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ABSTRACT

This study a) compared the anxiety levels of three groups of student teachers just prior to and immediately following the student teacher experience and b) ascertained whether or not the concept of student teaching changed in pleasantness during the teaching experience. Two groups of students (N=36, n=15) were instructed through traditional teacher education methods courses while one group (N=11) was taught by performance-oriented methods courses. All groups were administered a semantic differential test having "pleasant" at one end and "unpleasant" at the other end. Results show that a) prior to student teaching, the performance-oriented group viewed the concept with less pleasantness than the other two groups, although not significantly; b) all groups were equally relieved to have completed student teaching; c) the feeling toward the completed student teaching experience was uniform for all groups; and d) the performance-oriented group showed a large gain on the mean score of pleasantness during the student teaching experience. (The report presents nine tables of statistical data. The appendixes include a sample questionnaire and pre- and post-test instructions.) (BRB)

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**A COMPARISON OF ANXIETY LEVELS OF
STUDENT TEACHERS PRIOR TO STUDENT
TEACHING UNDER PERFORMANCE BASED
AND OTHER TYPES OF PREPARATION**

U.S. DEPARTMENT OF HEALTH
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**Project 200
College of Education
Virginia Polytechnic Institute
and
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Blacksburg, Virginia
June, 1973**

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CHAPTER I

INTRODUCTION

For several years the author has observed what appeared to be a general anxiety among those students in agricultural education who were about to begin student teaching. From preliminary study, it was discovered that the uneasiness students feel concerning the impending student teaching period is revealed to a certain extent by the degree of pleasantness or unpleasantness of the concept of "student teaching" as measured on a seven-step scale. The degree of anxiety toward student teaching in this study is assumed to be the degree of pleasantness or unpleasantness felt concerning the concept of "student teaching."

Teacher preparation procedures that contribute to undue anxiety of student teachers toward student teaching would seem to be counterproductive while procedures which increase confidence would be more desirable. Performance-based instruction that allows the student to prove himself on many of the teaching tasks would be expected to increase the confidence of a student teacher and cause him to view student teaching as a more pleasant experience than would conventional approaches to teacher preparation.

The opportunity to compare anxiety levels of student teachers who were prepared by traditional and by performance-based procedures became available when the Agricultural Education Department of the University of Minnesota made a change to performance-based preparation. The kind of data analyzed in this study had been collected on a continuous basis since 1967; therefore, a comparison of the two approaches to teacher preparation

was easily facilitated.

Statement of the Problem

The major problem was to determine whether or not there was a difference in anxiety levels of student teachers concerning student teaching just prior to the student teaching experience among the groups of student teachers, two of which were prepared by traditional procedures and one of which was prepared by performance-based instruction.

Definition of Terms

Anxiety level - The term in this study is defined as the degree of pleasantness or unpleasantness as measured by a seven-step Likert-type scale bound by the bipolar adjective, pleasant-unpleasant.

Performance-based Instruction - The term in this study refers to an individualized, competency-based, performance oriented, teaching methods course that was developed and used by Dr. Roland Peterson and others at the University of Nebraska and at the University of Minnesota. A rather complete description of the instructional program as reported by Dr. Roland Peterson (5, pp. 2-3) in The Visitor follows:

In becoming accountable for specific behaviors in a beginning agriculture teacher, a group of experienced teachers and teacher-educators identified behaviors they felt were critical for a beginning teacher to possess so far as teaching methods were concerned. These behaviors or performance areas were then arranged into a hierarchy which began with simple behaviors and then the more complex. Thirty performance areas were identified as critical behaviors for the beginning teachers to possess. Consequently, these 30 performance areas became the basis for 30 individualized instructional modules. Each module was organized into a worksheet around a format which included: 1) Module Title, 2) Introduction, 3) Objectives, 4) Pre-assessment, 5) Learning Activities, 6) Learning Resources, 7) Assignment, and 8) Worksheet Section. Each module directs the student to listen to an audio-tape record discussion and/or read materials

pertinent to the performance area. Following these experiences, the student may observe a video-taped demonstration teaching situation which utilizes one of the problem-solving methods or a teaching technique. Finally each student must perform each of the required tasks. This results in each student developing a minimum of 12 lesson plans and actually teaching each of them one time. Each teaching performance is evaluated on a satisfactory or unsatisfactory basis. Each student is video-taped on at least two or three of his micro-teaching experiences. If a performance is not acceptable, it is repeated until it can be performed satisfactorily. The modules included in the 30 performance areas are as follows:

- Module 1: Operating Audio-Visual Equipment and Learning Resources
- Module 2: Filing of Teaching Materials
- Module 3: Teacher-Pupil Planning
- Module 4: Five Problem-Solving Teaching Methods
- Module 5: Identifying Student Problems to the Problem-Solving Teaching Methods
- Module 6: Utilizing a Daily Lesson Plan Form
- Module 7: Writing Behavioral Objectives
- Module 8: Motivational Activities and Techniques
- Module 9: Reinforcement . . . Techniques
- Module 10: Questioning Techniques
- Module 11: Concluding a Discussion
- Module 12: Utilizing Supervised Study Time
- Module 13: Handling Discipline Situations
- Module 14: Constructing Objective-Type Tests
- Module 15: Constructing Subjective-Type Tests
- Module 16: Constructing Performance Evaluation Instruments
- Module 17: Grading Student Performance
- Module 18: Writing and Teaching a Lesson Using the Steps and Key Points Teaching Method

- Module 19: Writing and Teaching a Lesson Using the Possibilities and Factors Teaching Method
- Module 20: Writing and Teaching a Lesson Using the Advantages and Disadvantages Teaching Method
- Module 21: Writing and Teaching a Lesson Using the Present Situation vs. Ideal Situation Teaching Method
- Module 22: Writing and Teaching a Lesson Using the Question-Answer Discussion Teaching Method
- Module 23: Presenting a Shop Demonstration
- Module 24: Preparing Individualized Study Materials
- Module 25: Utilizing Resource Personnel
- Module 26: Using Games and Simulated Situations
- Module 27: Utilizing Field Trips
- Module 28: Team Teaching
- Module 29: Utilizing Discovery Teaching Techniques
- Module 30: Teaching the First Day of School

The performance areas covered attempt to begin with developing teacher-pupil planning skills so that a beginning teacher can develop the ability to acquire the problems and concerns of students and then formulate these problems into meaningful lesson plans. This is followed by developing skill in utilizing critical behaviors in teaching and finally putting it all together by developing these problems into a complete lesson plan and actually teaching it.

Semantic Differential Instrument - An instrument that measures the connotative meaning which stimulus concepts such as "student teaching" have for different individuals. The semantic differential is a psychological mechanism - a technique or process - which provides an objective measure of connotative meaning. The stimulus concept for which meaning is being measured is associated with or judged against a good-bad continuum or another bipolar, adjective continuum usually presented as a seven-step scale.

Objectives and Hypotheses

Objectives

The first and the major objective of this study was to ascertain whether or not student-teachers who were prepared by performance-based instruction felt just prior to student teaching that the concept of "student teaching" was more pleasant than the student teachers who were prepared by other more traditional types of instruction.

A second objective of this study was to ascertain whether or not student teachers who were prepared by performance-based instruction felt just after their student teaching experience that the concept of student teaching was more pleasant and more successful than student teachers who were prepared by other more traditional types of instruction.

The third objective of this study was to ascertain whether or not the concept of student teaching changed in pleasantness during the student teaching period. The fourth objective was to ascertain whether or not the change was significant.

Research Hypotheses and Rationale

The researcher hypothesized that the student teachers who were prepared by performance-based instruction would have more confidence and would feel that student teaching would be more pleasant than would student teachers prepared by other means. Specifically, the first research hypothesis was that student teachers who had been prepared by performance-based instruction would feel that the concept, "student teaching", was more pleasant, as measured by a seven-step scale, just prior to student teaching than would student teachers who were prepared by two other more traditional approaches.

The research hypothesis concerning how the groups of student teachers would feel toward student teaching immediately after the experience was that no difference would exist between the groups. Specifically, the second research hypothesis was that regardless of the method of preparation, student teachers would feel that the concept of student teaching would be equally pleasant when measured after student teaching by the seven-step scale. The rationale for believing that this would be true was that the low degree of pleasantness felt toward student teaching prior to student teaching is primarily an indication of anxiety. After the student teaching period has passed, the reason for anxiety has passed.

The third, fourth, and fifth hypotheses relate to changes in feeling toward concepts during the student teaching period. The third research hypothesis concerned the direction of change during the student teaching period in the pleasantness felt toward the student teaching experience. It was expected that nearly all student teachers would show an increase in the pleasantness felt toward the concept of student teaching regardless of the method of preparation.

The fourth research hypothesis was that the increase during the student teaching period referred to in hypothesis three would be significantly improved in each of the three groups.

Research Related to the Problem

The most closely related study to the present one known to the author is that of Ingvalson (3) who studied the attitudinal changes of student teachers toward the concept "student teaching" during the student teaching period. Ingvalson used an instrument made up of six seven-step

scales that measured the importance, meaningfulness, goodness, successfulness, and pleasantness of the concept of student teaching. The six adjectives used in the analysis were only the ones classified as evaluative on a semantic differential instrument. A semantic differential instrument is described in the definitions. Ingvalson collapsed the six scale values into one measure on which he conducted his analysis. In the study, attention was given to attitude change during the student teaching period and the relationship of that change to the student teaching grade and the likelihood of the individual entering agriculture teaching. Also, post-test information was studied for its relationship to the final grade and the likelihood of the individual entering agriculture teaching. The attitudes of student teachers toward the concept "student teachers" significantly (.05 level) improved during the student teaching period. Both the amount of attitude improvement and the post-test attitude measure were significantly (.05 level) related to the final grade. Neither the amount of attitude improvement nor the post-test attitude data were predictive of entrance into agriculture teaching, however, the final student teaching grade was related to teaching agriculture one or more years (significant Chi square at .05 level).

The study is related to the present study in that one of the scales out of the six used by Ingvalson is the criterion measure of the present study and the student teachers he studied were from the same institution and program as one group of student teachers in "the present study."

The attitude toward (the feeling about or the meaning of) student teaching was determined by a connotative meaning or linguistic approach like that of Osgood (4) in which student teaching was represented as a concept or as two words at the top of the page to be judged in terms of

the pleasantness or unpleasantness that the words call forth in the respondents. Thurstone's (6) definition of attitude in his book, The Measurement of Values, differs little from what is believed to be measured by the pleasantness-unpleasantness scale of this study. The one scale is only a part of the total attitude toward student teaching, but that part is what was pinpointed for study. Thurstone's (6, p. 29) definition of attitude is "the sum total of a man's inclinations and feelings, prejudice, or fears, thoughts, and convictions about any specified topic." Whether in this study we are measuring a part of connotative meaning or an attitude is felt to be of little consequence.

CHAPTER II

PROCEDURE

Population Studied

The primary groups studied in this investigation were the student teachers in Agricultural Education at the University of Minnesota, who student taught winter quarter of 1972 and fall quarter of 1972 and the student teachers in Agricultural Education at Virginia Polytechnic Institute and State University who student taught winter quarter of 1973. Some use was made of the same kind of data collected at the University of Minnesota between 1967 and 1971 in the study.

Thirty-six student teachers were included in the winter quarter of the 1972 group from Minnesota. These students had a traditional methods course with a limited amount of demonstration classes and use of video-tape recorders. Eleven student teachers who received the individualized, competency based, performance oriented teaching methods course and who student taught in Minnesota during fall quarter of 1972 made up the experimental group. This group contained fewer student teachers because use of two student teaching quarters instead of one was begun in the spring of 1972. Fifteen student teachers from Virginia who received a similar preparation to the first or traditional group from Minnesota were also included in the study.

Instrument

Although the student teachers completed an instrument which contained ten scales, the researcher had already decided to analyze only one or perhaps two of the scales. To avoid confusion, only that part of

the instrument used in the analysis will be shown here.

Student Teaching

Pleasant: ___ : ___ : ___ : ___ : ___ : ___ : ___ : Unpleasant

Successful: ___ : ___ : ___ : ___ : ___ : ___ : ___ : Unsuccessful

Figure 1 Measurement Scales Used to Measure Attitude (Anxiety)
Toward the Stimulus Concept of Student Teaching.

Observation of semantic differential data collected over a number of years had convinced the author that the degree of pleasantness was one of the best indicators of anxiety toward student teaching beforehand and one of the best indicators of how well the student teacher had performed at the end of student teaching of the ten adjectives that had been used. For this reason the degree of pleasantness was chosen as the primary criterion. The degree of successfulness was also investigated because it was felt to be the second best criterion for purposes of this study.

The instrument was administered to student teachers immediately preceding and immediately upon returning from the student teaching experience. Appendix A includes the instructions for completion of the forms as read to the student teachers before completing the instrument prior to student teaching. In every case the concept was only one of four concepts being measured and it was not the first concept to be measured. Students were not informed that there would be a second measurement when they returned from their student teaching experience. Upon returning, student teachers were told each year "I don't suppose you'd believe that I lost or misplaced the information you gave me earlier. At any rate, it is necessary for you to fill out the form for me again.

Without trying to second guess the purpose, complete the form according to the way you feel toward the words and phrases now."

Each time the instrument was administered the students were informed that the information was confidential and would be reported only in summary form. Students were further promised that the data would not be removed from sealed envelopes until after they had graduated. With this procedure, data could be collected without the students seeking to respond with high attitude scores in fear that a low score would affect his student teaching grade.

Statistical Procedure

Analysis of variance for a one-way design was used to determine whether or not groups of student teachers who were prepared by different methods felt that student teaching was an equally pleasant concept just prior to student teaching (hypothesis one) and after the student teaching period (hypothesis two). The computer program that was used (2,pp. 486-494) is known as the BMD01V - Analysis of Variance for One-Way Design of the Health Science Computing Facility, University of California - Los Angeles. The same program was used for two groups to further search for differences between two groups after it had been determined that there were significant differences among three groups.

Whether or not the direction of change in pleasantness felt toward student teaching that developed during the student teaching was positive or negative was tested by Chi square.

A paired t-test for analyzing the difference between pre-student teaching data and post-student was used. The alpha level chosen for making decisions concerning accepting or rejecting hypotheses was .05.

CHAPTER III

THE PRESENTATION AND ANALYSIS OF DATA

The purpose of the first hypothesis was to ascertain whether or not student teachers who were prepared by performance-based instruction felt just prior to student teaching that the concept of student teaching was more pleasant than the student teachers who were prepared by other, more traditional types of instruction. The hypothesis was stated in the null form for purposes of statistical tests.

Null Hypothesis One

The null hypothesis was that each group of student teachers who were prepared by different methods would feel that the concept "student teaching" was equally pleasant just prior to student teaching.

The one-way analysis of variance for the three groups, namely those students prepared by performance-based methods course in Minnesota, those prepared by conventional methods course in Minnesota, and those prepared by conventional methods courses in Virginia, yielded a small and non-significant F-ratio and the null hypothesis could not be rejected.

The group means, standard deviations, and F-ratio are presented in Table 1.

TABLE 1
 COMPARISONS^a OF DEGREE OF PLEASANTNESS FELT
 TOWARD THE CONCEPT OF STUDENT TEACHING JUST
PRIOR TO STUDENT TEACHING BY THREE GROUPS
 OF STUDENT TEACHERS

STUDENT TEACHER GROUP	N	\bar{X} [*]	SD
Minnesota Performance-based	11	4.636	1.629
Minnesota Conventional	36	5.028	1.444
Virginia Conventional	15	5.333	1.047

^a $F = 0.792$ N. S.
 $F_{.05} = 3.15$
 $df = 2, 59$

*
 criterion measures could range from one through seven

The feeling about student teaching by the performance-based instruction group in terms of pleasantness was lowest, although not significantly lower than the other two groups. Because data was available from student teachers from four previous years which was originally not planned for use in the present study, reference is made to that data here. The mean score for pleasantness was higher in each of the four previous years. The mean scores in 1968 and 1970 seemed particularly high; therefore, a t-test was used to test for differences between the means of the performance-based group and the 1968 group and between the performance-based group and the 1970 group.

The results of those comparisons are in Table 2 and Table 3.

TABLE 2

COMPARISON^a OF DEGREE OF PLEASANTNESS FELT
TOWARD THE CONCEPT OF STUDENT TEACHING JUST
PRIOR TO STUDENT TEACHING BY THE "PERFORMANCE-
BASED" GROUP AND THE 1968 GROUP

STUDENT TEACHER GROUP	N	\bar{X}	SD
Performance-based, 1972	11	4.636	1.629
Conventional, 1968	26	5.692	1.087

^a
t = 5.379 significant
t.05 = 4.13
df = 35

TABLE 3

COMPARISON^a OF DEGREE OF PLEASANTNESS FELT
TOWARD THE CONCEPT OF STUDENT TEACHING JUST
PRIOR TO STUDENT TEACHING BY THE "PERFORMANCE-
BASED" GROUP AND THE 1970 GROUP

STUDENT TEACHER GROUP	N	\bar{X}	SD
Performance-based, 1972	11	4.636	1.629
Conventional, 1970	28	5.714	1.272

^a
t = 4.832 significant
t.05 = 4.11
df = 38

Null Hypothesis Two

The null hypothesis was that each group of student teachers who were prepared by different methods would feel that the concept, "student teaching", was equally pleasant just after the student teaching period.

The group means, standard deviations, and F-ratio are presented in Table 4.

TABLE 4

COMPARISON^a OF DEGREE OF PLEASANTNESS FELT TOWARD THE CONCEPT OF STUDENT TEACHING JUST AFTER THE STUDENT TEACHING EXPERIENCE BY THREE GROUPS OF STUDENT TEACHERS

STUDENT TEACHER GROUP	N	\bar{X}	SD
Minnesota Performance-based	11	6.000	1.342
Minnesota Conventional	36	6.139	1.175
Virginia Conventional	15	6.067	0.884

^a F = 0.069 N. S.

The same analysis was made for successfulness of the concept, "student teaching," as was made for pleasantness. The group means, standard deviations, and F-ratio are presented in Table 5.

TABLE 5

COMPARISON^a OF DEGREE OF SUCCESSFULNESS FELT TOWARD THE CONCEPT OF STUDENT TEACHING JUST AFTER THE STUDENT TEACHING EXPERIENCE BY THREE GROUPS OF STUDENT TEACHERS

STUDENT TEACHER GROUP	N	\bar{X}	SD
Minnesota Performance-based	11	6.182	1.168
Minnesota Conventional	36	6.083	1.273
Virginia Conventional	15	6.200	1.320

^a F = 0.057 N. S.

Null Hypothesis Three

The null hypothesis was that an equal number of individuals when put into one group would show a decrease as would show an increase in attitude toward the concept, "student teaching," during the student teaching period.

Of the 62 students, 55 or 88.7 percent showed an improvement in their feeling toward the concept of student teaching. A Chi square of 35.6 was obtained and a Chi square of 10.8 is significant of the .001 level. The percentage of students that improved in their feeling toward the concept of student teaching during the student teaching period was rather uniform with 81.8 percent increase for the performance-based group, 88.8 percent for the Minnesota conventional group, and 92.3 for the Virginia conventional group. Refer to Table 6.

Null Hypothesis Four

This hypothesis concerns the amount of change instead of the direction of change and pre-student teaching data for each of the three groups of student teachers was compared with post-student teaching data for each of the three groups.

The null hypothesis was that each group of student teachers would feel that the concept of student teaching was equally pleasant after the student teaching period as before the student teaching period.

TABLE 6
 FREQUENCY OF MEASURED INCREASE AND DECREASE IN
 PLEASANTNESS FELT TOWARD THE CONCEPT OF STUDENT
 TEACHING DURING THE STUDENT TEACHING PERIOD FOR
 THREE GROUPS

STUDENT TEACHER GROUP	NUMBER INCREASED	NUMBER DECREASED	PERCENT DECREASED
Minnesota Performance-based	9	2	18.2%
Minnesota Conventional	32	4	11.2%
Virginia Conventional	14	1	6.7%
* All Groups	55	7	11.3%

* χ^2 for all individuals as a group with Yate's correction equals 35.62 for one degree of freedom

$$\chi^2 .001 = 10.8$$

The group means,, standard deviations, and value of t are presented in Tables 7 through 9.

TABLE 7

A COMPARISON^a OF THE DEGREE OF PLEASANTNESS FELT TOWARD THE CONCEPT OF STUDENT TEACHING BEFORE AND AFTER STUDENT TEACHING FOR THE PERFORMANCE-BASED GROUP

RELATION TO STUDENT TEACHING	NUMBER PAIRS	\bar{X}	SD
Before	11	4.636	1.629
After		6.000	1.342

^apaired $t = 22.97$ significant
 $t.05 = 2.23$
 $df = 10$

TABLE 8

A COMPARISON^a OF THE DEGREE OF PLEASANTNESS FELT TOWARD THE CONCEPT OF STUDENT TEACHING BEFORE AND AFTER STUDENT TEACHING FOR THE MINNESOTA CONVENTIONAL GROUP

RELATION TO STUDENT TEACHING	NUMBER PAIRS	\bar{X}	SD
Before	36	5.028	1.444
After		6.139	1.175

^apaired $t = 4.95$ significant
 $t.05 = 2.037$
 $df = 35$

TABLE 9

A COMPARISON^a OF THE DEGREE OF PLEASANTNESS
 FELT TOWARD THE CONCEPT OF STUDENT TEACHING
 BEFORE AND AFTER STUDENT TEACHING FOR THE
 VIRGINIA CONVENTIONAL GROUP

RELATION TO STUDENT TEACHING	NUMBER PAIRS	\bar{X}	SD
Before	15	5.667	1.047
After		6.200	1.320

^a paired $t = 2.47$ significant
 $t_{.05} = 2.145$
 $df = 14$

A composite of the findings of the study are in Figure 2. All possible comparisons were made except where "not tested" appears in the figure. If no indication of significance appears, that means the test was made but no significance was found.

HOW PLEASANT IS THE CONCEPT OF STUDENT TEACHING?

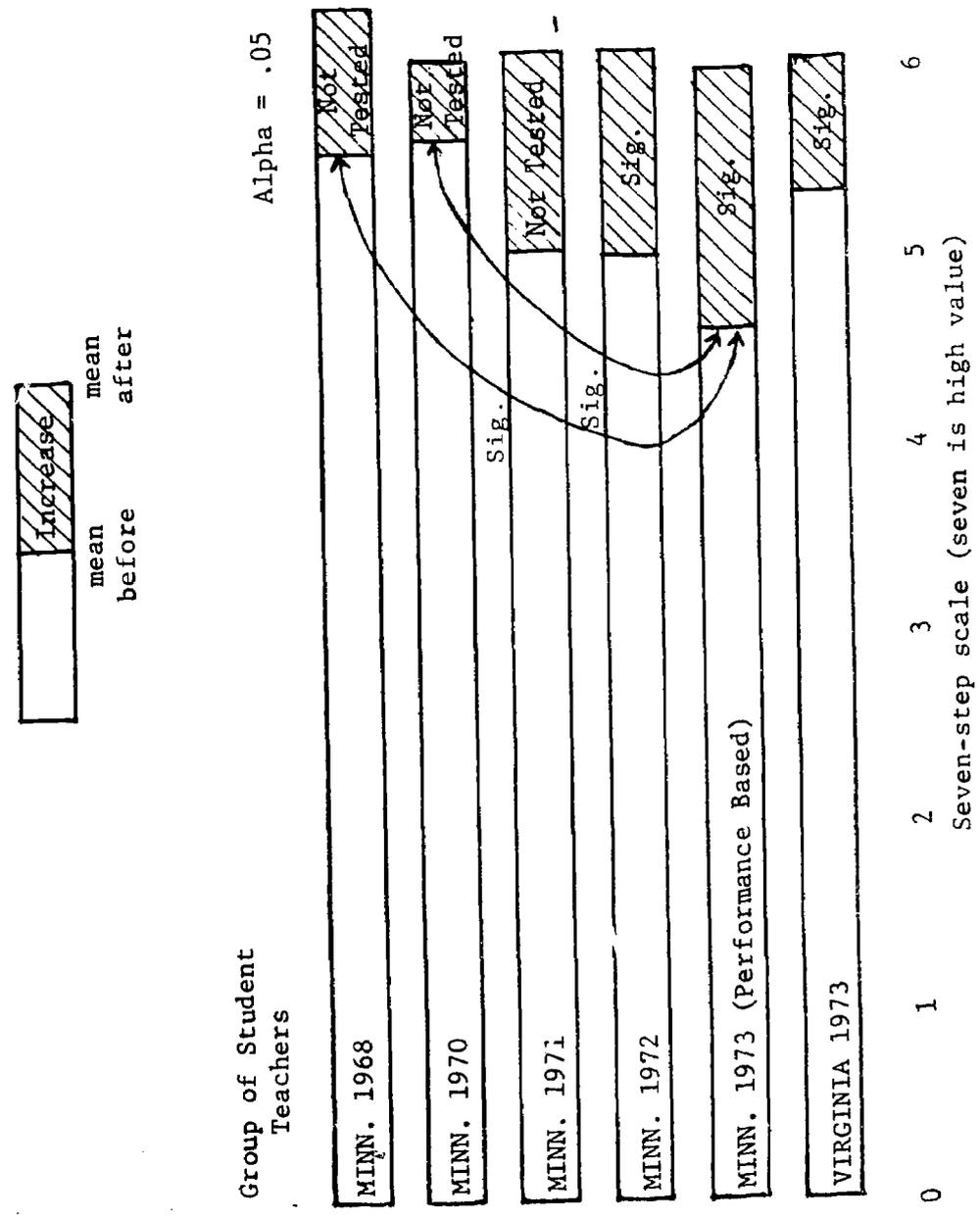


Figure 2. Composite of Findings in the Study

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Three groups of student teachers were studied to ascertain how they felt about student teaching before the student teaching period and after the student teaching period. Two of the groups of student teachers were prepared by convention methods courses and one group was prepared by performance-based instruction.

The major inquiry concerned whether or not the group prepared by performance-based instruction would perceive the concept of student teaching as more pleasant (causing less anxiety) than would the other two groups.

Measurement of the degree of pleasantness was done by using a seven-step scale having "pleasant" at one end and "unpleasant" at the other end.

To the surprise of the investigator, the performance-based group felt that the concept of student teaching was less pleasant than either of the other groups, although not significantly so. In comparisons with student teacher groups in Agricultural Education in four previous years, the 1968 class and the 1970 class perceived student teaching as significantly more pleasant than the performance-based instruction group of 1973. Perhaps student teaching like actual teaching is in fact becoming more difficult and student teachers are more aware of it. Other factors which may have contributed to the feeling by the performance-based group was that student teaching would be less pleasant could have been the new course, a new methods professor, and a new university supervisor of student teaching. Hopefully, data will be collected from the next group of student teachers that go through the performance-based preparation in

case that being the first group caused a greater feeling of uncertainty and anxiety concerning student teaching.

Student teachers were equally relieved to have completed student teaching. The feeling toward student teaching after it was over was quite uniform for all years and all groups.

Having started from such a low mean score on pleasantness, the performance-based group showed a large gain during the student teaching period. Each of the three groups had a significant increase and 88.7 percent of the 62 individuals marked higher on the scale after the student teaching period than before.

No group increased significantly more than another.

The reader is cautioned to keep in mind that success in student teaching was not a part of this study. The relationship of the pleasantness felt toward the concept of student teaching either before or after the student teaching period to grades received in student teaching is unclear. The mastery approach used with the performance-based methods course apparently also was used in grading in student teaching and the high percent of "A's" complicated the correlation problem. The relationship of attitude toward student teaching and success in student teaching is suggested as a topic for further study.

BIBLIOGRAPHY

BIBLIOGRAPHY

1. Cortney, E. Wayne. Attitudinal Changes in the Student Teacher. Department of Psychology and Education, Stout State College, Minomonie, Wisconsin, July, 1964.
2. Dixon, W. J. (ed.). Biomedical Computer Programs. Second edition. Berkley: University of California Press, 1970, pp. 486-494.
3. Ingvalson, Brian I. "A Study of Attitudes and Attitudinal Changes of Student Teachers During the Student Teaching Experience," Unpublished Masters Study, Department of Agricultural Education, University of Minnesota, Saint Paul, 1971.
4. Osgood, Charles E., G. J. Suci and P. H. Tannenbaum. The Measurement of Meaning. Urbana: University of Illinois Press, 1957.
5. Peterson, Roland L. "Do Teaching Methods Really Make a Difference," The Visitor, Vol. LIX, No. 3. July, 1972.
6. Thurstone, Louis L. The Measurement of Values. Chicago: University of Chicago Press, 1959.

APPENDIX A
INSTRUCTIONS FOR QUESTIONNAIRE

VPI & SU
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AGRICULTURAL EDUCATION

INSTRUCTIONS FOR QUESTIONNAIRE

Dr. Martin B. McMillion, a professor in Agricultural Education at VPI & SU has been gathering data for an ongoing study for several years and wants to now include Ag. Ed. seniors at VPI & SU in the study also. The study concerns the meaning Ag. Ed. seniors place on certain words and groups of words used in vocational agriculture. He is interested in your opinions and impressions of these words and what these words stand for.

The information you place on the survey form will not be shown to anyone except Dr. McMillion and his research assistant. The information will be handled in confidence and reported only in summary form. Also the information will be sealed in an envelope until at least April and perhaps until after you have graduated.

The procedure does require that you place your name on the form. The necessity for this can be explained later.

It is important that I get the information because I have contracted to complete a study and without the information I cannot complete it.

Purpose and Description. The purpose of filling out the forms is to have you tell me what a few words and phrases mean to you. There is no right or wrong answer. I am interested in what the words mean to you.

On the top of each set of 10 scales of the survey form, you will find a different word or phrase and below it a place to indicate your opinions. The word or phrase is at the top followed by ten lines where you indicate your opinions. At each end of these ten lines is a word such as unimportant - important, good - bad, etc. How close you place your mark to one of these words depends upon the degree to which that word seems to you to describe the word or phrase at the top of each page.

Example. The example which follows explains how one person gave his opinions of an agricultural term.

Agriculture project

1. unimportant: _____: _____: _____: _____: _____: _____: X :important
2. meaningful: X : _____: _____: _____: _____: _____: _____:unmeaningful
3. bad: _____: _____: _____: _____: _____: X : _____:good
4. successful: _____: X : _____: _____: _____: _____: _____:unsuccessful
5. pleasant: _____: _____: _____: _____: X : _____: _____:unpleasant
6. wise: _____: _____: X : _____: _____: _____: _____:unwise
7. strong: _____: _____: _____: X : _____: _____: _____:weak
8. hard: _____: _____: X : _____: _____: _____: _____:soft
9. active: _____: _____: _____: X : _____: _____: _____:passive
10. slow: _____: _____: X : _____: _____: _____: _____:fast

In the example above, on line one and two the check marks are in the space closest to the words at the end of the line and show that the word at the top is very important and very meaningful.

On line three and four the check marks are closer the middle of the line and show that the word at the top of the page is quite good and quite successful.

On line five and six the check marks show that the word at the top is slightly unpleasant but also slightly wise.

The mark in the center on line seven shows that the word at the top is not believed to be either strong or weak.

PLACE only 1 (one) check mark on each line, but be sure to check all lines.

PLEASE check each page in the order they are presented. PLEASE do not try to remember how you checked previous items. Each check mark should be made without considering how others were placed.

Thank you for your help.

NAME: _____

VOCATIONAL AGRICULTURE

1. unimportant: _____: _____: _____: _____: _____: _____: _____: important
2. meaningful: _____: _____: _____: _____: _____: _____: _____: unmeaningful
3. bad: _____: _____: _____: _____: _____: _____: _____: good
4. successful: _____: _____: _____: _____: _____: _____: _____: unsuccessful
5. pleasant: _____: _____: _____: _____: _____: _____: _____: unpleasant
6. wise: _____: _____: _____: _____: _____: _____: _____: unwise
7. strong: _____: _____: _____: _____: _____: _____: _____: weak
8. hard: _____: _____: _____: _____: _____: _____: _____: soft
9. active: _____: _____: _____: _____: _____: _____: _____: passive
10. slow: _____: _____: _____: _____: _____: _____: _____: fast

NON-FARM AGRICULTURAL OCCUPATION

1. unimportant: _____: _____: _____: _____: _____: _____: _____: important
2. meaningful: _____: _____: _____: _____: _____: _____: _____: unmeaningful
3. bad: _____: _____: _____: _____: _____: _____: _____: good
4. successful: _____: _____: _____: _____: _____: _____: _____: unsuccessful
5. pleasant: _____: _____: _____: _____: _____: _____: _____: unpleasant
6. wise: _____: _____: _____: _____: _____: _____: _____: unwise
7. strong: _____: _____: _____: _____: _____: _____: _____: weak
8. hard: _____: _____: _____: _____: _____: _____: _____: soft
9. active: _____: _____: _____: _____: _____: _____: _____: passive
10. slow: _____: _____: _____: _____: _____: _____: _____: fast

STUDENT TEACHING

1. unimportant: _____:_____:_____:_____:_____:_____:_____:_____:important
2. meaningful: _____:_____:_____:_____:_____:_____:_____:_____:unmeaningful
3. bad: _____:_____:_____:_____:_____:_____:_____:_____:good
4. successful: _____:_____:_____:_____:_____:_____:_____:_____:unsuccessful
5. pleasant: _____:_____:_____:_____:_____:_____:_____:_____:unpleasant
6. wise: _____:_____:_____:_____:_____:_____:_____:_____:unwise
7. strong: _____:_____:_____:_____:_____:_____:_____:_____:weak
8. hard: _____:_____:_____:_____:_____:_____:_____:_____:soft
9. active: _____:_____:_____:_____:_____:_____:_____:_____:passive
10. slow: _____:_____:_____:_____:_____:_____:_____:_____:fast

TEACHER OF AGRICULTURE

1. unimportant: _____:_____:_____:_____:_____:_____:_____:_____:important
2. meaningful: _____:_____:_____:_____:_____:_____:_____:_____:unmeaningful
3. bad: _____:_____:_____:_____:_____:_____:_____:_____:good
4. successful: _____:_____:_____:_____:_____:_____:_____:_____:unsuccessful
5. pleasant: _____:_____:_____:_____:_____:_____:_____:_____:unpleasant
6. wise: _____:_____:_____:_____:_____:_____:_____:_____:unwise
7. strong: _____:_____:_____:_____:_____:_____:_____:_____:weak
8. hard: _____:_____:_____:_____:_____:_____:_____:_____:soft
9. active: _____:_____:_____:_____:_____:_____:_____:_____:passive
10. slow: _____:_____:_____:_____:_____:_____:_____:_____:fast

APPENDIX B
ADDITIONAL POST-TEST INSTRUCTIONS

ADDITIONAL POST-TEST INSTRUCTIONS

Please complete the form again. I did not lose the other data. There wasn't anything wrong with it, I hope. It is still sealed in an envelope as I promised to do. Without trying to second guess the purpose, complete the form as you feel now.

Martin McMillion