## ED 025 489

By-Cornett, Joe D.; Butler, Walter

The Effect of a Team Approach in Achieving the Objectives of an Introductory Course in Education.

Pub Date [67]

Note-7p.

EDRS Price MF-\$0.25 HC-\$0.45

Descriptors Achievement Rating \*Career Choice, Conventional Instruction, Course Evaluation, \*Course Objectives, Course Organization, \*Educational Experiments, Education Courses, Effective Teaching, Teacher

Characteristics, Teacher Education Curriculum, \*Teacher Recruitment, \*Team Teaching

For a one-semester study it was hypotnesized that a team-taught group of students enrolled in an introductory course in education would achieve higher scores than traditionally taught students and that the students' decision to become teachers was independent of the teaching method employed. An experimental group, consisting of 78 students combined into one class, was taught by a team of three teachers. A control group of 55 students was divided into two sections, one taught by a team instructor and one by a regular instructor. The data of the control group was combined to minimize teacher variability. A standard examination was administered with a check list to determine the influence that the course had on the students' decision to become teachers. Statistical analysis of the data indicated that students taught by the team achieved significantly higher scores than did those in the control group. Also, the check list revealed that the teaching approach used did not influence the students' decision to become teachers. Teacher variability in the control group, the major limitation of the study, might have been reduced by using the team instructors for both control sections...(Author/SM)



DEC 3

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE

# THE EFFECT OF A TEAM APPROACH IN ACHIEVING THE OBJECTIVES OF AN INTRODUCTORY COURSE IN EDUCATION

by

Joe D. Cornett Texas Technological College

and

Walter Butler Southeastern Louisiana College

"An introduction to" is a familiar preface to a large number of courses found in most college and university catalogs. The preface denotes a beginning course designed to acquaint the student with a broad area of study, such as education, in order to provide a foundation for future specialization. In the field of education, introductory courses, foundation courses, and principles courses fall into this category. References to the advantages and disadvantages of the introductory course are too numerous to mention, but the literature reveals a preponderance of comments relative to the disadvantages of such courses.

A consistent criticism from both students and faculty is that, due to the broad coverage of the material included in an introductory course, it becomes too general and unequal treatment is given to the various topics. The result is often a sketchy treatment of some phases of the course and a more detailed study of other phases. This might be attributed to the idea that instructors teaching a course such as this are not normally well informed about all the subject areas in a broad field of study. Consequently, an instructor is more likely to converge on those areas in which he is best qualified and most interested.

SPooz

It was assumed, then, that a team approach, utilizing instructors of competence in the areas covered, would provide a more balanced coverage of the course material and enhance the students understanding of the breadth and depth of the course. The course selected for this study was entitled—An Introduction to Education—and was designed to achieve two objectives. These were: (1) to provide an understanding of the teaching profession, the organization and administration of schools, and the historical and philosophical foundations of the American school system, (2) to assist students in deciding whether or not they wanted to become teachers. The course was offered at the sophomore level and served as a first course required of all teacher education students.

Having experienced many of the criticisms of the introductory course, the researchers decided to experiment with a team approach in an effort to provide a more balanced background for the students enrolled. Accordingly, the purpose of this study was to compare the achievement scores of similar students taught in traditionally arranged classes. Also, an effort was made to determine if a students' decision to become a teacher. would be affected more by a team approach or the traditional approach.

#### PROCEDURE:

It was hypothesized that those students taught by a teaching team of three instructors with special competence in the areas covered in the course would achieve significantly higher on a standardized education examination than students taught in a conventional class with one instructor. It was further hypothesized that the influence of the



course on a student's decision to become a teacher was independent of the teaching technique employed. To test these hypotheses, two groups, as identified below, were utilized in this experiment.

The Experimental Group. This group consisted of three intact classes enrolled in the introductory course and co. sined to one group for the purpose of this experiment. The subjects were 78 second semester sophomore students majoring in both elementary and secondary education. The experimental approach used with this group consisted of a combination of large group presentations, small group discussions, and additional enrichment experiences. The instructor assigned to a particular phase of the course was considered the lead instructor for that particular unit and was responsible for all formal presentations to the large group and for planning the small group discussions.

The Control Group. This group consisted of 55 students enrolled in two sections of the introductory course. In an effort to minimize the factor of teacher variability, the data gathered on these two groups were combined to form one control group. One of the team instructors was involved with the control group while the other class was taught by an instructor not associated with the team. The approach used in both control groups consisted primarily of lecture, discussion, and some outside projects.

## THE CRITERION MEASURE:

The instrument used to measure a student's understanding of the course material consisted of a standardized one-semester examination especially prepared for this experiment. It was based on material included in the text (1) used by all students enrolled in the course



and a common syllabus used by all instructors. The examination included an equal number of questions on the three major phases of the course, the teaching profession, the organization and administration of schools, and the historical and philosophical foundations of American education.

The examination was constructed by an impartial group of graduate students using the text and syllabus as a guide. "Face Validity" of the test items was checked by the instructors involved. The examination was administered to a sample of like students and an item analysis was used to determine reliability. Sample questions from each of the three areas are presented below. They are typical examples of all the questions.

The NEA is an organization open to

- a. all in education or interested in education
- b. classroom teachers only
- c. school administrators only
- d. d. teacher preparation personnel only
  - e. classroom teachers and administrators only

Check the phrase which best describes the system of education in the United States

- a. centralized
- b. standardized
- c. federally controlled
- d. decentralized
- e. regionally operated

The Essentialists would get their aims of education from

- a. The Great Books
- b. tradition
- c. pupil interests
- d. the church
- e. pressure groups

The instrument used to determine the influence the course had on the students' decision to become a teacher was a check list requiring



the student to choose if the course had a positive influence, a negative influence, or no influence at all on his decision to become a teacher.

Three days prior to the close of the Spring semester, the examination was administered to students in the experimental and control groups. The examination was administered to all groups the same day but at different times during the day. The factor of class schedules made it necessary to follow this practice. At the same time, the students were instructed not to place their name on the check list and care was taken to inform them that their grade in the course would not be affected by their responses. The time limit for the experiment covered a period of four and one-half months. This was considered long enough to get an adequate measure of the differences due to the experimental treatment.

## DATA ANALYSIS:

The post-achievement un-adjusted and adjusted criterion means and the control variable means are presented in TABLE 1. As noted in the table, the experimental group exceeded the control group by a margin of 15.46 on the examination. When the means were adjusted, the situation did not change appreciably. The two groups differed only slightly on the control variable, grade point average at the time of enrollment in the course, but enough to be considered different. Therefore, a single classification analysis of covariance treatment yielded an F value of 14.40 which was found to be significant at the .01 level. The result of this analysis is presented in TABLE 2.

In testing the hypothesis that the influence of the course on a students' decision to become a teacher is independent of the teaching approach, the chi square technique was employed. This analysis resulted in a chi square value of 3.05 which was found not to be significant when tested at the .01 level. This information is summarized in TABLE



3.

### **CONCLUSIONS:**

The first hypothesis tested stated that those students taught by a teaching team would acieve significantly higher on a standardized education test than students taught in a conventional class with one instructor. The analysis of data concerned with this hypothesis yielded a significant. F value of 14.40 thereby supporting this hypothesis. It can be concluded, then, that students exposed to this particular team approached achieved significantly higher on a standardized education examination than students exposed to a conventional class situation. It should be noted that the experimental group gained much of its advantage on the foundations section of the examination.

The second hypothesis tested indicated that the influence of the course on a students decision to become a teacher is independent of the teaching approach used. A chi square value of 3.05 was found dictating the acceptance of the second hypothesis. Therefore, it was concluded that the approach used in teaching the course was not a factor in the students' decision to become a teacher. A majority of the students enrolled in both thesexperimental and control groups indicated that the course had no influence of any kind on their decision.

The major limitation of this study is concerned with teacher variability. The researchers attempted to deal with this factor by combining the two control groups, but it is still questionable if adequate control was achieved. A better method would have been for the team instructors to also be instructors in the control groups.

#### **FOOTNOTES**

- 1. James Monroe Hughes, Education in America (Harper and Row, 1965).
- 2. W. James Popham, Educational Statistics: Use and Interpretation (New York: Harper and Row, 1967), p. 233.



٢,

TABLE 1 INTRODUCTORY EDUCATION STUDENTS' CRITERION AND CONTROL VARIABLE MEANS

Groups	Criterion Post-Achievement			Control		
	N	Adjusted Means	Un-Adjusted Means	Pi SD	rior Achie (GPA)	vement SD
Experimental	78	72.07	72.26	73.38	2.377	2.461
Control	55	56.99	56.80	58.65	. 2.284	2.194

TABLE 2 ANALYSIS OF COVARIANCE FOR ACHIEVEMENT DIFFERENCES BETWEEN
TWO GROUPS OF INTRODUCTORY EDUCATION STUDENTS CONTROLLING FOR
PRIOR ACHIEVEMENT

Source of Variation	Degree of Freedom	Sum of Squares	Mean Square	F
Between	1	4678.67	4678.67	
Within	130	42,249.00	324.99	23,10

\*Significant beyond the .01 level

TABLE 3 RESPONSES OF INTRODUCTORY EDUCATION STUDENTS TO A QUESTION REGARDING THE INFLUENCE THE COURSE HAD ON THEIR DECISION TO BECOME A TEACHER

Groups	Positive Influence	No Influence	Negative Influence	Total
Experimental	14 (18.18)	62 (58.06)	2 (1.76)	78
Control	17 (12.82)	37 (40.94)	1 (1.24)	55
Total	31	99	3	133

Chi-square of 3.05 not significant at the .01 level

