Relationships Between Attitudes of Pre-service Agricultural Education Majors and Variables Related to Early Field-Based Experience

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Accepted for Publication December 1985

Experienced-based learning to bridge the gap between the world of actual practice and study has long been a goal in the preparation of professionals in all fields (Bryne & Wolfe, 1976).

Early field-based experiences in education are activities in teacher preparation that occur away from the university, with students or school personnel, that are separate from and prior to student teaching (Elliott, 1978; Webb, Gehrke, Ishler & Mendoza, 1981; McMillion & Hoover, 1971). A broad rationale has been developed for early field-based experience, but the two reasons that have most general support are: to allow students to make an informed career choice and to allow pre-service teachers to try on the role of teacher (Overbeck & Quisenberry, 1976; Reed & Hill, 1981; Elliott & Mays, 1979; Boucher, 1978).

Very little research has been conducted to document the claims of the benefits available from the use of field experience-based learning (Byrne & Wolfe, 1976). Zeichner (1980) stated that there is a serious contradiction between the growing body of criticism of the present practice of field-based experience and the abundant testimonial supporting the benefits. Much confusion and contradiction surround the data concerning field-based experience.

Objectives of the Study

The following research questions were investigated for the pre-service teachers participating in early field-based experience Autumn Quarter 1984.

1. What is the attitude of students who have and have not completed the early experience program toward themselves as teachers and toward teaching vocational agriculture?

2. What is the relationship between the attitude of pre-service teachers toward teaching vocational agriculture at the end of field-based experience and the attitude toward teaching vocational agriculture of their cooperating teacher?

3. What is the relationship between the attitude of pre-service teachers toward teaching vocational agriculture programs where the early field-based experience was completed, as determined by the Agricultural Education State Supervisors and Teacher Educators?

4. What is the relationship between the attitude of pre-service teachers toward teaching vocational agriculture and toward themselves as teachers and the extent of professional activities completed during early field-based experience?

Journal of the American Association of Teacher Educators in Agriculture
Volume 27, Number 3, pp.2-7
DOI: 10.5032/jaatea.1986.03002

5. What is the relationship between the attitude of pre-service teachers toward teaching vocational agriculture and toward themselves as teachers at the end of early field-based experience and selected demographic variables (years of vocational agriculture, extent of involvement in Future Farmers of America [FFA] and extent of involvement in Agricultural Education Society [AES])?

Methods and Procedures

This study was descriptive survey research of a comparative nature. The characteristics of interest included factors on measures of attitude and experience.

Population. The population of the study consisted of all pre-service teachers who participated in Early Field-Based Experience, Autumn Quarter 1984. Participants were randomly assigned to pretest and control groups prior to the pre-experience seminar in August of 1984 to control for the effects of pretesting. No difference between pretest and control groups was found. Data on a comparison group of students who had completed the same introduction to Agricultural Education course as the participants but had not participated in early field-based experience were collected to increase generalizability and reduce threats to validity.

Instrumentation. The data for the study were collected via five researcher-developed instruments. The two instruments developed to measure attitude were Myself as a Teacher (alpha .71), a semantic differential measure and Teaching Vocational Agriculture (alpha .91), a four-point Likert-type scale. Both instruments were pilot and field tested for reliability and validity. The Participation Inventory for Future Farmers of America and Agricultural Education Society asked students to report all FFA activities in high school and AES activities at the university. The Professional Activities Completed instrument was an interview schedule used by the researcher to collect data on what actually happened during the experience upon students' return to campus. The Perceived Program Quality instrument was a seven-point scale designed to evaluate vocational agriculture programs that were sites for early field-based experience on program components and appropriateness of the program for an early field-based experience site. The last three instruments were determined to have content validity by a panel of experts, but due to the nature of the instruments, no reliability tests were used.

Data collection. The early field-based experience pre-service teachers assigned to the pretest group completed instruments in a group as a part of the pre-field experience seminar. The post experience attitude measures for the study participants and the comparison group were completed individually during an appointment with the researcher.

The FFA and AES participation inventories were completed during the post experience seminar or during the scheduled interview times. All instruments were completed prior to the Professional Activities Completed interview, and all interviews were conducted by the primary researcher.

Cooperating teachers were mailed the Teaching Vocational Agriculture instrument after all students had completed the experience. Non-respondents were followed-up by phone for a 100% response.

Perceived Program Quality instruments were completed by the 1983-1984 Joint Agricultural Education Staff. Some of the demographic data

such as GPA and university rank were collected from existing university records.

Data analysis. Statistical analysis was done by means of the Statistical Package for the Social Sciences version 10 (SPSS, 1983). Statistics employed included: frequencies, measures of variability, measures of central tendency and measures of association.

Summary of the Findings

Participants and non-participants indicated a fairly positive attitude toward teaching and toward themselves as teachers with only slightly higher attitude scores upon completion of early field-based experience. The analysis of data indicated no statistical difference between the early field-based experience participants at the end of the experience and the comparison group of non-participants on measures of attitude toward themselves as teachers as indicated by the t value -.42 or toward teaching vocational agriculture t value -1.54 (Table 1).

Table 1

Attitude Toward Self as a Teacher and Toward Teaching Vocational Agriculture Scores of Those Who Completed Early Field-Based Experience and Those Who Did Not

Variable	Group	Number of Cases	Mean	S.D.	t
Attitude toward self as teacher	Comparison	11	5.66	0.77	-0.42
	Study	23	2.98	0.54	
Attitude toward teaching	Comparison	11	2.98	0.13	-1.54
	Study	23	3.09	0.21	

The cooperating teachers of early field-based experience pre-service teachers reported positive attitudes toward teaching vocational agriculture. However, a negligible relationship with a Pearson r of .05 as shown on Table 2 was found between the attitude of cooperating teachers and the corresponding attitude of the pre-service teachers working with them.

The strongest association of the study was in the area of perceived program quality relationship to the attitude of pre-service teachers toward teaching vocational agriculture. A moderate relationship (r=.32) between the variables was reported (Table 2).

The quality and depth of the early field-based experience as indicated by the extent of professional activities completed had a low relationship as indicated on Table 3 with the attitude of pre-service

Table 2

Relationship Between the Attitude of Pre-Service Teachers Toward Teaching Vocational Agriculture at the End of Early Field-Based Experience and Cooperating Teacher Attitude and Perceived Program Quality

Variable	Student Attitude Toward Teaching (Mean=3.09)
Cooperating teacher attitude toward teaching vo-ag (Mean=3.05)	Pearson r=.05
Perceived program quality	Pearson r=.32

Table 3

Relationship Between the Attitude of Pre-Service Teachers at the End of Early Field Based Experience Toward Teaching Vocational Agriculture and Toward Self as a Teacher and Selected Variables

	Attitude Toward Teaching mean=3.09	Attitude Toward Self mean=5.76
Variable	Spearman rho	Spearman rho
Extent of professional activities completed	.28	.21
FFA participation	.24	.03
AES participation	-.14	.02
Years of vo-ag	.11	.04

teachers toward teaching vocational agriculture (rho=.28) and toward themselves as a teacher (rho=.21).

The demographic variables selected for comparison shown on Table 3, FFA participation (rho=.24), AES participation (rho=-.14) and years of vo-ag (rho=.11), had a low relationship with the attitude of pre-service teachers toward teaching vocational agriculture. The same demographic variables had all positive but negligible relationships with the attitude of pre-service teachers toward themselves as teachers (FFA rho=.03, AES rho=.02 and years of vo-ag rho=.04).

Conclusions and Discussion

Based on the data collected for pre-service teachers enrolled in early field-based experience Autumn Quarter 1984, the researchers concluded that no significant change occurs in the attitude of pre-service teachers toward themselves as teachers or toward teaching vocational agriculture as a result of early field-based experience. Due to the data indicating most students participating had junior standing, the participants may have been beyond the exploration stage and had well-developed positive attitudes toward themselves as teachers and toward teaching vocational agriculture prior to participation, a position supported by Williams, Brown and Arth (1982).

The data collected indicated that the attitudes of cooperating teachers and pre-service teachers completing early field-based experience are independent.

The data indicated placement in perceived high quality programs may be associated with the attitudes of pre-service teachers at the completion of early field-based experience. This indicates greater importance should be placed on the type of instructional program, facilities and equipment, FFA and supervised occupational experience programs of the schools where the students are placed than on the attitudes of cooperating teachers toward teaching. This finding has implications for development of future site selection procedures to provide facilities and instructional programs which instill more positive attitudes toward the profession.

The attitudes of pre-service teachers toward teaching or toward themselves as teachers are not related to the extent of professional activities completed during early field-based experience according to the data. The interviewer found that the experience varied greatly from strictly observation to the experience of substitute teaching with no supervisor present. The extent of activities completed seemed to have more association with the enthusiasm of students about teaching during the interview than was reflected by the attitude scores.

The researchers conclude as a result of the data that the attitudes of pre-service teachers toward teaching vocational agriculture and toward themselves as teachers are independent of extent of participation in FFA and AES and previous enrollment in high school vocational agriculture.

Recommendations

1. The moderate relationship between the perceived quality of the early field-based experience site and the attitude of pre-service teachers toward teaching supports the view of Halloran (1970) that the circumstances of delivery of new information affects attitude change. Therefore, a specific early field-based site selection procedure should be developed to help insure the exposure of pre-service teachers to high quality, well balanced programs which meet or exceed state program standards.

2. As a result of the interviews with the pre-service teachers returning from the experience, the researcher would recommend that cooperating teachers should be carefully selected and be required to attend an inservice workshop or class on supervision. Although this study measures attitude, more uniform experiences with a greater extent of professional activities completed should be a goal of the early field-based experience program. Supervision by outside personnel is recommended in

an attempt to assure a more uniform high quality experience. Further research is needed to examine factors associated with the high variability in the extent of professional experiences completed.

3. Research should be conducted to determine why students are not completing the experience earlier in their teacher education programs and what relationship the commitment to teaching of the pre-service teacher has to the timing of early field-based experience in the individual teacher education program.

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