

WHAT PROFESSIONAL COMPETENCIES ARE NEEDED BY
BEGINNING TEACHER EDUCATORS
IN AGRICULTURAL EDUCATION?

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A frequent statement is that teachers teach the way they have been taught. Wise (1967) stated, "Having uncritically assimilated limited perspectives of teaching, the typical young teacher is prepared to spend his professional life replicating these experiences." Furthermore, in a recent report developed by the Commission on Education for the Profession of Teaching (CEPT), an assertion was made which implied that teacher education and teacher educators can be no less than a model of the best educational practices known to the profession and society (1975). If this is valid, and there is evidence that helps substantiate it, then it becomes of utmost importance that teacher educators possess those professional competencies needed to become teachers of teachers.

What experiences should be provided doctoral students in graduate programs which will enable them to become "model" teachers as well as enabling them to perform other responsibilities required of teacher educators? More specifically, what professional competencies are needed by beginning teacher educators in agricultural education? A study completed at Iowa State University was designed to answer this and other questions (Carter, 1975).

Objectives

The primary purpose of the study reported on here was to identify the professional competencies needed by beginning teacher educators who were employed as assistant professors in agricultural education. The specific objectives of the study were:

1. To identify the professional competencies needed by beginning teacher educators in agricultural education.
2. To compare the degree of competence needed by beginning teacher educators in agricultural education as perceived by the subgroups for each of the identified competencies.

3. To identify the professional competencies possessed by beginning teacher educators in agricultural education.
4. To compare the degree of competence possessed by beginning teacher educators in agricultural education as perceived by the subgroups for each of the identified competencies.
5. To determine differences between the degree of competence possessed by beginning teacher educators for each of the selected competencies.

Method

A questionnaire containing 114 professional competencies was developed through review of related literature, input from staff members in Agricultural Education at Iowa State University, and input from a jury of five nationally recognized leaders in agricultural education.

A stratified random sample was selected from the following groups: (1) teacher educators who had completed their doctorates since January 1, 1971; (2) doctoral students who were pursuing a doctorate in agricultural education or a doctorate with emphasis or minor in agricultural education; and (3) head teacher educators.

Respondents were asked to rate on a five-point scale their perceptions of both the degree of competence needed and possessed by beginning teacher educators in agricultural education for each of the competencies listed in the questionnaire. The data were summarized and analyzed by computing mean scores and standard deviations for all subgroups and for the total sample for both the degree of competence needed and the degree of competence possessed for each of the competencies included in the questionnaire. Based upon the mean scores, a rank was assigned to each of the competencies for all subgroups as well as the total sample. Analysis of variance scores were computed for each of the competencies for a comparison among subgroups. Duncan's Multiple Range Test was used as a post hoc analysis to identify where the differences among the subgroups existed. A vectorial quantity representing the discrepancy between the degrees of competence needed and possessed was calculated for each of the competencies. This vectorial quantity placed emphasis on those competencies which beginning teacher educators needed at the highest degree of competence, yet possessed a low degree of competence.

Findings

This study was a descriptive investigation of the degrees of competence needed and possessed by beginning teacher educators in agricultural education. The findings of the study are summarized as follows:

1. Beginning teacher educators in agricultural education, as perceived by respondents, needed at least an average degree of competence (mean score of three or above) in performing all of the professional competencies included in the questionnaire.
2. Respondents in the total sample recognized that beginning teacher educators needed a high degree of competence (mean score of 4.0 and above) in performing 87 of the 114 competencies and a very high degree of competence (mean score of 4.5 and above) in 14 of the competencies. Those 14 competencies were as follows:
 - a. Stimulate and maintain students' interest.
 - b. Develop rapport with students.
 - c. Demonstrate professionalism.
 - d. Plan and organize the content of a course.
 - e. Work and communicate effectively with others in department.
 - f. Plan the content of a lesson.
 - g. Make effective use of time.
 - h. Communicate with cooperating instructors on a one-to-one basis.
 - i. Critique a student teacher's performance.
 - j. Write in a clear, concise manner acceptable to graduate college standards.
 - k. Demonstrate good work habits.
 - l. Maintain a sense of humor.
 - m. Exhibit a willingness to change.
 - n. Select and use appropriate instructional resources and materials.
3. The subgroups were in basic agreement in perception of the degrees of competence needed by beginning teacher educators in the competencies listed. Overall, doctoral students tended to rate the degree of competence needed lower than did teacher educators or head teacher educators; however, there were significant differences at the .05 level among subgroups in the mean scores of the degree of competence needed by beginning teacher educators in only 11 of the 114 competencies. Perceptions of teacher educa-

tors for the degree of competence needed were significantly different for only one of the 114 competencies.

4. Respondents recognized that beginning teacher educators possessed at least an average degree of competence (mean score of 3.0 or above) in 112 of the 114 competencies; however, there were only nine competencies in which respondents perceived that beginning teacher educators possessed a high degree of competence (mean score of 4.0 or above).
5. Generally, teacher educators rated the degree of competence possessed by beginning teacher educators higher than respondents in the other subgroups; whereas, head teacher educators tended to rate the degree of competence possessed by beginning teacher educators the lowest of the subgroups. There were significant differences at the .05 level among subgroups in the mean scores of the degree of competence possessed by beginning teacher educators in ten of the 114 competencies.
6. The discrepancy between the degree of competence needed and the degree of competence possessed for each of the competencies was examined. The 26 competencies which had the greatest discrepancy were as follows:
 - a. Stimulate and maintain students' interest.
 - b. Plan and organize the content of a course.
 - c. Make effective use of time.
 - d. Write in a clear, concise manner acceptable to graduate college standards.
 - e. Identify in-service needs of vocational agricultural teachers.
 - f. Identify potential problem areas in student teaching and discuss ways to avoid these problems.
 - g. Revise and modify course content to keep courses up-to-date.
 - h. Develop rapport with students.
 - i. Critique a student teacher's performance.
 - j. Establish evaluation criteria for a course.
 - k. Determine student needs and interests.
 - l. Explain teacher certification requirements and procedures.
 - m. Evaluate instruction and course content.
 - n. Plan and conduct in-service workshops for teachers.
 - o. Formulate and utilize implications of research.
 - p. Interpret research findings.
 - q. Demonstrate professionalism.

- r. Evaluate progress of students.
- s. Keep abreast of current research.
- t. Work and communicate effectively with others in department.
- u. Make effective use of secretarial help.
- v. Formulate a philosophy of agricultural education.
- w. Evaluate effectiveness of assignments.
- x. Plan the content of a lesson.
- y. Provide reinforcement to student teachers and their cooperating instructors.
- z. Communicate with cooperating instructors on a one-to-one basis.

Recommendations

Based upon the findings and conclusions of this study, the following recommendations were made:

1. Every effort should be made to provide doctoral students with opportunities to gain experience in performing the professional competencies included in the questionnaire.
2. Although beginning teacher educators had obtained competence in performing these selected competencies, it was apparent that additional experience was needed in some of the competencies.
3. Special attention should be given in graduate programs to provide doctoral students with opportunities to develop competence in the 26 competencies identified which had the greatest discrepancy between the degree of competence needed and the degree of competence possessed.

Recommendations For Further Research

The following recommendations were made for further research in this area:

1. Techniques should be developed and refined for measuring competence of doctoral students in performing the professional competencies needed by beginning teacher educators.
2. The means or methods by which beginning teacher educators obtained their competence in each of the competencies should be identified.

3. A study should be conducted to determine the opportunities provided in current doctoral graduate programs for helping future teacher educators gain competence in performing those competencies needed by beginning teacher educators.
4. Although this study concentrated on competencies needed and possessed by beginning teacher educators, similar studies should be conducted for other occupational areas in which individuals with doctorates in agricultural education have been employed, such as in community colleges and state departments of education.

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