contacted consultants to assist in the development of the inservice program
- d) Planned and conducted two Planning Conferences
- e) Contacted experimental and control group teachers (and their respective administrators) to elicit their participation in the project
- f) Developed and conducted the inservice program for vocational teachers of disadvantaged students
- g) Developed teacher evaluation instruments of the inservice
- h) Selected and obtained published instruments used in data collection

- i) Developed instruments used in data collection
- j) Trained for administration of posttest instruments
- k) Coordinated and implemented the posttesting procedure
- l) Scored data collected in posttesting sessions
- m) Coordinated and conducted data analysis and evaluation
- n) Preparation of final report and dissemination activities

Four graduate assistants were employed 100 percent time (20 hours per week); one on a fourteen month basis and three on a five month basis. The major responsibilities of the graduate assistants included:

- a) Conducted a review of literature for program conceptualization
- b) Assisted with the development and implementation of the two Planning Conferences
- c) Assisted with the development of the inservice program and its implementation
- d) Assisted with the data collection and analysis
- e) Assisted with preparation of the final report and handbook

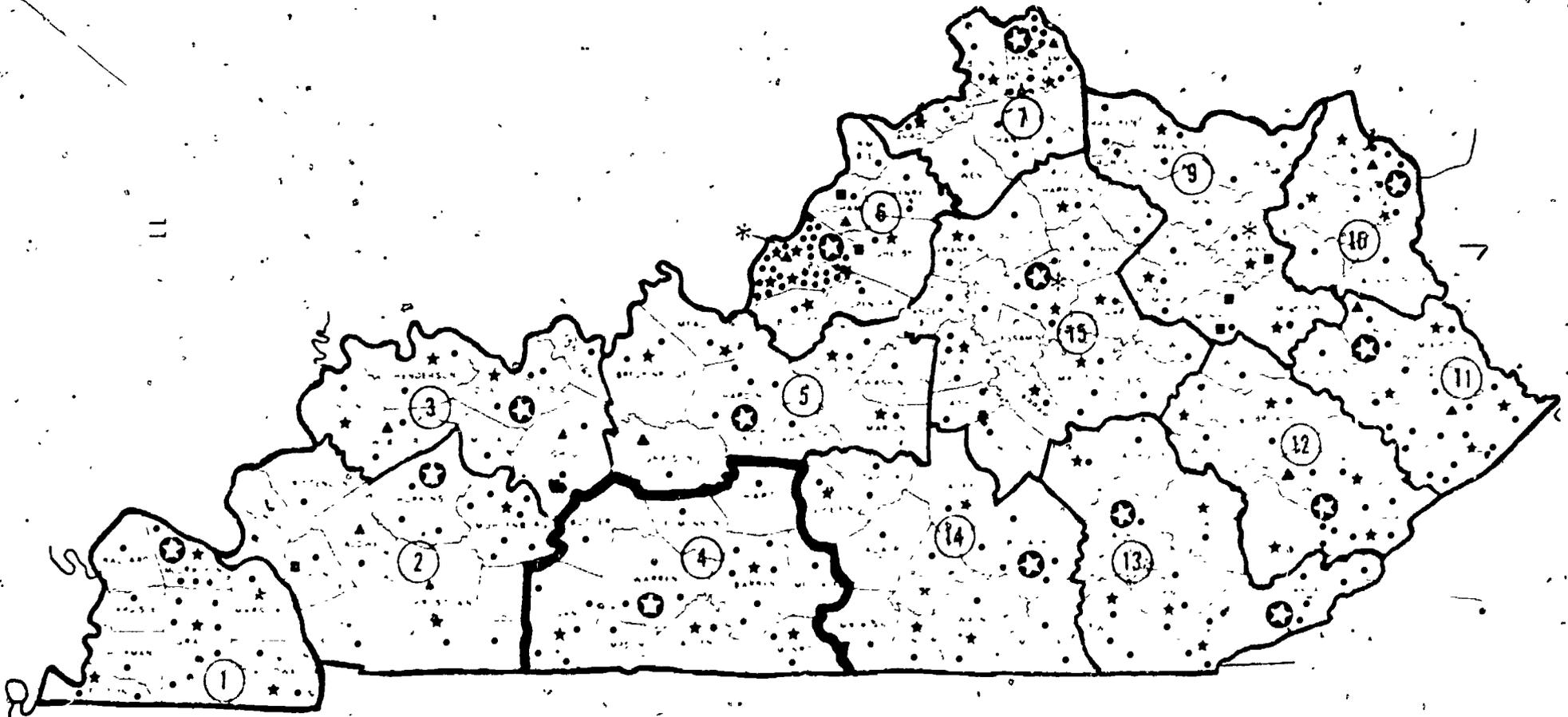
#### Identification of Population and Sample

Due to its close geographical proximity to Western Kentucky University, the implementation of the inservice program was limited to teachers of state and area vocational schools and high schools within Kentucky Vocational Region 4. Because of the necessity to make classroom observations in the data collection process and limitations of the observational instruments to be used, the population was also limited to vocational teachers in the service areas of Business and Office; Distributive Education, and Home Economics within the defined geographical area.

Eligibility for participation in the inservice program or as a member of the control group, as specified in the proposal, required teachers to have at least one class with a minimum of five students who have been identified as disadvantaged. While the Kentucky State Plan and the Kentucky Handbook For Planning and Evaluating Local Vocational Education Programs provide a general definition (taken from the Federal Register) of a disadvantaged student, each school system is relatively free to further develop its own operational definitions of what constitutes a student that is "academically" disadvantaged, "socio-economically" disadvantaged, etc. An informal survey within Region 4, by the project staff, found that many school systems were classifying approximately 40-50 percent of their students as disadvantaged. On this basis it was determined

FIGURE 1

Kentucky Vocational Region 4



by the project staff that approximately one-half of the students in any given classroom could be assumed as being disadvantaged. Thus, all teachers within the specified population were eligible to serve in either the experimental or control groups.

From the Region 4 area, high schools were randomly selected and the respective teachers within these schools were randomly assigned to either the experimental or control group. In the case of the state and area vocational schools within the region, since there was a very limited number of secondary vocational school teachers within the specified population, all vocational school teachers serving in one of the three service areas defined were randomly assigned to one of the sample groups. The respective school principal and superintendent of each selected participant were contacted by phone, seeking their approval, before contact was made with the teacher. All of the participating teachers were contacted personally by one of the project staff members concerning their participation in the program. Randomly selected alternates were contacted in place of teachers not willing to participate in the program.

The final sample consisted of 11 high school and five vocational school teachers serving in each of the experimental and control groups (see Appendix A for subject area, sex, and type school identification). Teachers participating in the inservice were paid a base rate of \$60 plus mileage as an incentive.

#### Selection and Meeting with Consultants

Eight vocational teachers (four Special Vocational Program teachers and four regular classroom teachers) were selected from Region 4 schools (from those not selected to be part of the sample) to serve as consultants to the project staff and assist in the development of an effective inservice program (see Appendix B). Vocational teachers from within the region were selected as consultants by the project staff on the basis that they knew best the problems and needs of vocational teachers in dealing with disadvantaged students in this specific geographical area. Because the consultants selected were public school teachers, it was not feasible to meet with this group until after schools had reopened for the year.

Two Planning Conferences were held in early November, 1975 at the Center for Career and Vocational Teacher Education on the campus of Western Kentucky University during which the consultants and project personnel interacted to provide recommendations for the direction and procedure to be utilized in developing the inservice program. Appendix C contains the agendas and discussion summaries of these two meetings.

#### Development of Inservice Content and Materials

From the literature review and suggestions offered during the Planning Conferences, the inservice program content and materials were developed (see Handbook). Two very strong recommendations were made during

the Planning Conferences in regards to the overall development and presentation of the inservice program:

- 1) Do not refer to the inservice program as focusing specifically on disadvantaged students. Teachers feel that the special need for programs and materials for this population of students has been overplayed. "They are tired of hearing about it."
- 2) Do not develop "another boring inservice." Create something different and remember teachers do not have a lot of extra time during the school year.

In order to eliminate the problem of "turning off" teachers to the inservice by its title, it was decided by the project staff to refer to the program as, "An Inservice for Vocational Teachers of Students with Varying Academic Levels in the Classroom." The title offered universal identification on the part of teachers while it avoided the negative connotation of "disadvantaged student" (to both teachers and students) and covered the topic to be discussed in an unobtrusive manner.

Considering the difficulty of getting 16 vocational teachers together for a series of evening meetings, it was decided not to mandate that the participants had to all meet together at a designated time and place. This decision led to the resulting inservice which consisted of a series of individualized modules utilizing written materials, worksheets, and films, to be available at the teacher's convenience. Thus, while the majority of teachers could meet and work through the modules together, those who were unable to meet with the group could either meet with a project staff member and work through the module at their convenience, or take the materials home and meet with a project staff member at a later date to review and check transcripts, worksheets, etc., or ask questions.

The basic outline developed for the inservice was as follows:

- I. Classroom Interaction
  - A. Using Student Ideas
  - B. Lesson Organization
  - C. Praise and Corrective Feedback
  - D. Questioning
- II. Classroom Management
  - A. Group Alerting
  - B. Learning Accountability
  - C. Transitions
  - D. Withitness

### III. Teacher Language

- A. Clarity
- B. Emphasis
- C. Encouragement
- D. Extension
- E. Feedback
- F. Organization

### IV. Group Process

- A. Stages of Group Growth
- B. Task Roles
- C. Unifying Roles
- D. Anti-Group Roles

### V. Instructional Concepts

- A. Conceptualizing the Process of Instruction
- B. Verbal Interaction in the Cognitive Dimension
- C. Organizing Facts to Teach Meaningful Relationships
- D. Fair Verbal Behavior
- E. Learners and Their Characteristics

### VI. Models of Teaching: Role Playing

Most of the above outline and materials (Sessions I-V) used in the inservice program were adopted and modified from the 1975-76 Protocol Materials, distributed by the National Resource and Dissemination Center, University of South Florida, Tampa, Florida. Consisting basically of films, worksheets, guides, and manuals, the Protocols are basically reproductions of student and teacher classroom behaviors. They exemplify educational concepts dealing with classroom behavior and are designed to teach the application of those concepts.

Concepts presented in Session VI, Models of Teaching: Role Playing, were adopted from Teaching Strategies Training Materials by Bruce Joyce and Marsha Weil. Models for teaching were developed to help build a teacher's capacity to reach more children and create a richer, more diverse environment for them.<sup>14</sup> In using the teaching strategy of role playing, students (and teachers) are able to explore human relation problems by enacting or improvising problem situations and then discussing the enactments. Role playing provides a sample of human interaction to analyze in order to identify alternative ways of handling situations, clarify special values, and learn to deal with the emotions in conflict situations.

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<sup>14</sup>Bruce Joyce and Marsha Weil, Models of Teaching (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1972), p. xiii.

Several films from the series Interactions in The Multi-cultural Classroom, distributed by Science Research Associates, Inc., were also used throughout the inservice. The films and respective film guides were designed to help teachers develop skill at recognizing and effectively dealing with the following categories of student/teacher behavior: aggressive, withdrawal, supportive, reciprocating, closing,

All of the above materials were obtained for the reported inservice program and are available on a loan basis from the Office of Teacher Corps and The Division of Media Services, Western Kentucky University, Bowling Green, Kentucky.

### Inservice Program

The inservice was conducted on six consecutive Thursday evenings, March 4 through April 8, 1976, 6-9 p.m. at the Center For Career and Vocational Teacher Education on the campus of Western Kentucky University. The 16 secondary vocational teachers from high schools and vocational schools were encouraged to meet at the scheduled times. However, when schedule conflicts occurred, participants were free to meet with a project staff member at another time or take the materials home. An agenda for the inservice is located in Appendix D.

While all of the materials presented during the inservice were provided to the participants in written form, a limited amount of oral presentation was given and working in small groups was strongly encouraged. See the "Facilitator's Guide", Supplement G in the handbook, for specific directions and procedures utilized in conducting the inservice program.

Where worksheets were involved, participants completed these either individually or in small groups and then checked their answers with a project staff member. Some exercises to be tried in their own classroom situations were provided to the participants and discussed by the entire group or with a project staff member in the next session.

An informal and relaxed atmosphere was encouraged throughout the inservice sessions.

### Teacher Evaluation of Sessions

Teachers were provided with an opportunity to evaluate each session of the inservice program. A Likert-response type instrument was developed and utilized for this purpose (see Appendix E). Additionally, the instrument sought general comments from the teachers regarding any aspect of the session they chose to address.

An opportunity for teacher evaluation was given at the end of each session or the evaluation instrument could be taken home and returned the following week. A comprehensive inservice evaluation was also requested

of the teachers during the posttesting phase. Specific evaluative procedures and data are presented in Chapter IV.

### Subject Mortality

The necessity of completing the inservice program was strongly emphasized in the personal contact with those teachers randomly selected to serve in the experimental group. All (100%) of the 16 teachers agreeing to participate in the inservice successfully completed the program.

### Posttest

The following instruments were administered to the teachers or their students in the experimental and/or control groups following completion of the inservice program for validation purposes: Interaction Analysis System (Sandefur and Adams, 1976); Classroom Observation Record (Ryan, 1960); Piers-Harris Children's Self Concept Scale (Piers and Harris, 1969); Student Evaluation of Teachers-I (Veldman and Peck, 1970); Student Evaluation of Teachers-II (Haak, Kleiber, and Peck, 1972); Teacher Survey (staff developed); Student Survey (staff developed).

The method of administration and a brief rationale of why these instruments were utilized follows:

#### 1. Interaction Analysis System

This instrument is a classroom observational instrument and was administered to observe verbal and nonverbal interaction between the students and their teacher. The instrument was administered to the teachers and their respective students in one of their classes of both the experimental and control groups.

#### 2. Classroom Observation Record (COR)

The COR is an observational instrument and was administered to measure overt behavior on the part of the teacher and respective students. The instrument was administered to the teachers and their respective students in one of their classes of both the experimental and control groups.

#### 3. Piers-Harris Children's Self Concept Scale:

This instrument was designed specifically for studying self attitudes of children and is suggested for use with senior high school students. The instrument was administered to one class of students of each of the teachers in both the experimental and control groups.

4. Students' Evaluation of Teaching-I (SET-I)

The SET-I obtains students' perceptions of teacher classroom behavior in five dimensions: friendly and cheerful; knowledgeable and poised; lively and interesting; firm control (discipline); non-directive (democratic procedure). The instrument was administered to the same students as was the Piers-Harris Children's Self Concept Scale.

5. Students' Evaluation of Teaching-II (SET-II)

The SET-II obtains four additional factors of students' perceptions of teacher classroom behavior: rapport with children; interactional competence; unreasonable negativity; fosterence of self-esteem. The instrument was administered to the same students as was the Piers-Harris Self Concept Scale.

6. Teacher Survey

The Teacher Survey was developed by the project staff to obtain teachers' perceptions of students in the affective and cognitive domains. The survey was administered to the teachers in both the experimental and control groups.

7. Student Survey

The Student Survey was developed by the project staff to obtain students' perceptions of their own cognitive achievement. The survey was administered to students as was the Piers-Harris Children's Self Concept Scale.

Training of project staff personnel in the observational techniques (Interaction Analysis System and Classroom Observation Record) was conducted by the Office of Educational Research, Western Kentucky University.

## CHAPTER III

### DATA COLLECTION AND ANALYSIS

Seven major instruments were utilized in collection of data for validation of the inservice program: Classroom Observation Record (COR) and Interaction Analysis System were direct classroom observation systems; Piers-Harris Children's Self Concept Scale; Student Evaluation of Teaching-I (SET-I); Student Evaluation of Teaching-II (SET-II); two instruments, Teacher Survey and Student Survey, were developed by the project staff. The seven instruments were administered to teachers and/or students of those teachers in the experimental and control groups.

Each teacher in the experimental and control groups was visited twice during the posttesting phase of the project. A prearranged schedule was established so that the teacher knew when he/she was to be visited. The visits were made to the same class approximately one week apart. During the first visit, the SET-I and II and Student Survey were administered, and observations made for the Interaction Analysis System and COR. The Teacher Survey was left with each teacher during this visit, to be picked up on the second visit. During the second visit, the Piers-Harris Children's Self Concept Scale was administered and the second set of observations obtained for the Interaction Analysis System and COR. The Teacher Survey was also picked up at this time.

Since it was hypothesized that the experimental group would score higher (more favorably) on the posttesting instruments, a one-tailed or directional t-test was utilized in the analysis of the raw data.<sup>15</sup> The p-value or probability level is accordingly one-tailed and is reported in the following tables, as such.

#### Direct Classroom Observations

##### Interaction Analysis System

The 19-category Interaction Analysis System is a modification of Flanders' Model (Flanders, 1970) and an expanded model developed by Hough (Hough, 1967). The instrument contains 12 categories of teacher talk, three categories of student talk (including questions), and four nonverbal categories (see Appendix F).<sup>16</sup> With this instrument, classroom behaviors are categorized and recorded every three seconds or at the change of a category, whichever occurred first. Observations of a class period were made in three seven-minute blocks of time (at the beginning, middle, and prior to the end of the period), resulting in 42 minutes of combined recorded observations from two class visits.

<sup>15</sup>N. M. Downie and R. W. Heath, Basic Statistical Methods (New York: Harper and Row, Publishers, 1965), p. 131.

<sup>16</sup>Sandefur and Adams, loc. cit.

Table 2 presents the results of these observations for the experimental and control groups by category. As indicated, the experimental group was found to have significantly more observations than the control group for Categories 4 (teacher asks direct recall questions) and 10 (student talk initiated by the teacher). The experimental group was also found to have observations approaching significance (probability less than .10) for Categories 1 (teacher accepts student feelings) and 3 (teacher accepts or uses student ideas). The control group had observations approaching significance for Categories 5 (teacher answers student questions) and 12 (directed practice or activity).

Several categories of The Interaction Analysis System can be collapsed together to form a single heading such as "student talk" or "silence." The categories can thus be logically grouped and ten ratios obtained to form a more clear picture of what occurred in the class observed. Table 3 gives the ten ratio titles and the categories grouped to formulate each ratio. Table 4 presents the analysis of these ratios, comparing the experimental and control groups.

Ratio 1 (little i/d) compares indirect to direct teacher influence. Ratio 2 (big I/D) is essentially the same as Ratio 1 except for broadening its scope by adding the categories involving teacher questions and answers (4, 4.1, 4.2, and 5) to the indirect group and the categories involving lecture (6 and 6.1) to the direct group. Thus, Ratio 1 is a more pure and precise ratio of teacher influence, while Ratio 2 is expanded to include all categories of teacher talk. Again, the "indirect" and "direct" used in ratio titles 6 and 7 refer to teacher influence. The remaining ratio titles are self-explanatory.

Of the ten ratios, no significant differences (.05 level) were found when comparing the experimental and control groups. Observations approaching significance (probability less than .10) were found in favor of the experimental group for ratios 1 (little i/d), 6 (indirect/total), and 8 (teacher talk/total). The control group had observations approaching significance for Ratio 4 (silence/total).

#### Classroom Observation Record (COR)

The COR (Ryans, 1960), an observational instrument, measures four dimensions of pupil behavior and 18 dimensions of teacher behavior (see Appendix 6). A polarized seven-point interval scale allows rating pupil and teacher behaviors. A set of observational ratings were made upon the completion of each classroom visit.

Table 5 presents the analysis of these observations for the experimental and control groups by behavior characteristic. While no scores were found to be significant or approaching significance between the experimental and control groups on the four dimensions of pupil behavior, the experimental group scored consistently higher on all 18 dimensions of teacher behavior. Two dimensions, Partial/Fair (5) and Harsh/Kindly (9)

TABLE 2

## RESULTS OF INTERACTION ANALYSIS SYSTEM OBSERVATIONS BY CATEGORY

Category	Group	N	Mean	Standard Deviation	T-Value	T - Tail Probability
1. Accepts Feeling	Experimental	16	0.4037	0.519	1.50	0.075+
	Control	16	0.1862	0.263		
2. Praises/Encourages	Experimental	16	1.2694	0.762	0.62	0.271
	Control	16	1.1006	0.787		
3. Accepts Student Idea	Experimental	16	6.8462	3.772	1.56	0.065+
	Control	16	4.6275	4.244		
4. Asks Direct Question	Experimental	16	5.9275	3.661	2.04	0.027*
	Control	16	3.7756	2.110		
4.1 Asks Probing Question	Experimental	16	0.9906	0.720	-0.45	0.329
	Control	16	1.1412	1.136		
4.2 Asks Higher Order Question	Experimental	16	1.8994	2.019	0.79	0.217
	Control	16	1.3919	1.567		
5. Answers Student Question	Experimental	16	3.0900	1.643	-1.66	0.056+
	Control	16	4.6850	3.463		
6. Lecture (Content)	Experimental	16	25.7956	15.697	1.10	0.140
	Control	16	19.8000	15.078		
6.1 Lecture (Non-content)	Experimental	16	7.9110	4.368	0.21	0.418
	Control	16	7.5650	5.001		

TABLE 2 - Continued

Category	Group	N	Mean	Standard Deviation	T-Value	1 - Tail Probability
7. Corrective Feedback	Experimental	16	0.4125	0.354	-1.19	0.125
	Control	16	0.7494	1.074		
8. Gives Directions	Experimental	16	6.5375	2.174	-0.04	0.483
	Control	16	6.5837	3.543		
9. Criticizes/Justifies Authority	Experimental	16	0.3019	0.349	-1.01	0.162
	Control	16	0.5881	1.073		
10. Student Talk Initiated By Teacher	Experimental	16	10.5569	7.249	1.80	0.042*
	Control	16	6.5962	4.984		
10.1 Student Initiated Talk	Experimental	16	3.8269	2.904	-0.48	0.317
	Control	16	4.4456	4.248		
11. Student Question	Experimental	16	2.3906	1.428	-1.16	0.129
	Control	16	3.2462	2.575		
12. Directed Practice/Activity	Experimental	16	13.4875	19.416	-1.43	0.083+
	Control	16	25.8199	28.592		
13. Demonstration	Experimental	16	3.2094	5.013	0.01	0.496
	Control	16	3.1900	5.308		
14. Constructive Silence	Experimental	16	3.4706	2.406	0.37	0.357
	Control	16	3.1937	1.758		

TABLE 2 - Continued

Category	Group	N	Mean	Standard Deviation	T-Value	T - Tail Probability
14.1 Non-constructive Silence	Experimental	16	1.6806	1.970	0.51	0.306
	Control	16	1.3094	2.122		

\* Statistically Significant at the .05 level  
 + Approaching Significance (probability less than .10)

Categories 1-9: Teacher Talk  
 Categories 10-11: Student Talk  
 Categories 12-14.1: Nonverbal

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TABLE 3

CATEGORY RATIOS OF THE  
INTERACTION ANALYSIS SYSTEM

Ratio	Title	Categories
1	little i/d	1, 2, 3/7, 8, 9
2	big I/D	1 through 5/6 through 9
3	student talk/teacher talk	10, 10.1/1 through 9
4	silence/total	12 through 14.1/ 1 through 14.1
5	lecture/total	6, 6.1/1 through 14.1
6	indirect/total	1, 2, 3/1 through 14.1
7	direct/total	7, 8, 9/1 through 14.1
8	teacher talk/total	1 through 9/1 through 14.1
9	student questions/ student responses	11/10, 10.1
10	student talk/total	10, 10.1, 11/ 1 through 14.1

TABLE 4

## ANALYSIS OF CATEGORY RATIOS - INTERACTION ANALYSIS SYSTEM

Ratio	Group	N	Mean	Standard Deviation	T-Value	1 - Tail Probability
1. little i/d	Experimental	16	1.3014	0.878	1.39	.088+
	Control	16	0.8985	0.761		
2. big I/D	Experimental	16	0.6419	0.661	0.82	0.213
	Control	16	0.5014	0.198		
3. student talk/teacher talk	Experimental	16	0.2464	0.130	0.50	0.312
	Control	16	0.2226	0.141		
4. silence/total	Experimental	16	0.2184	0.182	-1.52	0.070+
	Control	16	0.3352	0.249		
5. lecture/total	Experimental	16	0.3371	0.168	1.12	0.136
	Control	16	0.2736	0.152		
6. indirect/total	Experimental	16	0.0852	0.044	-1.65	0.055+
	Control	16	0.0592	0.045		
7. direct/total	Experimental	16	0.0726	0.022	-0.51	0.307
	Control	16	0.0791	0.045		
8. teacher talk/total	Experimental	16	0.6138	0.162	1.37	0.091+
	Control	16	0.5219	0.213		
9. student questions/student responses	Experimental	16	0.2609	0.267	-1.23	0.113
	Control	16	0.4003	0.366		
10. Student talk/total	Experimental	16	0.1676	0.075	0.99	0.166
	Control	16	0.1428	0.067		

+ Approaching Significance (probability less than .10)

TABLE 5

## BEHAVIOR ANALYSIS OF THE CLASSROOM OBSERVATION RECORD

Behavior	Group	N	Mean	Standard Deviation	T-Value	1 - Tail Probability
<u>Pupil Behavior</u>						
1. Apathetic/Alert	Experimental	16	4.6563	1.690	0.20	0.423
	Control	16	4.5625	0.873		
2. Obstructive/Responsible	Experimental	16	4.7250	1.626	-0.32	0.377
	Control	16	4.8750	0.975		
3. Uncertain/Confident	Experimental	16	4.6250	1.360	-0.65	0.263
	Control	16	4.8750	0.742		
4. Dependent/Initiating	Experimental	16	4.6563	0.908	0.73	0.237
	Control	16	4.4375	0.793		
<u>Teacher Behavior</u>						
5. Partial/Fair	Experimental	16	5.3438	0.352	1.78	0.045*
	Control	16	4.9688	0.763		
6. Autocratic/Democratic	Experimental	16	4.8438	0.747	0.24	0.408
	Control	16	4.7813	0.752		
7. Aloof/Responsive	Experimental	16	5.3750	0.866	0.88	0.194
	Control	16	5.1250	0.742		
8. Restricted/Understanding	Experimental	16	5.2188	0.682	0.43	0.337
	Control	16	5.0938	0.953		
9. Harsh/Kindly	Experimental	16	5.5000	0.548	1.74	0.047*
	Control	16	5.0938	0.758		

TABLE 5 - Continued

Behavior	Group	N	Mean	Standard Deviation	T-Value	1 - Tail Probability
10. Dull/Stimulating	Experimental	16	4.6250	0.940	0.52	0.305
	Control	16	4.4688	0.763		
11. Stereotyped/Original	Experimental	16	4.6875	0.929	1.50	0.073+
	Control	16	4.2500	0.707		
12. Apathetic/Alert	Experimental	16	5.2500	0.707	0.63	0.266
	Control	16	5.0938	0.688		
13. Unimpressive/Attractive	Experimental	16	5.6875	0.359	0.34	0.369
	Control	16	5.6250	0.645		
14. Evading/Responsible	Experimental	16	5.4375	0.704	1.27	0.108
	Control	16	5.1563	0.539		
15. Erratic/Steady	Experimental	16	5.5938	0.688	0.91	0.186
	Control	16	5.3125	1.031		
16. Excitable/Poised	Experimental	16	5.5000	0.548	1.35	0.095+
	Control	16	5.1875	0.750		
17. Uncertain/Confident	Experimental	16	5.5313	0.531	1.04	0.154
	Control	16	5.3125	0.655		
18. Disorganized/Systematic	Experimental	16	5.6250	0.742	1.53	0.069+
	Control	16	5.1250	1.072		
19. Inflexible/Adaptable	Experimental	16	4.8438	0.676	1.19	0.120
	Control	16	4.5625	0.655		

TABLE 5 - Continued

Behavior	Group	N	Mean	Standard Deviation	T-Value	T - Tail Probability
20. Pessimistic/Optimistic	Experimental	16	5.2813	0.657	0.95	0.176
	Control	16	5.0313	0.826		
21. Immature/Integrated	Experimental	16	5.500	0.447	0.42	0.340
	Control	16	5.4063	0.779		
22. Narrow/Broad	Experimental	16	4.6563	0.569	0.15	0.440
	Control	16	4.6250	0.592		

\* Statistically Significant at the .05 level

† Approaching Significance (probability less than .10)

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were significantly higher. Scores on the dimensions of Stereotyped/Original (11), Excitable/Poised (16), and Disorganized/Systematic (18) were found to be approaching significance.

### Student Self Concept

#### Piers-Harris Children's Self Concept Scale

This scale was designed by Piers and Harris (1969) specifically for research purposes in studying self attitudes of children (see Appendix H). The instrument consists of a set of 80 statements about how the student feels about himself/herself. Each statement is answered with either a "Yes" or "No" response. When scored, the instrument yields a single score for each student. A mean score was obtained for each classroom, from which the experimental and control group means were calculated.

The analysis of the scores obtained for this instrument is given in Table 6.

TABLE 6  
ANALYSIS OF CHILDREN'S  
SELF CONCEPT SCALE

Group	N	Mean	Standard Deviation	T-Value	1 - Tail Probability
Experimental	16	52.4916	3.491	-0.47	0.323
Control	16	53.3979	6.966		

As shown in Table 6, the control group scored slightly higher on the Self Concept Scale than the experimental group, but not significantly.

### Teacher Evaluation

#### Student Evaluation of Teaching-I (SET-I)

The students' perception of teachers were measured by the Student Evaluation of Teaching-I, developed by Veldman and Peck (see Appendix I). Five major factors of teacher classroom behavior were measured: 1) Friendly and Cheerful; 2) Knowledgeable and Poised; 3) Lively and Interesting; 4) Firm Control (discipline); 5) Non-Directive (democratic procedure). As with the Piers-Harris Scale, a mean score was obtained for

each classroom, from which the group means were calculated. The instrument is scored so that the higher the score, the more favorable the students' perception of the teacher.

Table 7 presents the analysis of each of the five factors for SET-I. Although no significant differences were observed between the experimental and control groups, the experimental group scored consistently higher on all five factors. Scores on two factors, Knowledgeable/Poised (2) and Lively/Interesting (3), were found to be approaching significance.

### Student Evaluation of Teaching-II (SET-II)

Five additional dimensions of teaching behavior, as perceived by the student, were measured by the Student Evaluation of Teaching-II, developed by Haak, Kleiber, and Peck (see Appendix I). The five additional factors measured were: 1) Stimulating Interaction Style; 2) Total Rapport; 3) Total Interaction Competence; 4) Unreasonable Negativity; 5) Fostering of Self-Esteem. Like the SET-I, a mean score was obtained for each factor by classroom, from which experimental and control group means were calculated. Factors 1, 2, 3, and 5 are scored so that the lower the score, the more favorable the students' perception of the teacher. For factor 4, Unreasonable Negativity, it is scored so that the higher the score the more favorable the students' perception of the teacher.

Results of the SET-II, by factor, are shown in Table 8. Consistent with the SET-I, the experimental group scored more favorably than the control group on all five factors. The experimental group students rated their teachers significantly better in Total Rapport (factor 2), and with ratings approaching significance in Stimulating Interaction Style (factor 1).

### Survey Instruments

Both of the surveys reported in this section follow the same format. The instruments consisted of a number of statements and response choices designed after the Likert Method. Responses were scored on a scale from one to four, with the higher response being the more desired. Both instruments were developed by the project staff.

#### Teacher Survey

The 28-item Teacher Survey (see Appendix J) was designed to obtain data regarding the teachers' perceptions of disadvantaged students in her/his class in the affective and cognitive domains--the child as a person and as a student. The teachers' responses were to be directed at the students in the class being observed by the project staff. Table 9 presents the results of this survey for the experimental and control

TABLE 7  
ANALYSIS OF SET I

Factor	Group	N	Mean	Standard Deviation	T-Value	1 - Tail Probability
1. Friendly/Cheerful	Experimental	16	305.6015	33.999	1.29	.104
	Control	16	287.7023	43.977		
2. Knowledge/Poised	Experimental	16	316.9939	28.682	1.32	.099+
	Control	16	300.3352	41.368		
3. Lively/Interesting	Experimental	16	268.1521	43.525	1.46	.078+
	Control	16	245.2827	45.285		
4. Discipline	Experimental	16	274.8566	31.469	0.73	.237
	Control	16	266.6867	32.109		
5. Direct-Nondirect	Experimental	16	278.0549	48.740	1.03	.156
	Control	16	259.2635	54.298		
Cumulative Mean	Experimental	16	283.7317	33.231	1.30	.103
	Control	16	271.8541	40.046		

+ Approaching Significance (probability less than .10)

TABLE 8  
ANALYSIS OF SET II

Factor	Group	N	Mean	Standard Deviation	T-Value	T - Tail Probability
1. Stimulating Interaction Style	Experimental	16	10.3352	0.877	-1.56	.065+
	Control	16	10.8679	1.042		
2. Total Rapport	Experimental	16	5.8099	0.639	-1.74	.046*
	Control	16	6.2291	0.720		
3. Total Interaction Competence	Experimental	16	4.5252	0.278	-0.95	.176
	Control	16	4.6389	0.392		
4. Unreasonable Negativity	Experimental	16	9.3502	0.466	1.06	.149
	Control	16	9.1607	0.542		
5. Fosters Self-Esteem	Experimental	16	7.5209	0.799	-0.59	.281
	Control	16	7.6829	0.759		

\* Statistically Significant at the .05 level

+ Approaching Significance (probability less than .10)

groups, by item. As shown in Table 9, a significant difference was found between groups for items 1, 9, 17, and 23. Items 2, 6, and 11 were found to be approaching significance.

The experimental group teachers indicated with significantly higher scores that students of low socio-economic backgrounds progress equally with other students in their classes (item 9) and that they (low socio-economic students) generally have the same learning capability as students from middle and upper socio-economic backgrounds (item 17). Teachers of the experimental group also differed significantly from the control group in comparing their background with their students' to find a common point of interest for presenting subject material (item 23). While the control group showed scores approaching significance of their students completing homework assignments (item 6), the experimental group had similar scores indicating an opinion that their slower students are working at capacity (item 2) and revealed an attitude that students labeled as "disadvantaged" have other factors contributing to their problem, rather than being "just lazy."

### Student Survey

The Student Survey (see Appendix K) was designed to obtain data regarding the students' perception of their own cognitive achievement--how he/she is doing in that particular class as a student. The time references made in the statements appearing on the survey were used to distinguish the time since the beginning of the inservice program, as opposed to before the treatment period. Table 10 presents the results of this survey and comparison of the experimental and control groups, by item.

The experimental group scored consistently higher (more favorable) than the control group on all items of the survey. Students in the experimental group indicated with significant scores that they felt they had learned more since the beginning of the treatment period than any other time of the school year (item 1) and that they receive adequate help from the teacher (item 4). The experimental group also indicated with a score approaching significance that the material presented in the class was understandable (item 3).

TABLE 9  
TEACHER SURVEY

Item	Group	N	Mean	Standard Deviation	T-Value	T - Tail Probability
1. I respect each one of my students equally.	(A) Experimental	16	3.3125	0.479	-1.07	0.148
	Control	16	3.5000	0.516		
2. Most of my slower students are not working at their capacity.	(C) Experimental	16	2.1875	0.655	1.39	0.088+
	Control	16	1.8750	0.619		
3. I have recently observed my students to be more willing to work in my classes.	(C) Experimental	16	2.5625	0.727	0.69	0.248
	Control	16	2.3750	0.806		
4. I am usually too rushed to give special attention to "slower" students.	(A) Experimental	16	2.8125	0.750	-0.24	0.406
	Control	16	2.8750	0.719		
5. Classes should be segregated on the basis of academic achievement.	(C) Experimental	16	2.6250	0.619	-1.26	0.109
	Control	16	2.9375	0.772		
6. Most of my students have been completing their homework assignments.	(G) Experimental	16	2.4375	0.964	-1.34	0.096+
	Control	16	2.8750	0.885		
7. I have five or more students in each of my classes that could be labeled as "Disadvantaged."	(A) Experimental	16	2.6875	1.078	1.12	0.136
	Control	16	2.3125	0.793		
8. I have a tendency to avoid students who do not practice good personal hygiene.	(A) Experimental	16	2.9375	0.680	0.49	0.316
	Control	16	2.8125	0.750		
9. Students in my classes with a low socio-economic background do not progress as rapidly as the other students.	(C) Experimental	16	2.6250	0.806	1.85	0.037*
	Control	16	2.1250	0.719		

TABLE 9 - Continued

Item	Group	N	Mean	Standard Deviation	T-Value	1 - Tail Probability
10. Evaluation methods to check for student competency attainment should be varied according to individual student capabilities.	(C) Experimental	16	3.0000	0.966	0.00	0.500
	Control	16	3.0000	0.516		
11. Most students labeled as "Disadvantaged" are just lazy.	(A) Experimental	16	3.3125	0.704	1.63	0.057+
	Control	16	2.8750	0.806		
12. All of my students participate about equally in class.	(C) Experimental	16	2.0625	0.854	-0.46	0.323
	Control	16	2.1875	0.655		
13. I find the progress of many students in my classes is "held back" by a fewer, less capable individuals.	(C) Experimental	16	2.5625	0.727	0.49	0.315
	Control	16	2.4375	0.727		
14. The various individual students' backgrounds (socio-economic, academic achievement, etc.) should be taken into consideration when conducting a learning situation.	(A) Experimental	16	3.3750	0.619	-0.56	0.298
	Control	16	3.5000	0.632		
15. Previously non-participating students are beginning to show an increase in classroom interaction in my classes.	(C) Experimental	16	3.0000	0.632	0.70	0.247
	Control	16	2.8750	0.342		
16. Most of my students benefit from individualized instruction.	(C) Experimental	16	3.3750	0.619	0.91	0.185
	Control	16	3.1875	0.544		
17. Students from a lower socio-economic background generally do not have the learning capability of students from a middle or upper socio-economic background.	(A) Experimental	16	3.0000	0.730	1.94	0.031*
	Control	16	2.5000	0.730		

TABLE 9 - Continued

Item	Group	N	Mean	Standard Deviation	T-Value	1 - Tail Probability
18. I find fewer students in my classes receiving failing grades in recent months.	(C) Experimental	16	2.6250	0.806	0.52	0.303
	Control	16	2.5000	0.516		
19. I find it difficult to understand the plight of the student who has been labeled as "Disadvantaged."	(A) Experimental	16	2.8750	0.806	0.75	0.231
	Control	16	2.6875	0.602		
20. I find many of my students progressing better in the last couple of months.	(C) Experimental	16	2.5625	0.727	0.52	0.304
	Control	16	2.4375	0.629		
21. Students from lower socio-economic backgrounds create most of the discipline problems.	(A) Experimental	16	2.9375	0.854	1.12	0.136
	Control	16	2.6250	0.719		
22. Most of my students are able to comprehend the material presented in my classes.	(C) Experimental	16	3.1875	1.047	0.23	0.412
	Control	16	3.1250	0.342		
23. I often try to compare my background with that of some of my students to find a common point of interest.	(A) Experimental	16	3.1250	0.342	1.75	.048*
	Control	16	2.6250	1.088		
24. I have many students in my classes that do not make an attempt to learn.	(A) Experimental	16	2.3750	1.025	-0.57	0.286
	Control	16	2.5625	0.814		
25. I find it difficult to be patient with students of below average achievement.	(A) Experimental	16	3.1250	0.619	0.99	0.167
	Control	16	2.9375	0.443		
26. There are some students in my classes I previously expected would fail, who will finish with a passing grade.	(C) Experimental	16	2.5625	0.727	0.0	0.500
	Control	16	2.5625	0.512		

TABLE 9 - Continued

Item	Group	N	Mean	Standard Deviation	T-Value	T - Tail Probability
27. The most feasible method of teaching a class with students of varying academic levels is "to teach "the middle of the road" approach.	(C) Experimental	16	2.6875	0.602	0.0	0.500
	Control	16	2.6875	0.704		
28. I readily accept a student's point of view that is different from my own.	(A) Experimental	16	3.0625	0.574	0.82	0.212
	Control	16	2.8750	0.719		

\* Statistically significant at the .05 level

+ Approaching significance (probability less than .10)

(A) Affective Perception

(C) Cognitive Perception

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TABLE 10  
STUDENT SURVEY

Item	Group	N	Mean	Standard Deviation	T-Value	T - Tail Probability
1. In this class I feel I have learned more in the last six weeks than any other time of the school year.	Experimental	16	2.7187	0.543	2.14	0.022*
	Control	16	2.3937	0.272		
2. I am doing as well in this class as most of my classmates.	Experimental	16	3.2812	0.256	0.63	0.266
	Control	16	3.2125	0.350		
3. I find the material presented in this class hard to understand.	Experimental	16	3.1875	0.296	1.49	0.076+
	Control	16	2.9437	0.585		
4. I feel I often need more help than the teacher gives me.	Experimental	16	3.1187	0.310	1.93	0.032*
	Control	16	2.8562	0.447		
5. My grades in this class have improved in the last few months.	Experimental	16	2.6250	0.361	0.41	0.343
	Control	16	2.5750	0.330		
6. I fail more than I succeed in this class.	Experimental	16	3.4687	0.332	0.30	0.395
	Control	16	3.4312	0.384		
7. I have recently considered dropping out of school, but have since changed my mind.	Experimental	16	1.3437	0.248	0.64	0.265
	Control	16	1.2812	0.304		
8. I find my homework assignments in this class too difficult.	Experimental	16	3.4250	0.382	0.49	0.315
	Control	16	3.3500	0.482		

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TABLE 10 - Continued

Item	Group	N	Mean	Standard Deviation	T-Value	T - Tail Probability
9. If it were possible, I would drop this class.	Experimental	16	3.5062	0.340	1.06	0.149
	Control	16	3.3375	0.535		
10. Recently, I find I am enjoying this class more.	Experimental	16	3.1187	0.534	0.74	0.234
	Control	16	3.0000	0.358		

\* Statistically significant at the .05 level

+ Approaching significance (probability less than .10)

## CHAPTER IV

### INSERVICE EVALUATION

Individual inservice session evaluation surveys and a comprehensive inservice evaluation survey were developed by the project staff to collect supplemental feedback and evaluative data (see Appendix E). The individual session surveys were administered to the teachers in the experimental group at the completion of each inservice session. The comprehensive survey was administered to the same group upon completion of the inservice program.

All survey instruments followed the same format. The instruments consisted of a number of statements and response choices pertaining to the session/program and a series of open-ended questions for non-directive feedback. The Likert Method was employed for the response choices appearing on the survey instruments. Responses were scored on a scale from one to four, with the higher response being the more favorable toward the program. The results of the survey instruments are reported in Tables 11 through 17.

A high percentage of "No Response" answers on the various surveys, particularly to questions dealing with working in small groups and class discussions, is probably the result of those teachers who did not meet at the scheduled time with the group, but either took the materials home or met with a project staff member at another time.

#### Session I Evaluation

The results presented in Table 11 reveal a very favorable reaction to the initial inservice session, dealing with Classroom Interaction. Items 15-18 directed at the presentation of "Questioning," indicate some trouble on the part of a few teachers in understanding these materials.

Many varying comments were made in response to the open-ended questions. While a few teachers indicated the concepts presented would alter their teaching performance, many of them stated that the session made them "aware" or "more conscious" of certain concepts and their utilization in the classroom. No one concept was identified as being more beneficial than the others in achieving classroom interaction, indicating that the needs of different teachers were met with different concepts. The concept of "Questioning" and the varying techniques of questioning seemed to be the least popular. It was suggested that more material on how to deal with aggressive behavior was needed. On a scale of one (poor) to five (great), thirteen teachers gave an average rating of 3.54 on the value of the information presented in respect to achieving better classroom interaction and in their particular teaching needs. Additional comments indicated that the teachers found the session to be interesting and

TABLE 11  
SESSION I EVALUATION

Item	Mean	Absolute Frequency					Cumulative Frequency (%)		
		SA	A	D	SD	NR*	SA+A	D+SD	NR
<u>Aggressive Behavior Exercise</u>									
1. The film was helpful in understanding this concept.	3.562	9	7	-	-	-	100.0	-	-
2. The workbook activities furthered my understanding of this concept.	3.250	4	12	-	-	-	100.0	-	-
40 3. Working in a small group was beneficial for completing the workbook activities.	3.571	8	6	-	-	2	87.5	-	12.5
4. From this session on aggressive behavior I feel I better understand this concept and how to deal with it in the classroom.	3.062	3	11	2	-	-	87.5	12.5	-
<u>Using Student Ideas</u>									
5. The introductory materials were understandable.	3.187	3	13	-	-	-	100.0	-	-
6. The transcript utilized was adequate for illustrating the points and concepts of this classroom procedure.	3.125	2	14	-	-	-	100.0	-	-
7. The class discussion was beneficial to my understanding of this process.	3.308	4	9	-	-	3	81.2	-	18.8

TABLE 11 - Continued

Item	Mean	Absolute Frequency					Cumulative Frequency (%)		
		SA	A	D	SD	NR*	SA+A	D+SD	NR
<u>Lesson Organization</u>									
8. The introductory materials were understandable.	3.375	8	7	-	1	-	93.7	6.3	-
9. The handout listing components of Lesson Organization clearly identified and explained each of the components.	3.500	8	8	-	-	-	100.0	-	-
10. I found the group work of classifying teacher statements beneficial in understanding this concept.	3.533	8	7	-	-	1	93.7	-	6.3
11. The class discussion aided in furthering my understanding of this concept.	3.462	6	7	-	-	3	81.2	-	18.8
<u>Praise and Corrective Feedback</u>									
12. The introductory materials were understandable.	3.267	7	5	3	-	1	75.0	18.7	6.3
13. Completing the worksheets in small groups helped in comprehending this concept.	3.333	4	8	-	-	4	75.0	-	25.0
14. The class discussion aided in furthering my understanding of this concept.	3.545	6	5	-	-	5	68.7	-	81.3

TABLE 11 - Continued

Item	Mean	Absolute Frequency					Cumulative Frequency (%)		
		SA	A	D	SD	NR*	SA+A	D+SD	NR
<u>Questioning</u>									
15. The introductory materials were understandable.	3.067	3	10	2	-	1	81.2	12.5	6.3
16. The handout listing various components of questioning clearly identified and explained each of the categories.	2.933	2	10	3	-	1	75.0	18.7	6.3
42 17. Working on the transcript in small groups facilitated identifying and understanding questioning techniques.	3.333	5	6	1	-	4	68.7	6.3	25.0
18. The class discussion aided in furthering my understanding of this concept.	3.364	5	5	1	-	5	62.5	6.3	31.2
N = 16									

\* No Response

beneficial, but that possibly too much material was presented in one session for full comprehension. The "informal" atmosphere was expressed as being appreciated, as was the promptness (beginning and ending on time) of the meeting.

### Session II Evaluation

Table 12 presents results of the second inservice session evaluation by the teachers. The session focused on Classroom Management and, again, a very favorable reaction to the session was elicited by the group. However, some difficulty in understanding the introductory explanation of "Learner Accountability" was indicated (item 10).

Several teachers reported that the concepts presented would alter their teaching performance, citing several different concepts from the session. As in the first session evaluation, no one concept was identified as being more beneficial than the others in achieving good classroom management. Different concepts were cited by the various teachers as being the "most beneficial." One teacher suggested that the materials on positive reinforcement should be deleted "because it is logical." However, comments from many of the group overwhelmingly supported the inclusion and benefit of this concept. More information on how to deal with the withdrawn student was suggested. On a scale of one (poor) to five (great), fourteen teachers gave an average rating of 3.93 on the value of the information presented in respect to achieving better classroom management and in meeting their particular teaching needs. Additional comments by the teachers indicated they felt the concepts presented were interesting and enjoyable. One teacher who missed the group session due to illness wrote that the modular concept of presenting the inservice was very advantageous when absence is unavoidable.

### Session III Evaluation

The third inservice session followed suit with the previous two sessions in receiving very positive reports from the participants (see Table 13). "Teacher Language" was the topic of Session III.

Group presentations and role playing exercises, used throughout this session, received very favorable comments as a learning process. Many of the teachers indicated that the concepts presented would alter their teaching performance, particularly their communications with students. As in the first two sessions, no one concept was indicated as being more beneficial than the others in achieving better teacher language. While no materials were suggested to be deleted, the suggestion was made to have more discussion of personal experiences between teachers and students.

On a scale of one (poor) to five (great), fourteen teachers gave an average rating of 4.0 (second highest for all sessions) on the value of the information presented with respect to achieving better teacher language and in meeting their particular teaching needs. One additional

TABLE 12  
SESSION II EVALUATION

Item	Mean	Absolute Frequency					Cumulative Frequency (%)		
		SA	A	D	SD	NR*	SA+A	D+SD	NR
<u>Withdrawal Behavior Exercise</u>									
1. The film was helpful in understanding this concept.	3.625	11	4	1	-	-	93.7	6.3	-
2. The workbook activities furthered my understanding of this concept.	3.250	4	12	-	-	-	100.0	-	-
4A 3. Working in a small group was beneficial for completing the workbook activities.	3.500	7	7	-	-	2	87.5	-	12.5
4. From this session on withdrawal behavior I feel I better understand this concept and how to deal with it in the classroom.	3.067	2	12	1	-	1.	87.4	6.3	6.3
<u>Positive Reinforcement</u>									
5. The introductory materials provide a concise, adequate explanation of the theory behind this concept.	3.250	4	12	-	-	-	100.0	-	-
6. The facilitator presentations of the various techniques involved in this concept were beneficial in my understanding of how positive reinforcement can be used in achieving better classroom management.	3.312	5	11	-	-	-	100.0	-	-

TABLE 12 - Continued

Item	Mean	Absolute Frequency					Cumulative Frequency (%)		
		SA	A	D	SD	NR*	SA+A	D+SD	NR
<u>Group Alerting</u>									
7. The explanation of Group Alerting was helpful in understanding and clarifying this concept.	3.312	6	9	1	-	-	93.7	6.3	-
8. The transcript utilized was beneficial in illustrating the three teacher behaviors involved in this concept.	3.437	7	9	-	-	-	100.0	-	-
45 9. The class discussion was beneficial to my understanding of this process.	3.375	7	8	1	-	-	93.7	6.3	-
<u>Learner Accountability</u>									
10. The explanation of Learner Accountability clearly identified the concept and the behaviors involved.	3.062	5	7	4	-	-	75.0	25.0	-
11. I found the group work of identifying teacher behaviors involved in Learner Accountability beneficial in understanding this concept.	3.267	4	11	-	-	1	93.7	-	6.3
12. The class discussion aided in furthering my understanding of this concept.	3.267	4	11	-	-	1	93.7	-	6.3
<u>Transitions</u>									
13. The explanation of Transitions and the teacher behaviors involved was helpful in my understanding of this concept.	3.375	6	10	-	-	-	100.0	-	-

TABLE 12 - Continued

Item	Mean	Absolute Frequency					Cumulative Frequency (%)		
		SA	A	D	SD	NR*	SA+A	D+SD	NR
14. The role playing exercise was beneficial in illustrating the application of this concept in the classroom.	3.687	11	5	-	-	-	100.0	-	-
<u>Withitness</u>									
15. The explanation of Withitness and the teacher behaviors involved was helpful in my understanding of this concept.	3.125	3	12	1	-	-	93.7	6.3	-
46 16. Working on the classroom situations in small groups facilitated identifying and understanding behaviors involved in this concept.	3.400	6	9	-	-	1	93.7	-	6.3
17. The class discussion aided in furthering my understanding of this concept.	3.400	6	9	-	-	1	93.7	-	6.3
N = 16									

\* No Response

TABLE 13

## SESSION III EVALUATION

Item	Mean	Absolute Frequency					Cumulative Frequency (%)		
		SA	A	D	SD	NR*	SA+A	D+SD	NR
<u>Supporting Behavior Exercise</u>									
1. The film was helpful in understanding the concept.	3.625	10	6	-	-	-	100.0	-	-
2. The workbook activities furthered my understanding of this concept.	3.375	6	10	-	-	-	100.0	-	-
47 3. Working in a small group was beneficial for completing the workbook activities.	3.500	7	7	-	-	2	87.5	-	12.5
4. From this session on supporting behavior I feel I better understand this concept and how to deal with it in the classroom?	3.375	6	10	-	-	-	100.0	-	-
<u>Clarity</u>									
5. The explanation of Clarity was helpful in understanding and clarifying this concept.	3.375	6	10	-	-	-	100.0	-	-
6. The transcript utilized was beneficial in illustrating the three teacher behaviors involved in this concept.	3.312	6	9	1	-	-	93.7	6.3	-
7. The class discussion (reviewing transcript) was beneficial to my understanding of this process.	3.267	6	8	-	1	1	87.4	6.3	6.3

TABLE 13 - Continued

Item	Mean	Absolute Frequency					Cumulative Frequency (%)		
		SA	A	D	SD	NR*	SA+A	D+SD	NR
<u>Organization</u>									
8. The explanation of Organization clearly identified the concept and the behaviors involved.	3.312	6	9	1	-	-	93.7	6.3	-
9. The role playing exercise (or development/identification of teacher statements) was beneficial in illustrating the application of this concept in the classroom.	3.625	10	6	-	-	-	100.0	-	-
<u>Emphasis</u>									
10. The explanation of Emphasis and the teacher behaviors involved was helpful in my understanding of this concept.	3.437	7	9	-	-	-	100.0	-	-
11. The role playing exercise (or development/identification of teacher statements) was beneficial in illustrating the application of this concept in the classroom.	3.312	5	11	-	-	-	100.0	-	-
<u>Feedback</u>									
12. The explanation of Feedback and the teacher behaviors involved was helpful in my understanding of this concept.	3.533	8	7	-	-	1	93.7	-	6.3
13. The role playing exercise (or development/identification of teacher statements) was beneficial in illustrating the application of this concept in the classroom.	3.733	11	4	-	-	1	93.7	-	6.3

TABLE 13 - Continued

Item	Mean	Absolute Frequency					Cumulative Frequency (%)		
		SA	A	D	-SD	NR*	SA+A	D+SD	NR
<u>General</u>									
14. Group presentations <sup>a</sup> of the concepts to the class was an effective method of learning.	3.571	8	6	-	-	2	87.5	-	12.5
N = 16									

\* No Response

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comment made was: "I think the section on Feedback is a good reminder to us that we need to keep the students' interests and needs in mind--not just ours."

#### Session IV Evaluation

Session IV, which looked at "Instructional Concepts," was the least popular of the six inservice sessions, as can be seen in Table 14 and from the responses to the open-ended questions. The reason for this, it is believed by the project staff, is that the concepts and ideas presented in this session were somewhat abstract, in contrast to the more concrete ideas, materials, and concepts presented in the previous and following sessions. While a few indicated the concepts presented would alter their teaching behavior in some form, most said it would not. As in the previous sessions, different concepts were named by different teachers as being beneficial, with no one concept being identified more than the others. When questioned as to what materials should be deleted, several suggestions were offered, but with no consistency.

On a scale of one (poor) to five (great), sixteen teachers gave an average rating of 2.6 (lowest of the six sessions) on the value of the information presented with respect to meeting their particular teaching needs. While several indicated that the concepts presented were difficult to understand, one teacher commented:

I feel the information gained is basic to any classroom needs. The experience has motivated me to apply the techniques within my work-a-day world. I have, furthermore, become more aware of human behavior and to react to said behavior.

#### Session V Evaluation

Session V dealt with concepts involved in "Group Process," within the classroom. Table 15 exhibits, once again, a favorable reaction by the participants to the session. Where some difficulty was indicated in understanding the concepts from the introductory materials and subsequent films or transcripts utilized, the class discussion of each concept appears to have resolved this problem. About half of those responding reported that the concepts conveyed would alter in some way their teaching performance.

While all of the concepts were named, the concept of Closing Behavior and how to deal with it was most mentioned as being beneficial in the classroom. The physical quality, age, and grade level of some of the films utilized were cited as one undesirable aspect of the session. Unfortunately, a search by the project staff was unable to find any films of a better quality dealing with the concepts involved.

On a scale of one (poor) to five (great) fifteen teachers gave an average rating of 3.9 on the value of the information presented with

TABLE 74  
SESSION IV EVALUATION

Item	Mean	Absolute Frequency					Cumulative Frequency (%)		
		SA	A	D	SD	NR*	SA+A	D+SD	NR
<u>Reciprocating Behavior Exercise</u>									
1. The film was helpful in understanding this concept.	3.533	9	5	1	-	1	87.4	6.3	6.3
2. The workbook activities furthered my understanding of this concept.	3.125	4	10	2	-	-	87.5	12.5	-
3. Working in a small group was beneficial for completing the workbook activities.	3.462	6	7	-	-	3	81.2	-	18.8
4. From this session on reciprocating behavior I feel I better understand this concept and how to utilize it in the classroom.	3.312	6	9	1	-	-	93.7	6.3	-
<u>Conceptualizing the Process of Instruction</u>									
5. The introductory materials clearly explained Conceptualizing the Process of Instruction.	2.875	2	11	2	1	-	81.2	18.8	-
6. The films utilized were beneficial in illustrating the principle underlying this concept.	3.400	6	9	-	-	1	93.7	-	6.3
7. Group work was helpful in understanding this concept.	3.250	3	9	-	-	4	75.0	-	25.0
8. The model building exercise was beneficial to my understanding of this concept.	3.214	6	6	1	1	2	75.0	12.5	12.5

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TABLE 14 - Continued

Item	Mean	Absolute Frequency					Cumulative Frequency (%)		
		SA	A	D	SD	NR*	SA+A	D+SD	NR
9. Class discussion of this concept facilitated understanding of Conceptualizing the Process of Instruction.	3.429	6	8	-	-	2	87.5	-	12.5
<u>Verbal Interaction in the Cognitive Dimension</u>									
10. The introductory materials clearly explained Verbal Interaction in the Cognitive Dimension.	2.875	2	11	2	1	-	81.2	18.8	-
11. Use of MacDonald-Zarct Matrix along with the transcripts were beneficial in illustrating this concept.	3.125	4	10	2	-	-	87.5	12.5	-
12. Class discussion (reviewing transcript) was helpful in understanding this concept.	3.400	6	9	-	-	1	93.7	-	6.3
<u>Organizing Facts to Teach Meaningful Relationships</u>									
13. The introductory materials clearly explained Organizing Facts to Teach Meaningful Relationships.	3.062	3	11	2	-	-	87.5	12.5	-
14. Handouts on Concept Teaching were beneficial to my understanding of this process.	3.067	1	14	-	-	1	93.7	-	6.3
15. The transcript utilized was beneficial in illustrating this concept.	3.267	4	11	-	-	1	93.7	-	6.3
16. Class discussion (reviewing transcript) was helpful in facilitating my understanding of Organizing Facts to Teach Meaningful Relationships.	3.385	5	8	-	-	3	81.2	-	18.8

N = 16

\* No Response

TABLE 15  
SESSION V EVALUATION

Item	Mean	Absolute Frequency					Cumulative Frequency (%)		
		SA	A	D	SD	NR*	SA+A	D+SD	NR
<u>Closing Behavior Exercise</u>									
1. The film was helpful in understanding this concept.	3.687	11	5	-	-	-	100.0	-	-
2. The workbook activities furthered my understanding of this concept.	3.375	6	10	-	-	-	100.0	-	-
3. Working in a small group was beneficial for completing the workbook activities.	3.437	7	9	-	-	-	100.0	-	-
4. From this session on closing behavior I feel I better understand this concept and how to deal with it in the classroom.	3.500	8	8	-	-	-	100.0	-	-
<u>Anti-Group Roles</u>									
5. The introductory materials clearly explained Anti-Group behaviors.	3.062	4	9	3	-	-	81.2	18.8	-
6. The film utilized was beneficial in illustrating these behaviors.	3.125	5	8	3	-	-	81.2	18.8	-
7. The class discussion facilitated understanding and how to deal with these behaviors.	3.500	8	8	-	-	-	100.0	-	-
<u>Task Roles</u>									
8. The introductory materials clearly explained task oriented behaviors.	3.187	5	9	2	-	-	87.5	12.5	-
9. The transcript utilized was beneficial in illustrating these behaviors.	2.917	2	8	1	1	4	62.5	12.5	25.0

TABLE 15 - Continued

Item	Mean	Absolute Frequency					Cumulative Frequency (%)		
		SA	A	D	SD	NR*	SA+A	D+SD	NR
10. Class discussion (reviewing transcript) was helpful in understanding these behaviors.	3.333	5	10	-	-	1	93.7	-	6.3
<u>Unifying Roles</u>									
11. The introductory materials clearly explained unifying behaviors.	3.000	4	8	4	-	-	75.0	25.0	-
12. The transcript utilized was beneficial in illustrating these behaviors.	3.231	4	8	1	-	3	74.9	6.3	18.8
13. Class discussion (reviewing transcript) was helpful in facilitating my understanding of Unifying Roles.	3.667	10	5	-	-	1	93.7	-	6.3
<u>Stages of Group Growth</u>									
14. The introductory materials clearly explained the Stages of Group Growth.	3.125	4	10	2	-	-	87.5	12.5	-
15. The film utilized was beneficial in illustrating these behaviors.	3.417	5	7	-	-	4	75.0	-	25.0
16. The class discussion facilitated understanding and dealing with these stages.	3.357	5	9	-	-	2	87.5	-	12.5

N = 16

\* No Response

respect to the subject and meeting their particular teaching needs. One additional comment made on an evaluation was that the films and discussions were "better" (more beneficial in learning) than the transcripts.

### Session VI Evaluation

A guest facilitator presented the use of role playing in the classroom for the last of the inservice sessions. Evaluation results of the session are found in Table 16. From the results appearing in Table 16 and the responses to the open-ended questions, this session appears to have been the most popular of the six inservice sessions. On a scale of one (poor) to five (great), fifteen teachers gave an average rating of 4.6 on the value of the information presented with respect to the subject and in meeting their particular teaching needs. An overwhelming number of responses testified that the session was interesting and that the concept would be very applicable to future use in the classroom.

### Comprehensive Evaluation

A comprehensive evaluation survey over the six inservice sessions was given to the experimental group teachers during the posttesting phase of the project. The results of this survey are given in Table 17.

More than two-thirds of the teachers felt the inservice has increased their teaching effectiveness (item 1), with three-quarters of the participants indicating they felt the inservice would be beneficial to other teachers (item 9). The modularized materials (item 3) and flexible schedule (item 4) were extremely popular program characteristics. Fifteen of the sixteen participants reported they had already put into practice some of the concepts presented (item 7). Almost contradictory, however, is that thirteen of the teachers responded that they were already practicing most of the concepts presented (item 8). Approximately 80 percent of the teachers indicated that the inservice had provided some help in teaching students of different academic and socio-economic levels in the same classroom (items 11 and 12). While the time frame utilized in conducting the inservice sessions was not necessarily the recommended schedule to be observed, a majority of the teachers appear to have been supportive of it (item 13).

The participants rated the inservice sessions from most to least valuable with respect to meeting their teaching needs as follows:

1. Classroom Management (Session II)
2. Classroom Interaction (Session I)
3. Models of Teaching-Role Playing (Session VI)
4. Teacher Language (Session III)

TABLE 16  
SESSION VI EVALUATION

Item	Mean	Absolute Frequency					Cumulative Frequency (%)		
		SA	A	D	SD	NR*	SA+A	D+SD	NR
<u>Role Playing</u>									
1. The theory of role playing was clearly and adequately explained.	3.867	13	2	-	-	-	100.0	-	-
2. I understand the nine steps (warm up the group, select participants, etc.) for role-playing activity.	3.400	6	9	-	-	-	100.0	-	-
3. I understand the role of the teacher in a role playing activity.	3.400	6	9	-	-	-	100.0	-	-
4. The presentation of the 17 critical teaching skills promoted a better understanding of how to conduct a role playing exercise.	2.933	2	11	1	1	-	86.6	13.4	-
5. Experiencing a role playing activity furthered my understanding of the concept.	3.800	12	3	-	-	-	100.0	-	-
6. I enjoyed the method of presenting this concept.	3.800	12	3	-	-	-	100.0	-	-
7. I would have occasion to use role playing in my classes.	3.600	9	6	-	-	-	100.0	-	-
8. I feel role playing could be a valuable learning activity for vocational students.	3.867	13	2	-	-	-	100.0	-	-

TABLE 16 - Continued

Item	Mean	SA	Absolute Frequency				Cumulative Frequency (%)		
			A	D	SD	NR*	SA+A	D+SD	NR
9. Facilitating a role playing activity in my classes would help me to better know and understand my students.	3.733	12	2	1	-	-	93.3	6.7	-
N = 15									

\* No Response

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TABLE 17  
COMPREHENSIVE EVALUATION

Item	Mean	Absolute Frequency					Cumulative Frequency (%)		
		SA	A	D	SD	NR*	SA+A	D+SD	NR
1. Participating in the inservice increased my effectiveness as a teacher.	2.867	2	9	4	-	1	68.7	25.0	6.3
2. The inservice meetings were boring.	3.071	-	2	9	3	2	12.5	75.0	12.5
3. I liked having the materials presented in modularized form.	3.063	3	11	-	2	-	87.5	12.5	-
4. I liked the flexible schedule of the inservice.	3.750	13	2	1	-	-	93.7	6.3	-
5. I liked having a personal copy of all the materials presented.	3.500	8	8	-	-	-	100.0	-	-
6. I will probably make use or refer to some part(s) of these materials in the future.	3.188	4	11	1	-	-	93.7	6.3	-
7. I have already tried to put into practice some of the concepts presented in the inservice.	3.125	3	12	1	-	-	93.7	6.3	-
8. I was already practicing most of the concepts presented in the inservice.	2.000	3	10	3	-	-	81.2	18.8	-
9. Having completed the inservice, I feel it should be beneficial to other teachers.	2.875	3	9	3	1	-	75.0	25.0	-

TABLE 17 - Continued

Item	Mean	Absolute Frequency				Cumulative Frequency (%)			
		SA	A	D	SD	NR*	SA+A	D+SD	NR
10. The inservice meetings were a waste of my time.	3.250	-	-	12	4	-	100.0	-	-
11. The inservice has provided some help to me in teaching students of different ability levels in the same classroom.	2.813	2	11	1	2	-	81.2	18.8	-
12. The inservice has provided some help to me in teaching students of different socio-economic levels in the same classroom.	2.688	2	10	1	3	-	75.0	25.0	-
13. I would rather have met in a shorter, more concentrated session than one night a week for six weeks.	3.120	-	5	4	7	-	31.2	68.8	-
N = 16									

\* No Response

5. Group Process (Session V)
6. Instructional Concepts (Session IV).

Suggestions given to improve the inservice program included:

- 1) Either more time or less material to cover in a session.
- 2) More examples of real life classroom situations and discussions of how to deal with them.
- 3) More group participation.
- 4) Less-reading.
- 5) More up-to-date and better quality films.
- 6) More guest speakers/facilitators.
- 7) Should have included new games, teaching aids, reference books, etc., which could be used in the classroom.
- 8) One facilitator (project staff member) should be in the room at all times, including when materials were being read.
- 9) Revise some of the transcripts utilized.

## CHAPTER V

### CONCLUSIONS AND DISCUSSION

The reported research was a study to determine if an inservice for vocational teachers of disadvantaged students could be developed and implemented, and if so, what effects such a program would have on the participating teachers and their respective students.

All conclusions are based upon the development, implementation, and validation of an inservice program and the results obtained from testing its effect on participating teachers and their respective students. Consequently, results of the statistical analysis reflect only the population studied. However, it is the opinion of the researchers that generalizations can be made to teachers in other school settings, both vocational and non-vocational.

The following conclusions are based upon actually developing, refining, implementing and testing an inservice program for vocational teachers of disadvantaged students. The conclusions are:

1. An inservice program was developed and implemented for vocational education teachers of disadvantaged students in vocational programs.
2. The effect of the inservice program on the behavior, attitudes and teaching effectiveness of the participating teachers and upon their respective students was assessed.
3. A handbook including specific procedures and materials utilized in the inservice program was developed.

Eight null hypotheses were proposed (see Chapter 1) and tested by means of a Posttest-Only Control Group Design. The following conclusions are based upon results obtained from the posttest instruments.

Null Hypothesis 1 Rejected. Significant differences in verbal teaching behavior were observed between vocational teachers who participated in the inservice and vocational teachers who did not participate.

Results from the Interaction Analysis System indicate that teachers in the experimental group ask significantly more direct questions (Category 4) than do the control group teachers with respect to content and/or classroom procedures. Accordingly, students in the experimental group spend a significantly greater amount of time in student talk initiated by the teacher (Category F0) than do the control group students. Consistent with the above results, teachers in the experimental group also showed a

tendency, with scores approaching significance (probability less than .10), to accept the feelings of students (Category 1) and to accept and/or use students' ideas (Category 3), than do the teachers in the control group. In contrast, scores approaching significance show control group teachers to spend more time answering student questions (Category 5) and control group students to spend more time engaged in directed practice or activity (Category 12).

While none of the Category Ratios (Table 4) are found to be significantly different between the two groups, a tendency is observed with scores approaching significance that the experimental group teachers are more indirect in their manner of teaching (Ratio 1), spend a greater proportion of their total time in indirect teaching (Ratio 6), and that a greater proportion of the total time of the experimental group is spent in teacher talk (Ratio 8). In contrast, control group students show a tendency to spend a greater proportion of their total time in silence (Ratio 4) than do the experimental group.

In summary, teachers who participated in the inservice are found to spend a greater proportion of time in an indirect manner of teaching and in teacher talk in general through the acceptance of student feelings and ideas by asking more direct questions and by initiating a greater amount of student talk than control group teachers.

Null Hypothesis 2 Unable to reject. No significant differences in nonverbal teaching behavior were observed between vocational teachers who participated in the inservice program and vocational teachers who did not participate.

There are no significant differences between the experimental and control group teachers in nonverbal teaching behavior as measured by Categories 12 through 14.1 of the Interaction Analysis System. However, it is of interest to note that the control group teachers have observations approaching the significance level for Category 12 (nonverbal directed practice or activity). Accordingly, Ratio 4 (silence/total) is also observed to be approaching significance.

Null Hypothesis 3 Rejected. Significant differences in affective perceptions of disadvantaged students were observed between vocational teachers who participated in the inservice program and vocational teachers who did not participate.

Thirteen of the 28 items appearing on the Teacher Survey are concerned with the teacher's affective perceptions of disadvantaged students in their class.

The inservice program appears to have had a positive effect upon the experimental group with regards to teachers' affective perceptions. Teachers participating in the inservice scored more favorably on 9 of the 13 (69%) affective items. Results from this instrument show the experimental group teachers to exhibit significant differences in affective

perceptions of students by indicating that students from a low socioeconomic background generally have equal learning capabilities as students from higher socioeconomic backgrounds and that they (the teachers) often try to compare their own background with that of their students to find a common point of interest from which to teach.

Additionally, teachers who participated in the inservice program indicate with scores approaching significance that students labeled as "Disadvantaged" are not "just lazy" but have other factors contributing to their problem.

Null Hypothesis 4 Rejected. A significant difference in cognitive perceptions of disadvantaged students was observed between vocational teachers who participated in the inservice and vocational teachers who did not participate.

Fifteen of the 28 items appearing on the Teacher Survey are concerned with the teacher's cognitive perceptions of disadvantaged students in their class. Again, the inservice program appears to have had a positive effect upon the experimental group with regards to teachers' cognitive perceptions. Teachers participating in the inservice scored more favorably on 12 of the 15 (80%) cognitive items. Specifically, the experimental group teachers indicate with significantly higher scores that students in their class from low socioeconomic backgrounds progress equally with other students, and with scores approaching significance, that most of their slower students are working at capacity. Conversely, the control group teachers indicate with scores approaching significance that most of their students are successfully completing their homework assignments.

Null Hypothesis 5 Rejected. A significant difference was observed in classroom behavior between students of vocational teachers who participated in the inservice program and students of vocational teachers who did not participate.

Students in the experimental group are found to spend a significantly greater amount of time in student talk initiated by the teacher than do the control group students, as indicated by Category 10 of the Interaction Analysis System. However, statistical analysis of "Pupil Behaviors" (Categories 1-4) appearing on the Classroom Observation Record find no significant differences between the two groups.

Null Hypothesis 6 Unable to reject. No significant differences in self concept were observed between students of vocational teachers who participated in the inservice program and students of vocational teachers who did not participate.

There are no significant differences observed between the experiment and control group students in self concept as measured by the Piers-Harris Children's Self Concept Scale.

Null Hypothesis 7 Rejected. A significant difference in student attitude toward the teacher was observed between students of vocational teachers who participated in the inservice program and students of vocational teachers who did not participate.

The experimental group students rate their teachers significantly better in total rapport (Factor 2) on The Student Evaluation of Teaching-1. Additionally, the experimental group scored consistently more favorably than the control group on all factors of both SET-I and SET-II. Scores approaching significance (probability less than .10) are observed for the factors Knowledge/Poised (2) and Lively/Interesting (3) of the SET-I and for the factor Stimulating Interaction Style (1) of SET-II.

Null Hypothesis 8 Rejected. Significant differences were observed in perception of cognitive achievement between students of vocational teachers who participated in the inservice program and students of vocational teachers who did not participate.

Analysis of the Student Survey show the students of the experimental group to indicate with significant scores that they feel they have learned more since the beginning of the treatment period than any other time of the school year and that they receive adequate help from the teacher. Additionally, the experimental group scored consistently higher (more favorable) than the control group on all items of the survey and indicate with a score approaching significance that the material presented in the class was understandable.

The six individual inservice evaluation surveys were extremely beneficial to the project staff in receiving immediate evaluative feedback on each session. The individual surveys also gave the participating teachers the opportunity to express their opinions and reactions to specific segments of the inservice immediately following their participation in these segments. The project staff was therefore able to immediately begin making any necessary revisions in the materials and in the method of presentation. The comprehensive inservice evaluation survey provided additional feedback on the general characteristics of the overall program. As indicated in Chapter IV, participants in the inservice had generally favorable reactions to the program. Specifically, more than two-thirds of the participating teachers felt that the inservice had increased their teaching effectiveness toward all students; and more than three-quarters of the teachers indicated that the inservice had provided help in teaching students of different academic and socioeconomic levels in the same class. Additionally, both the modularized materials and the flexible schedule for attending the inservice meetings were very popular with the teachers.

From observations and evaluative results, the project staff suggest the following recommendations:

1. Preparation for teaching disadvantaged students should be incorporated into preservice teacher training programs.

2. Inservice programs, such as the one reported, should be made available to teachers who did not receive preparation for teaching disadvantaged students in their preservice training.
3. Inservice sessions should be conducted in such a manner that participants can work together in small groups.
4. The materials presented in the reported study are not necessarily universal. Concepts and program content should meet the needs of the specific population.
5. When illustrating concepts through the use of films, up-to-date films with classroom situations in a grade level similar to the participants should be used, when available.
6. Make all materials and presentations available to the participants in written form, but give verbal presentation of those materials on occasion.
7. Participants' work schedules and personal time should be considered when scheduling the inservice meetings.
8. The facilitator(s) should make a point to check with those who study and complete materials at home for comprehension.
9. Flexibility is encouraged. The inservice facilitator(s) should be available to meet with participants who miss scheduled meetings when necessary.
10. The name given to the inservice should be enticing and reflect its purpose while avoiding labels with negative connotations.

In summary, the inservice program appears to have had a definite positive effect upon the participants and their respective students. Evidence of this is found in the inservice session evaluations completed by the participants and the posttest instruments administered by the project staff members. Where significant differences occurred between the experimental and control groups, the experimental group was found in each instance to have scored more favorably toward the expectations of the inservice program. Where significant differences were not observed, the experimental group were observed to score more favorably toward the expectations of the inservice program on a majority of the variables tested.

One important consideration which emerged during the course of the inservice program is that the vast majority of the teachers participating in the inservice were both over 35 years of age and had been teaching for several years. As a result of these two factors, both life attitudes and teaching mannerisms are assumed to be firmly established. Realizing that long standing attitudes and established mannerisms cannot be expected to change greatly over a relatively short period of time, it is the consensus of the project staff that any observance of change or utilization of the concepts presented (more than by the average teacher) is a meaningful gain.

APPENDIX A  
SAMPLE IDENTIFICATION

SAMPLE IDENTIFICATION

Experimental Group				Control Group			
Subject	Sex	Area	Type School	Subject	Sex	Area	Type School
1	F	B/O	Voc.	1	F	B/O	H.S.
2	F	B/O	H.S.	2	F	DE	H.S.
3	F	B/O	H.S.	3	F	B/O	H.S.
4	F	B/O	H.S.	4	F	B/O	H.S.
5	F	B/O	Voc.	5	F	HE	H.S.
6	F	HE	H.S.	6	M	B/O	Voc.
7	F	DE	H.S.	7	F	HE	H.S.
8	F	HE	H.S.	8	F	HE	H.S.
9	F	B/O	H.S.	9	F	HE	H.S.
10	M	B/O	Voc.	10	F	B/O	Voc.
11	F	HE	H.S.	11	M	B/O	Voc.
12	M	DE	H.S.	12	F	DE	Voc.
13	F	HE	H.S.	13	F	B/O	Voc.
14	F	HE	Voc.	14	F	HE	H.S.
15	F	HE	H.S.	15	F	HE	H.S.
16	F	B/O	Voc.	16	F	HE	H.S.

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Totals

KEY

Totals

Male = 2  
 Female = 14  
 Bus/Office = 8  
 Dist. Ed. = 2  
 Home Ec. = 6  
 H.S. Teachers = 11  
 Voc. School Teachers = 5

M - Male  
 F - Female  
 B/O - Business/Office  
 DE - Distributive Education  
 HE - Home Economics  
 H.S. - High School  
 Voc. - Vocational School

Male = 2  
 Female = 14  
 Bus/Office = 7  
 Dist. Ed. = 2  
 Home Ec. = 7  
 H.S. Teachers = 11  
 Voc. School Teachers = 5

APPENDIX B  
CONSULTANTS

CONSULTANTS

for

The Development of an In-Service Program For Vocational Teachers  
of Students With Varying Academic Levels in the Classroom.

Special Vocational Program Teachers

Doris Love	Warren Central SVP Teacher
Phyllis Oglesby	Warren East SVP Teacher
Dana Lee Proffitt	Gamaliel SVP Teacher
Jim Stovall	Bowling Green SVP Teacher

Regular Vocational Program Teachers

Dorothy McCubbin	Barren County H.E. Teacher
Judy Polston	Metcalfe County D.E. Teacher
Doris Pruitt	Warren Central H.E.
Martha Talley	Hart County Bus. & Office Teacher

Project Staff

\*Norman D. Ehresman, Director, Center for Career and Vocational Teacher Education, Western Kentucky University.

Donald J. Britt, Graduate Assistant, Center for Career and Vocational Teacher Education, Western Kentucky University.

Robert Cobb, Staff Assistant, Center for Career and Vocational Teacher Education, Western Kentucky University.

John F. Hanel, Staff Assistant, Center for Career and Vocational Teacher Education, Western Kentucky University.

Keith Politi, Graduate Assistant, Center for Career and Vocational Teacher Education, Western Kentucky University.

Project Staff - Continued

Patricia Richardson, Graduate Assistant, Center for Career and Vocational Teacher Education, Western Kentucky University.

Betty Robertson, Staff Assistant, Center for Career and Vocational Teacher Education, Western Kentucky University.

Roger D. Vincent, Staff Assistant, Center for Career and Vocational Teacher Education, Western Kentucky University.

Kaye Willis, Graduate Assistant, Center for Career and Vocational Teacher Education, Western Kentucky University.

\*Project Director

APPENDIX C

PLANNING CONFERENCE AGENDAS AND DISCUSSION SUMMARIES.

## PLANNING CONFERENCE I AGENDA

In-service Program For Teachers of the Disadvantaged

Room 404  
College of Education  
Western Kentucky University  
November 4, 1975

- |           |   |   |
|-----------|---|---|
| 4:00 P.M. | Opening Remarks                             | Norman D. Ehresman<br>Director, Center<br>for Career and Vocational Teacher Education |
| 4:10 P.M. | Introduction of Participants                | Jack Hanel<br>Project Staff   |
| 4:15 P.M. | Review of Project                           | Betty Robertson<br>Project Staff  |
| 4:30 P.M. | Reaction/Discussion of Project              | Committee Members   |
| 5:00 P.M. | Dinner                                      |   |
| 6:00 P.M. | Questions for Discussion From Project Staff | Committee Members   |
| 8:00 P.M. | Adjourn                                     |   |

## SUMMARY

Planning Conference I

för

The Development of an In-Service Program for Vocational  
Teachers of Students with Varying Academic  
Levels in the Classroom

November 4, 1975

### Problem Areas Identified

1. Not enough time for teachers to develop instructional materials to meet the needs of students with varying academic levels.
2. Teachers need help (teacher or student aides) to deal with classes consisting of students with varying academic levels.
3. Teachers need more access to materials and resource centers.
4. Materials budget should be larger because students at low academic levels consume more materials.
5. Low ability students in the regular classroom become a problem and usually fail.
6. Low reading level may prevent some students from succeeding in the regular class.

### Possible Solutions to the Problems

1. Courses that offer varied entry level skills should be available to the academically low student.
2. Teacher's attitude should be adjusted to meet the needs of the students (academically low as well as academically high).
3. Teachers should communicate with academically low students on their level and accept their social behavior.

4. Home visits could help teachers better understand students with special needs.
5. Teachers should be a "friend" to students--yet command respect.
6. Teachers should make an effort to develop a close relationship with those students having special needs (take them on errands).
7. The use of rewards help motivate academically low students.
8. Students with special needs should be taught something useful and easily comprehended.
9. The term "special education" or "disadvantaged" should be avoided due to the negative connotations of such labels.
10. Teachers need to get together to share ideas and techniques on dealing with classes that consist of students with varying academic levels.
11. Teachers should be aware of what students need and what is available from other teachers in the school so efforts can be coordinated.
12. Communication with special need students is the best form of individualized instruction.
13. Students should be grouped--no way a class of students with varying academic levels can progress at the same rate.

#### Thoughts on the In-Service

1. The in-service should not be called a "disadvantaged" workshop.
2. The in-service should consist of materials that can be "used" by teachers in their classrooms--not just ideas and theories.
3. The in-service should consist of a dissemination of "tried and true" techniques that the teacher can adopt for use with students of varying academic ability.

4. Input concerning content of the in-service should come from teachers with classes consisting of students operating at various academic levels.

#### Possible In-Service Content

1. How to establish a relationship and good communications with the academically low student.
2. How to find time to deal with the academically low student in a classroom of varying level students.
3. How to motivate the academically low students (use of rewards).
4. How to build self concept and self image in the student who functions at a low academic level.
5. How to use resources in the school in teaching students of varying academic levels---SVP teachers and other teachers.
6. How to assess interest and need of academically low students (use of interest tests).
7. How to meet the needs of students at academically low levels (introducing varying job skill levels into vocational courses).
8. Why group students in the classroom where varying academic levels exist.
9. How to group students that are operating at various academic levels in the classroom.
10. How to work with the different groups in the regular classroom.

#### Points to Consider Before the Next Meeting

1. What topics should be covered in the in-service?
2. How should the content be disseminated--lecture, guest speaker, case study, etc.?

3. How long should the in-service be?
4. What type of incentive should be used to attract teachers to participate in the in-service?

PLANNING CONFERENCE II AGENDA

In-Service Program for Vocational Teachers of  
Students with Varying Academic Levels in the Classroom

Room 404  
College of Education  
Western Kentucky University  
November 18, 1975

4:00 p.m.	Introduction of New Consultants	Norman D. Ehresman Project Director Center for Career and Vocational Teacher Education
4:10 p.m.	Questions for Discussion From Project Staff	Committee Members
5:00 p.m.	Dinner	
6:00 p.m.	Discussion of In-Service	Committee Members
8:00	Adjourn	

Summary

Planning Conference II  
for  
The Development of an In-Service Program for Vocational  
Teachers of Students with Varying Academic  
Levels in the Classroom

November 18, 1975

Discussion of In-Service

1. Teachers can't work with large number of students--need to group
2. Methods of grouping
  - A. Observation
  - B. Tests
3. Procedure for working with groups--rotation and individualized instruction
4. Grading criteria for low achievers
  - A. Effort
  - B. Attitude
5. Individualized instruction works with students of varying academic levels--if given time
6. Utilizing teacher's aids or high achievers in reaching the low achiever has been very successful
7. Shouldn't spend much time in in-service on identifying low achievers
8. Workshop should involve "active" sessions (participation from teachers) as opposed to passive lecture sessions
9. Having workshop participants develop materials for their own classroom to meet specific needs is usually effective
10. Changes in student attitude and achievement should result from an effective workshop
11. Changing the things that go into the classroom--ways of utilizing materials--will change students
12. Positive, affective climate will produce cognitive achievement and better attitude on the part of students

13. Teacher courtesy helps student improve self concept
14. Expenses should be paid for teachers who participate in the in-service
15. Teachers do things in the classroom that they are unaware of doing
16. Teachers want materials that actually work and can be put into practice--effectively
17. Giving students objectives lets students know where they are going
18. Positive self concept, cognitive gain, and student interaction are desirable outcomes
19. A basic structure must exist in the classroom--teacher should be systematic.
20. Teacher attitudes toward students and interaction with students are most important
21. Materials lend themselves to opening the communication barrier between student and teacher
22. Teacher expectation of students should be realistic in regard to achievement level
23. Teachers should "try out" techniques in the classroom that were learned in the in-service to get immediate feedback on the success of such methods--feedback could be shared with other in-service participants
24. In-service content should not be concentrated on theory, behavioral objectives, etc.
25. Ten weeks should be the minimum length of time for the in-service--longer duration with shorter hours
26. Option for college credit should be available
27. Mileage should be paid for teachers participating in the in-service

#### Possible In-Service Content Outline

##### I. Teacher Attitudes and Interaction Toward Student

- A. Teacher Expectations--what the teacher really expects from the students. Altering expectations and setting objectives that are realistic for individual students will bring about changes in student behavior.

- B. Classroom Management
  - 1. Grouping (physical)
  - 2. Grading
  - 3. Individualized learning
- C. Verbal and Nonverbal Communications
- D. Teaching Skills (practical and specific)

APPENDIX D

INSERVICE PROGRAM AGENDA

AGENDA  
FOR  
AN IN-SERVICE FOR VOCATIONAL TEACHERS  
OF STUDENTS WITH VARYING ACADEMIC LEVELS  
IN THE CLASSROOM

Center for Career and Vocational Teacher Education  
Room 404 - College of Education  
Western Kentucky University

March 4, 1976 6-9 p.m.

1. Greetings and Introductions
2. Six-week Program Outline
  - A. March 4 - Classroom Interaction
  - B. March 11 - Classroom Management
  - C. March 18 - Teacher Language
  - D. March 25 - Group Process
  - E. April 1 - Instructional Concepts
  - F. April 8 - Models of Teaching
3. Classroom (Student/Teacher) Behavior
  - A. Explanation of film series
  - B. Aggressive Behavior Exercise
4. Classroom Interaction
  - A. Using Student Ideas
  - B. Lesson Organization
  - C. Praise and Corrective Feedback
  - D. Questioning
5. Session Evaluation

March 11, 1976 6-9 p.m.

1. Classroom (Student/Teacher) Behavior
  - A. Review of Aggressive Behavior
  - B. Withdrawal Behavior Exercise
2. Classroom Management
  - A. Group Alerting
  - B. Learner Accountability
  - C. Transitions
  - D. Withitness
3. Session Evaluation

March 18, 1976 6-9 p.m.

1. Classroom (Student/Teacher) Behavior
  - A. Review of Withdrawal Behavior
  - B. Supportive Behavior Exercise
2. Teacher Language
  - A. Clarity
  - B. Emphasis
  - C. Encouragement
  - D. Extension
  - E. Feedback
  - F. Organization
3. Session Evaluation

March 25, 1976 6-9 p.m.

1. Classroom (Student/Teacher) Behavior
  - A. Review of Supportive Behavior
  - B. Reciprocating Behavior Exercise
2. Group Process
  - A. Stages of Group Growth
  - B. Task Roles
  - C. Unifying Roles
  - D. Anti-group Roles
3. Session Evaluation

April 1, 1976. 6-9 p.m.

1. Classroom (Student/Teacher) Behavior
  - A. Review of Reciprocating Behavior
  - B. Closing Behavior Exercise
2. Instructional Concepts
  - A. Conceptualizing the Process of Instruction
  - B. Verbal Interaction in the Cognitive Dimension
  - C. Organizing Facts to Teach Meaningful Relationships
  - D. Fair Verbal Behavior
  - E. Learners and their Characteristics
3. Session Evaluation

April 8, 1976 6-9 p.m.

1. Classroom (Student/Teacher) Behavior
  - A. Review of Closing Behavior
2. Models of Teaching
  - A. Guest Facilitator
3. Session/Program Evaluation

APPENDIX E

INDIVIDUAL SESSION AND COMPREHENSIVE EVALUATION SURVEYS

(Optional) Name \_\_\_\_\_

IN-SERVICE SESSION EVALUATION  
CLASSROOM INTERACTION - MARCH 4, 1976

DIRECTIONS: Please read each statement and circle the response that best describes how you feel about the statement. Your answer will tell us if you STRONGLY AGREE (SA), AGREE (A), DISAGREE (D), or STRONGLY DISAGREE (SD).

Aggressive Behavior Exercise

- |   |    |   |   |    |
|---|----|---|---|----|
| 1. The film was helpful in understanding this concept.  | SA | A | D | SD |
| 2. The workbook activities furthered my understanding of this concept.  | SA | A | D | SD |
| 3. Working in a small group was beneficial for completing the workbook activities.  | SA | A | D | SD |
| 4. From this session on aggressive behavior I feel I better understand this concept and how to deal with it in the classroom. | SA | A | D | SD |

Using Student Ideas

- |   |    |   |   |    |
|---|----|---|---|----|
| 5. The introductory materials were understandable.  | SA | A | D | SD |
| 6. The transcript utilized was adequate for illustrating the points and concepts of this classroom procedure. | SA | A | D | SD |
| 7. The class discussion was beneficial to my understanding of this process.                                   | SA | A | D | SD |

Lesson Organization

- |   |    |   |   |    |
|---|----|---|---|----|
| 8. The introductory materials were understandable.  | SA | A | D | SD |
| 9. The handout listing components of Lesson Organization clearly identified and explained each of the components. | SA | A | D | SD |
| 10. I found the group work of classifying teacher statements beneficial in understanding this concept.            | SA | A | D | SD |
| 11. The class discussion aided in furthering my understanding of this concept.                                    | SA | A | D | SD |

Praise and Corrective feedback

- 12. The introductory materials were understandable. SA A D SD
- 13. Completing the worksheets in small groups helped in comprehending this concept. SA A D SD
- 14. The class discussion aided in furthering my understanding of this concept. SA A D SD

Questioning

- 15. The introductory materials were understandable. SA A D SD
- 16. The handout listing various components of questioning clearly identified and explained each of the categories. SA A D SD
- 17. Working on the transcript in small groups facilitated identifying and understanding questioning techniques. SA A D SD
- 18. The class discussion aided in furthering my understanding of this concept. SA A D SD

General

- 20. Will knowledge of the concepts conveyed in this session alter your teaching performance, and if so, how?
  
- 21. Which, if any, of the concepts presented will benefit you in achieving better classroom interaction?



22. What, if any, materials or ideas should be deleted?

23. What, if any, materials or ideas should be added?

24. On a scale of one (poor) to five (great), how would you rate the value of the information presented in this session with respect to achieving better classroom interaction and in meeting your particular teaching needs?

25. Please give any additional comments you would like to make.

(Optional) Name \_\_\_\_\_

IN-SERVICE SESSION EVALUATION  
CLASSROOM MANAGEMENT - MARCH 11, 1976

DIRECTIONS: Please read each statement and circle the response that best describes how you feel about the statement. Your answer will tell us if you STRONGLY AGREE (SA), AGREE (A), DISAGREE (D), or STRONGLY DISAGREE (SD).

Withdrawal Behavior Exercise

- |   |    |   |   |    |
|---|----|---|---|----|
| 1. The film was helpful in understanding this concept.  | SA | A | D | SD |
| 2. The workbook activities furthered my understanding of this concept.  | SA | A | D | SD |
| 3. Working in a small group was beneficial for completing the workbook activities.  | SA | A | D | SD |
| 4. From this session on withdrawal behavior I feel I better understand this concept and how to deal with it in the classroom. | SA | A | D | SD |

Positive Reinforcement

- |   |    |   |   |    |
|---|----|---|---|----|
| 5. The introductory materials provide a concise, adequate explanation of the theory behind this concept.  | SA | A | D | SD |
| 6. The facilitator presentations of the various techniques involved in this concept were beneficial in my understanding of how positive reinforcement can be used in achieving better classroom management. | SA | A | D | SD |

Group Alerting

- |   |    |   |   |    |
|---|----|---|---|----|
| 7. The explanation of Group Alerting was helpful in understanding and clarifying this concept.                  | SA | A | D | SD |
| 8. The transcript utilized was beneficial in illustrating the three teacher behaviors involved in this concept. | SA | A | D | SD |
| 9. The class discussion was beneficial to my understanding of this process.                                     | SA | A | D | SD |

Learner Accountability

10. The explanation of Learner Accountability clearly identified the concept and the behaviors involved. SA A D SD
11. I found the group work of identifying teacher behaviors involved in Learner Accountability beneficial in understanding this concept. SA A D SD
12. The class discussion aided in furthering my understanding of this concept. SA A D SD

Transitions

13. The explanation of Transitions and the teacher behaviors involved was helpful in my understanding of this concept. SA A D SD
14. The role playing exercise was beneficial in illustrating the application of this concept in the classroom. SA A D SD

Withitness

15. The explanation of Withitness and the teacher behaviors involved was helpful in my understanding of this concept. SA A D SD
16. Working on the classroom situations in small groups facilitated identifying and understanding behaviors involved in this concept. SA A D SD
17. The class discussion aided in furthering my understanding of this concept. SA A D SD

General

18. Will knowledge of the concepts conveyed in this session alter your teaching performance, and if so, how?



(Optional) Name \_\_\_\_\_

IN-SERVICE SESSION EVALUATION  
TEACHER LANGUAGE - MARCH 18, 1976

DIRECTIONS: Please read each statement and circle the response that best describes how you feel about the statement. Your answer will tell us if you STRONGLY AGREE (SA), AGREE (A), DISAGREE (D), or STRONGLY DISAGREE (SD).

Supporting Behavior Exercise

- |   |    |   |   |    |
|---|----|---|---|----|
| 1. The film was helpful in understanding this concept.  | SA | A | D | SD |
| 2. The workbook activities furthered my understanding of this concept.  | SA | A | D | SD |
| 3. Working in a small group was beneficial for completing the workbook activities.  | SA | A | D | SD |
| 4. From this session on supporting behavior I feel I better understand this concept and how to deal with it in the classroom. | SA | A | D | SD |

Clarity

- |   |    |   |   |    |
|---|----|---|---|----|
| 5. The explanation of Clarity was helpful in understanding and clarifying this concept.                         | SA | A | D | SD |
| 6. The transcript utilized was beneficial in illustrating the three teacher behaviors involved in this concept. | SA | A | D | SD |
| 7. The class discussion (reviewing transcript) was beneficial to my understanding of this process.              | SA | A | D | SD |

Organization

- |   |    |   |   |    |
|---|----|---|---|----|
| 8. The explanation of Organization clearly identified the concept and the behaviors involved.   | SA | A | D | SD |
| 9. The role playing exercise (or development/identification of teacher statements) was beneficial in illustrating the application of this concept in the classroom. | SA | A | D | SD |

Emphasis

10. The explanation of Emphasis and the teacher behaviors involved was helpful in my understanding of this concept. SA A D SD
11. The role playing exercise (or development/ identification of teacher statements) was beneficial in illustrating the application of this concept in the classroom. SA A D SD

Feedback

12. The explanation of Feedback and the teacher behaviors involved was helpful in my understanding of this concept. SA A D SD
13. The role playing exercise (or development/ identification of teacher statements) was beneficial in illustrating the application of this concept in the classroom. SA A D SD

General

14. Group presentations of the concepts to the class was an effective method of learning. SA A D SD

Comments:

15. Will knowledge of the concepts conveyed in this session alter your teaching performance, and if so, how?

16. Which, if any, of the concepts presented will benefit you in achieving better classroom management?
17. What, if any, materials or ideas should be deleted?
18. What, if any, materials or ideas should be added?
19. On a scale of one (poor) to five (great), how would you rate the value of the information presented in this session with respect to achieving better classroom management and in meeting your particular teaching needs?
20. Please give any additional comments you would like to make.

(Optional) Name \_\_\_\_\_

IN-SERVICE SESSION EVALUATION  
INSTRUCTIONAL CONCEPTS - MARCH 25, 1976

DIRECTIONS: Please read each statement and circle the response that best describes how you feel about the statement. Your answer will tell us if you STRONGLY AGREE (SA), AGREE (A), DISAGREE (D), or STRONGLY DISAGREE (SD).

Reciprocating Behavior Exercise

- |  |    |   |   |    |
|--|----|---|---|----|
| 1. The film was helpful in understanding this concept.   | SA | A | D | SD |
| 2. The workbook activities furthered my understanding of this concept.   | SA | A | D | SD |
| 3. Working in a small group was beneficial for completing the workbook activities.   | SA | A | D | SD |
| 4. From this session on reciprocating behavior I feel I better understand this concept and how to utilize it in the classroom. | SA | A | D | SD |

Conceptualizing the Process of Instruction

- |  |    |   |   |    |
|--|----|---|---|----|
| 5. The introductory materials clearly explained Conceptualizing the Process of Instruction.                  | SA | A | D | SD |
| 6. The films utilized were beneficial in illustrating the principle underlying this concept.                 | SA | A | D | SD |
| 7. Group work was helpful in understanding this concept.   | SA | A | D | SD |
| 8. The model building exercise was beneficial to my understanding of this concept.                           | SA | A | D | SD |
| 9. Class discussion of this concept facilitated understanding of Conceptualizing the Process of Instruction. | SA | A | D | SD |

Verbal Interaction in The Cognitive Dimension

- |  |    |   |   |    |
|--|----|---|---|----|
| 10. The introductory materials clearly explained Verbal Interaction in the Cognitive Dimension             | SA | A | D | SD |
| 11. Use of Macdonald-Zaret Matrix along with the transcripts were beneficial in illustrating this concept. | SA | A | D | SD |

12. Class discussion (reviewing transcript) was helpful in understanding this concept. SA A D SD

Organizing Facts to Teach Meaningful Relationships

13. The introductory materials clearly explained Organizing Facts to Teach Meaningful Relationships. SA A D SD

14. Handouts on Concept Teaching were beneficial to my understanding of this process. SA A D SD

15. The transcript utilized was beneficial in illustrating this concept. SA A D SD

16. Class discussion (reviewing transcript) was helpful in facilitating my understanding of Organizing Facts to Teach Meaningful Relationships. SA A D SD

17. Will knowledge of the concepts conveyed in this session alter your teaching performance, and if so, how?

18. Which, if any, of the concepts presented will benefit you in the classroom?





(Optional) Name \_\_\_\_\_

IN-SERVICE SESSION EVALUATION  
GROUP PROCESS - APRIL 1, 1976

DIRECTIONS: Please read each statement and circle the response that best describes how you feel about the statement. Your answer will tell us if you STRONGLY AGREE (SA), AGREE (A), DISAGREE (D), or STRONGLY DISAGREE (SD).

Closing Behavior-Exercise

- |  |    |   |   |    |
|--|----|---|---|----|
| 1. The film was helpful in understanding this concept.   | SA | A | D | SD |
| 2. The workbook activities furthered my understanding of this concept.   | SA | A | D | SD |
| 3. Working in a small group was beneficial for completing the workbook activities.   | SA | A | D | SD |
| 4. From this session on closing behavior I feel I better understand this concept and how to deal with it in the classroom. | SA | A | D | SD |

Anti-Group Roles

- |   |    |   |   |    |
|---|----|---|---|----|
| 5. The introductory materials clearly explained Anti-Group behaviors.                   | SA | A | D | SD |
| 6. The film utilized was beneficial in illustrating these behaviors.                    | SA | A | D | SD |
| 7. The class discussion facilitated understanding and how to deal with these behaviors. | SA | A | D | SD |

Task Roles

- |   |    |   |   |    |
|---|----|---|---|----|
| 8. The introductory materials clearly explained task oriented behaviors.                  | SA | A | D | SD |
| 9. The transcript utilized was beneficial in illustrating these behaviors.                | SA | A | D | SD |
| 10. Class discussion (reviewing transcript) was helpful in understanding these behaviors. | SA | A | D | SD |

Unifying Roles

- 11. The introductory materials clearly explained unifying behaviors. SA A D SD
- 12. The transcript utilized was beneficial in illustrating these behaviors. SA A D SD
- 13. Class discussion (reviewing transcript) was helpful in facilitating my understanding of Unifying Roles. SA A D SD

Stages of Group Growth

- 14. The introductory materials clearly explained the Stages of Group Growth. SA A D SD
- 15. The film utilized was beneficial in illustrating these behaviors. SA A D SD
- 16. The class discussion facilitated understanding and dealing with these stages. SA A D SD
- 17. Will knowledge of the concepts conveyed in this session alter your teaching performance, and if so, how?

18. Which, if any, of the concepts presented will benefit you in the classroom?



19. What, if any, materials or ideas should be deleted?

20. What, if any, materials or ideas should be added?

21. On a scale of one (poor) to five (great), how would you rate the value of the information presented in this session with respect to meeting your particular teaching needs?

22. Please give any additional comments you would like to make.

(Optional) Name \_\_\_\_\_

IN-SERVICE SESSION EVALUATION  
ROLE PLAYING - April 8, 1976

DIRECTIONS: Please read each statement and circle the response that best describes how you feel about the statement. Your answer will tell us if you STRONGLY AGREE (SA), AGREE (A), DISAGREE (D), or STRONGLY DISAGREE (SD).

Role Playing

- |   |    |   |   |    |
|---|----|---|---|----|
| 1. The theory of role playing was clearly and adequately explained.   | SA | A | D | SD |
| 2. I understand the nine steps (warm up the group, select participants, etc.) of role playing activity.   | SA | A | D | SD |
| 3. I understand the role of the teacher in a role playing activity.   | SA | A | D | SD |
| 4. The presentation of the 17 critical teaching skills promoted a better understanding of how to conduct a role playing exercise.   | SA | A | D | SD |
| 5. Experiencing a role playing activity furthered my understanding of this concept.   | SA | A | D | SD |
| 6. I enjoyed the method of presenting this concept.   | SA | A | D | SD |
| 7. I would have occasion to use role playing in my classes.   | SA | A | D | SD |
| 8. I feel role playing could be a valuable learning activity for vocational students.   | SA | A | D | SD |
| 9. Facilitating a role playing activity in my classes would help me to better know and understand my students.  | SA | A | D | SD |
| 10. On a scale of one (poor) to five (great), how would you rate the value of the information presented in this session with respect to meeting your particular teaching needs. |    |   |   |    |
| 11. Please give any additional comments you would like to make.   |    |   |   |    |

EVALUATION OF  
AN IN-SERVICE FOR VOCATIONAL TEACHERS  
OF STUDENTS WITH VARYING ACADEMIC  
LEVELS IN THE CLASSROOM

DIRECTIONS: Please read each statement (statements 1-13) and circle the response that best describes how you feel about the statement. Your answer will tell us if you STRONGLY AGREE (SA), AGREE (A), DISAGREE (D), or STRONGLY DISAGREE (SD). Please give your personal/professional opinion in response to statements 14 and 15.

- |  |    |   |   |    |
|--|----|---|---|----|
| 1. Participating in the in-service increased my effectiveness as a teacher.                    | SA | A | D | SD |
| 2. The in-service meetings were boring.  | SA | A | D | SD |
| 3. I liked having the materials presented in modularized form.                                 | SA | A | D | SD |
| 4. I liked the flexible schedule of the in-service.  | SA | A | D | SD |
| 5. I liked having a personal copy of all the materials presented.                              | SA | A | D | SD |
| 6. I will probably make use or refer to some part(s) of these materials in the future.         | SA | A | D | SD |
| 7. I have already tried to put into practice some of the concepts presented in the in-service. | SA | A | D | SD |
| 8. I was already practicing most of the concepts presented in the in-service.                  | SA | A | D | SD |
| 9. Having completed the in-service, I feel it would be beneficial to other teachers.           | SA | A | D | SD |
| 10. The in-service meetings were a waste of my time.   | SA | A | D | SD |

11. The in-service has provided some help to me in teaching students of different ability levels in the same classroom. SA A D SD

12. The in-service has provided some help to me in teaching students of different socio-economic levels in the same classroom. SA A D SD

13. I would rather have met in a shorter, more concentrated session than one night a week for six weeks. SA A D SD

14. Rank the six in-service sessions from most valuable to least valuable to you as a teacher.

1. (most valuable)

2.

3.

4.

5.

6.

(least valuable)

15. List any suggestions you feel would improve the in-service program.

APPENDIX F  
INTERACTION ANALYSIS SYSTEM CATEGORIES

## Interaction Analysis System Categories

<u>Category</u>	<u>Description</u>
1	Teacher Accepts Student Feelings
2	Teacher Praises or Encourages Students
3	Teacher Accepts or Uses Student Ideas
4	Teacher Asks Direct Recall Question
4.1	Teacher Asks Probing Question
4.2	Teacher Asks Higher Order Question
5	Teacher Answers Student Question
6	Teacher Lecture - Content
6.1	Teacher Lecture - Non content
7	Teacher Gives Corrective Feedback
8	Teacher Gives Directions
9	Teacher Criticizes or Justifies Authority
10	Student Talk Initiated By Teacher
10.1	Student Initiated Talk
11	Student Question
12	Directed Practice or Activity
13	Demonstration
14	Constructive Silence
14.1	Non-constructive Silence or Confusion

Categories 1-9: Teacher Talk  
 Categories 10-11: Student Talk  
 Categories 12-14.1: Nonverbal

APPENDIX G

COR RECORDING SHEET AND GLOSSARY

FIGURE 2

Classroom Observation Record

9-22-51

Teacher Characteristics Study

Teacher \_\_\_\_\_ No. \_\_\_\_\_ Sex \_\_\_\_\_ Class or Subject \_\_\_\_\_ Date \_\_\_\_\_  
 School \_\_\_\_\_ Time \_\_\_\_\_ Observer \_\_\_\_\_

BEHAVIOR

REMARKS

1. Apathetic	1	2	3	4	5	6	7	N	Alert
2. Obstructive	1	2	3	4	5	6	7	N	Responsible
3. Uncertain	1	2	3	4	5	6	7	N	Confident
4. Dependent	1	2	3	4	5	6	7	N	Initiating

TEACHER BEHAVIOR

5. Partial	1	2	3	4	5	6	7	N	Fair
6. Autocratic	1	2	3	4	5	6	7	N	Democratic
7. Alert	1	2	3	4	5	6	7	N	Responsive
8. Restricted	1	2	3	4	5	6	7	N	Understanding
9. Harsh	1	2	3	4	5	6	7	N	Kindly
10. Dull	1	2	3	4	5	6	7	N	Stimulating
11. Stereotyped	1	2	3	4	5	6	7	N	Original
12. Apathetic	1	2	3	4	5	6	7	N	Alert
13. Unimpressive	1	2	3	4	5	6	7	N	Attractive
14. Evading	1	2	3	4	5	6	7	N	Responsible
15. Erratic	1	2	3	4	5	6	7	N	Steady
16. Eccentric	1	2	3	4	5	6	7	N	Poised
17. Uncertain	1	2	3	4	5	6	7	N	Confident
18. Unorganized	1	2	3	4	5	6	7	N	Systematic
19. Inflexible	1	2	3	4	5	6	7	N	Adaptable
20. Pessimistic	1	2	3	4	5	6	7	N	Optimistic
21. Unintegrated	1	2	3	4	5	6	7	N	Integrated
22. Narrow	1	2	3	4	5	6	7	N	Broad

## GLOSSARY

(to be used with classroom observation record.)

Pupil Behaviors

## 1. Apathetic-Apert Pupil Behavior

Apathetic -

1. Listless.
2. Read-acting.
3. Enter into activities half-heartedly.
4. Restless.
5. Attention wanders.
6. Slow in getting under way.

Alert

1. Appear anxious to recite and participate.
2. Watch teacher attentively.
3. Work concentratedly.
4. Seem to respond eagerly.
5. Prompt and ready to take part in activities when they begin.

## 2. Obstructive-Responsible Pupil Behavior

Obstructive

1. Tease or nag another and/or to teacher.
2. Interrupting, demanding attention, disturbing.
3. Obtrusive, glib.
4. Refusal to participate.
5. Quarrelsome, irritable.
6. Engaged in name-calling and/or tattling.
7. Unprepared.

Responsible

1. Courteous, co-operative, friendly with each other and with teacher.
2. Complete assignments without complaining or unhappiness.
3. Controlled voices.
4. Received help and criticism attentively.
5. Asked for help when needed.
6. Orderly without specific directions from teacher.
7. Prepared.

## 3. Inert-Confident Pupil Behavior

Inert

1. Hesitant, timid, unsure.
2. Reactions restrained.
3. Willing to attend.
4. Inappropriate physical habits, mannerisms, etc.
5. Appropriate and timid.
6. Reactions poor (stammering, speech).

Confident

1. Seem anxious to try new problems or activities.
2. Undisturbed by mistakes.
3. Volunteer to recite.
4. Enter freely into activities.
5. Appear relaxed.
6. Speak with assurance.

## 4. Dependent-Initiating Pupil Behavior

Dependent

1. Depend on teacher for explicit directions.
2. Slow in reacting to work things.
3. Inability to lead.
4. Depend on teacher when initiative called for.
5. Appear to resent to take lead or to accept responsibilities.

Initiating

1. Volunteer ideas and suggestions.
2. Showed resourcefulness.
3. Take lead willingly.
4. Assume responsibilities without evasion.

Figure 2 (Continued)

Teacher Behaviors

5. Partial or Teacher Behavior

Partial

1. Repeatedly singled a pupil.
2. Repeatedly criticized certain pupils repeatedly.
3. Repeatedly gave a pupil special advantage.
4. Gave most attention to one or a few pupils.
5. Showed prejudice (favorable or unfavorable) towards some social, racial, or religious groups.
6. Expressed suspicion of motives of a pupil.

Fair

1. Treated all pupils approximately equally.
2. In case of controversy pupil allowed to explain his side.
3. Distributed attention to many pupils.
4. Rotated leadership impartially.
5. Based criticism or praise on factual evidence, not hearsay.

6. Autocratic-Democratic Teacher Behavior

Autocratic

1. Tells pupils each step to take.
2. Intolerant of pupils' ideas.
3. Mandatory in giving directions, orders to be obeyed at once.
4. Interrupted pupils although their discussion was relevant.
5. Always directed rather than participated.

Democratic

1. Guided pupils without being mandatory.
2. Exchanged ideas with pupils.
3. Encouraged (asked for) pupil opinion.
4. Encouraged pupils to make own decisions.
5. Entered into activities without domination.

7. Abusive-Responsive Teacher Behavior

Abusive

1. Stiff and formal in relations with pupils.
2. Pupils received little class activity.
3. Unpleasant to pupils.
4. Retire and subject matter only, content pupils as persons ignored.
5. Referred to pupil as "this child" or "that child."

Responsive

1. Approachable to all pupils.
2. Participates in class activity.
3. Responded to reasonable requests and/or questions.
4. Speaks to pupils as equals.
5. Commends effort.
6. Gives encouragement.
7. Recognized individual differences.

8. Understanding Teacher Behavior

Unaffected

1. Keenly interested in academic accomplishments of pupil, no concern for personal problems.
2. Completely unresponsive with a pupil's behavior in class.
3. Gave attention only to very good or superior work.
4. Was impatient with a pupil.

Understanding

1. Showed awareness of a pupil's personal emotional problems and needs.
2. Was tolerant of error on part of pupil.
3. Patient with a pupil beyond ordinary limits of patience.
4. Showed what appeared to be sincere sympathy with a pupil's viewpoint.

9. Harsh-Kindly Teacher Behavior

Harsh

1. Hypercritical, fault-finding.
2. Cross, curt.
3. Depreciated pupil's efforts, was sarcastic.
4. Scolded a great deal.
5. Lost temper.
6. Used threats.
7. Permitted pupils to laugh at mistakes of others.

Kindly

1. Goes out of way to be pleasant and try to help pupils, friendly.
2. Give a pupil a deserved compliment.
3. Found good things in pupils to call attention to.
4. Seemed to show sincere concern for a pupil's personal problem.
5. Showed affection without being demonstrative.
6. Disengaged self from a pupil without bluntness.

10. Dull-Stimulating Teacher Behavior

Dull

1. Uninteresting, monotonous explanations.
2. Assignments provide little or no motivation.
3. Fails to provide challenge.
4. Lack of animation.
5. Failed to capitalize on pupil interests.
6. Pedantic, boring.
7. Lacks enthusiasm, bored acting.

Stimulating

1. Highly interesting presentation, gets and holds attention without being flashy.
2. Clever and witty, though not smart-alecky or wise-cracking.
3. Enthusiastic, animated.
4. Assignments challenging.
5. Took advantage of pupil interests.
6. Brought lesson successfully to a climax.
7. Seemed to provoke thinking.

11. Stereotyped-Original Teacher Behavior

Stereotyped

1. Used routine procedures without variation.
2. Would not depart from procedure to take advantage of a relevant question or situation.
3. Presentation seemed unimaginative.
4. Not successful in answering questions or providing explanations.

Original

1. Used what seemed to be original and relatively unique devices to aid instruction.
2. Tried new materials, or methods.
3. Seemed imaginative and able to develop presentation around a question or situation.
4. Resourceful in answering question, had many pertinent illustrations available.

12. Apathetic-Alert Teacher Behavior

Apathetic

1. Seemed listless; languid, lacked enthusiasm.
2. Seemed bored by pupils.
3. Passive in response to pupils.
4. Seemed preoccupied.
5. Attention seemed to wander.
6. Saw no chairment of time, took no active part in class activities.

Alert

1. Appeared buoyant, wide-awake; enthusiastic about activity of the moment.
2. Kept constructively busy.
3. Gave attention to, and seemed interested in, what was going on in class.
4. Prompt to "pick up" class when pupils' attention showed signs of lagging.

Figure 2 (Continued)

## 13. Unimpressive-Attractive Teacher Behavior

Unimpressive

1. Untidy or sloppily dressed.
2. Inappropriately dressed.
3. Habit colorless.
4. Posture and bearing unattractive.
5. Possessed distracting personal habits.
6. Mumbled, inaudible speech, limited expression, disagreeable voice tone, poor inflection.

Attractive

1. Clean and neat.
2. Well-groomed, dress showed good taste.
3. Posture and bearing attractive.
4. Free from distracting personal habits.
5. Plainly audible speech, good expression, agreeable voice tone, good inflection.

## 14. Evading-Responsible Teacher Behavior

Evading

1. Avoided responsibility, disinclined to make decisions.
2. "Passed the buck" to class, to other teachers, etc.
3. Left learning to pupils, failing to give adequate help.
4. Let a difficult situation get out of control.
5. Assignments and directions indefinite.
6. No insistence on either individual or group standards.
7. Inattentive with pupils.
8. Cursory.

Responsible

1. Assumed responsibility, makes decisions as required.
2. Conscientious.
3. Punctual.
4. Painstaking, careful.
5. Suggested aids to learning.
6. Controlled a difficult situation.
7. Gave definite directions.
8. Called attention to standards of quality.
9. Attentive to class.
10. Thorough.

## 15. Erratic-Steady Teacher Behavior

Erratic

1. Impulsive, uncontrolled, temperamental, unsteady.
2. Course of action easily swayed by circumstances of the moment.
3. Inconsistent.

Steady

1. Calm, controlled.
2. Maintained progress toward objective.
3. Stable, consistent, predictable.

## 16. Excitable-Poised Teacher Behavior

Excitable

1. Easily disturbed and upset, flustered in classroom situation.
2. Hurried in class activities, spoke rapidly using many words and gestures.
3. Was "jumpy", nervous.

Poised

1. Seemed at ease at all times.
2. Unruffled by situation that developed in classroom, dignified without being stiff or formal.
3. Unhurried in class activities, spoke quietly and slowly.
4. Successfully diverted attention from a stress situation in classroom.

## 17. Uncertain-Confident Teacher Behavior

Uncertain

1. Seemed unsure of self, faltering, hesitant.
2. Appeared timid and shy.
3. Appeared artificial.
4. Disturbed and embarrassed by mistakes and/or criticism.

Confident

1. Seemed sure of self, self-confident in relations with pupils.
2. Undisturbed and unembarrassed by mistakes and/or criticism.

18. Systematic Teacher Behavior

Unplanned

1. No plan for class work.
2. Unprepared.
3. Objectives not apparent, undecided as to next step.
4. Wasted time.
5. Explanations not to the point.
6. Easily distracted from matter at hand.

Systematic

1. Evidence of a planned though flexible procedure.
2. Well prepared.
3. Careful in planning with pupils.
4. Systematic about procedure of class.
5. Had anticipated needs.
6. Provided reasonable explanations.
7. Held discussion together, objective apparent.

19. Adaptability Teacher Behavior

Inflexible

1. Avoids conforming to routine.
2. Makes attempt to adapt materials to individual pupils.
3. Adapts materials by modifying explanation or activities to meet particular classroom situations.
4. Patient with interruptions and diversions.

Adaptable

1. Flexible in adapting explanations.
2. Individualized materials for pupils as required, adapted activities to pupils.
3. Took advantage of pupils' questions to further clarify ideas.
4. Met an unusual classroom situation competently.

20. Optimistic Teacher Behavior

Pessimistic

1. Emphasis on "pluses."
2. Called attention to "central bad."
3. Expressed pessimism of "education" in the school system, or fellow educators.
4. Did not take up good points, made correct but not unpleasant "good" corrections.

Optimistic

1. Cheerful, good-natured.
2. Genial.
3. Joked with pupils on occasion.
4. Emphasized potential "good."
5. Looked on bright side, spoke optimistically of the future.
6. Called attention to good points, emphasized the positive.

21. Control of Class Behavior

Authoritative

1. Maintained an approach to classroom situation.
2. Clear in explaining, demanding, and enforcing needed.

Integrated

1. Maintained class as center of activity, kept self out of spotlight, referred to class's activities, not own.
2. Emotionally well controlled.

22. Background Teacher Behavior

Narrow

1. Presentation of material supported only by facts on subject or material, lack of depth in background.
2. Failed to connect concepts with illustrations in "related" areas.
3. Showed little evidence of breadth of cultural background in such areas as science, art, literature, and history.
4. Answered pupils' questions in complete ignorance.
5. Non-critical approach to subject.

Broad

1. Presentation suggested good background in subject, good scholarship suggested.
2. Drew examples and explanations from various sources and related fields.
3. Showed evidence of broad cultural background in science, art, literature, history, etc.
4. Gave satisfying, complete, and accurate answers to questions.
5. Was constructively critical in approach to subject matter.

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MATERIAL.

APPENDIX I  
SET I AND II

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# NET I and II

## Student Evaluation of Teaching

Research and Development Center  
for Teacher Education  
The University of Texas at Austin

Scale mark forms for computer scoring developed at  
Western Kentucky University  
Office of Educational Research

NAME											
SCHOOL								DATE			
SEX	M	F									
GRADE	4	5	6	7	8	9	10	11	12		
1	<input type="checkbox"/>	0	1	2	3	4	5	6	7	8	9
2	<input type="checkbox"/>	0	1	2	3	4	5	6	7	8	9
3	<input type="checkbox"/>	0	1	2	3	4	5	6	7	8	9

### INSTRUCTIONS:

Do you really notice how your teacher acts? Please mark the following sentences about your teacher.

Tell if each sentence is true or false by blackening the space next to the sentence. **BE HONEST** and **GIVE YOUR OPINION**

Your teacher will not see these answers Please choose only one answer for each question.

NET I Veldman and Peck T=Almost always true t=Often true f=Often false F=Almost always false

### THIS TEACHER:

- |    |   |                          |   |  |
|----|---|--------------------------|---|--|
| 1  | T | <input type="checkbox"/> | F | is always friendly toward students                   |
| 2  | T | <input type="checkbox"/> | F | knows a lot about the subject.                       |
| 3  | T | <input type="checkbox"/> | F | is never dull or boring                              |
| 4  | T | <input type="checkbox"/> | F | expects a lot from students.                         |
| 5  | T | <input type="checkbox"/> | F | asks for students' opinions before making decisions. |
| 6  | T | <input type="checkbox"/> | F | is usually cheerful and optimistic.                  |
| 7  | T | <input type="checkbox"/> | F | is not confused by unexpected questions.             |
| 8  | T | <input type="checkbox"/> | F | makes learning more like fun than work.              |
| 9  | T | <input type="checkbox"/> | F | doesn't let students get away with anything.         |
| 10 | T | <input type="checkbox"/> | F | often gives students a choice in assignments.        |

NET II Haak, Kleiber, and Peck T=True F=False

- |    |   |                          |   |  |
|----|---|--------------------------|---|--|
| 1  | T | <input type="checkbox"/> | F | Our teacher teaches us a lot                   |
| 2  | T | <input type="checkbox"/> | F | The kids like our teacher                      |
| 3  | T | <input type="checkbox"/> | F | Our teacher listens to what we want            |
| 4  | T | <input type="checkbox"/> | F | Our teacher makes what we learn interesting    |
| 5  | T | <input type="checkbox"/> | F | Our teacher always picks on people             |
| 6  | T | <input type="checkbox"/> | F | Our teacher helps us a lot                     |
| 7  | T | <input type="checkbox"/> | F | Our teacher gives us too much work             |
| 8  | T | <input type="checkbox"/> | F | We can tell how our teacher wants things done. |
| 9  | T | <input type="checkbox"/> | F | Our teacher gets mad a lot.                    |
| 10 | T | <input type="checkbox"/> | F | Our teacher makes school fun.                  |
| 11 | T | <input type="checkbox"/> | F | Our teacher likes to teach                     |
| 12 | T | <input type="checkbox"/> | F | Our teacher thinks kids are good.              |
| 13 | T | <input type="checkbox"/> | F | Our teacher thinks I work hard                 |
| 14 | T | <input type="checkbox"/> | F | Our teacher thinks I have good ideas           |
| 15 | T | <input type="checkbox"/> | F | Our teacher likes us kids.                     |
| 16 | T | <input type="checkbox"/> | F | Our teacher likes me.                          |
| 17 | T | <input type="checkbox"/> | F | Our teacher likes for me to help him/her.      |
| 18 | T | <input type="checkbox"/> | F | Our teacher thinks I can do a lot on my own.   |
| 19 | T | <input type="checkbox"/> | F | Our teacher thinks I am lazy.                  |
| 20 | T | <input type="checkbox"/> | F | Our teacher thinks I act ugly.                 |
| 21 | T | <input type="checkbox"/> | F | Our teacher thinks we are a smart class.       |
| 22 | T | <input type="checkbox"/> | F | Our teacher thinks I am smart.                 |
| 23 | T | <input type="checkbox"/> | F | Our teacher is nice when we make mistakes.     |

APPENDIX J  
TEACHER SURVEY

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## TEACHER SURVEY

**DIRECTIONS:** Please read each statement and circle the response that best describes how you feel about the statement. Your answer will tell us if you STRONGLY AGREE (SA), AGREE (A), DISAGREE (D), or STRONGLY DISAGREE (SD).

- |  |    |   |   |    |
|--|----|---|---|----|
| 1. I respect each one of my students equally.  | SA | A | D | SD |
| 2. Most of my slower students are not working at their capacity.   | SA | A | D | SD |
| 3. I have recently observed my students to be more willing to work in my classes.  | SA | A | D | SD |
| 4. I am usually too rushed to give special attention to "slower" students.   | SA | A | D | SD |
| 5. Classes should be segregated on the basis of academic achievement.  | SA | A | D | SD |
| 6. Most of my students have been completing their homework assignments.  | SA | A | D | SD |
| 7. I have five or more students in each of my classes that could be labeled as "Disadvantaged."                                  | SA | A | D | SD |
| 8. I have a tendency to avoid students who do not practice good personal hygiene.  | SA | A | D | SD |
| 9. Students in my classes with a low socio-economic background do not progress as rapidly as the other students.                 | SA | A | D | SD |
| 10. Evaluation methods to check for student competency attainment should be varied according to individual student capabilities. | SA | A | D | SD |
| 11. Most students labeled as "Disadvantaged" are just lazy.  | SA | A | D | SD |
| 12. All of my students participate about equally in class.   | SA | A | D | SD |
| 13. I find the progress of many students in my classes is "held back" by a fewer, less capable individuals.                      | SA | A | D | SD |

- |  |    |   |   |    |
|--|----|---|---|----|
| 14. The various individual students' backgrounds (socio-economic, academic achievement, etc.) should be taken into consideration when conducting a learning situation. | SA | A | D | SD |
| 15. Previously non-participating students are beginning to show an increase in classroom interaction in my classes.  | SA | A | D | SD |
| 16. Most of my students benefit from individualized instruction.   | SA | A | D | SD |
| 17. Students from a lower socio-economic background generally do not have the learning capability of students from a middle or upper socio-economic background.        | SA | A | D | SD |
| 18. I find fewer students in my classes receiving failing grades in recent months.   | SA | A | D | SD |
| 19. I find it difficult to understand the plight of the student who has been labeled as "Disadvantaged."   | SA | A | D | SD |
| 20. I find many of my students progressing better in the last couple of months.  | SA | A | D | SD |
| 21. Students from lower socio-economic backgrounds create most of the discipline problems.   | SA | A | D | SD |
| 22. Most of my students are able to comprehend the material presented in my classes.   | SA | A | D | SD |
| 23. I often try to compare my background with that of some of my students to find a common point of interest.  | SA | A | D | SD |
| 24. I have many students in my classes that do not make an attempt to learn.   | SA | A | D | SD |
| 25. I find it difficult to be patient with students of below average achievement.  | SA | A | D | SD |
| 26. There are some students in my classes, I previously expected would fail, who will finish with a passing grade.   | SA | A | D | SD |
| 27. The most feasible method of teaching a class with students of varying academic levels is to teach "the middle of the road" approach.                               | SA | A | D | SD |
| 28. I readily accept a student's point of view that is different from my own.  | SA | A | D | SD |

APPENDIX K  
STUDENT SURVEY

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## STUDENT SURVEY

**DIRECTIONS:** Please read each statement and circle the response that best describes how you feel about the statement. Your answer will tell us if you **STRONGLY AGREE (SA)**, **AGREE (A)**, **DISAGREE (D)**, or **STRONGLY DISAGREE (SD)**.

- |   |    |   |   |    |
|---|----|---|---|----|
| 1. In this class I feel I have learned more in the last six weeks than any other time of the school year. | SA | A | D | SD |
| 2. I am doing as well in this class as most of my classmates.   | SA | A | D | SD |
| 3. I find the material presented in this class hard to understand.  | SA | A | D | SD |
| 4. I feel I often need more help than the teacher gives me.   | SA | A | D | SD |
| 5. My grades in this class have improved in the last few months.  | SA | A | D | SD |
| 6. I fail more than I succeed in this class.  | SA | A | D | SD |
| 7. I have recently considered dropping out of school, but have since changed my mind.                     | SA | A | D | SD |
| 8. I find my homework assignments in this class too difficult.  | SA | A | D | SD |
| 9. If it were possible, I would drop this class.  | SA | A | D | SD |
| 10. Recently, I find I am enjoying this class more.   | SA | A | D | SD |

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