

EARLY FIELD EXPERIENCE IN AGRICULTURAL EDUCATION: A NATIONAL DESCRIPTIVE STUDY

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Abstract

The purpose of this study was to describe the nature of early field experience (EFE) in agricultural teacher education programs nationally. A descriptive census survey of all active agricultural teacher education programs in the country was used for this study. The fact that nearly all agricultural teacher education programs require EFE indicates that EFE is valued as an important component of teacher education programs. It was discovered that multiple early field experiences are required at multiple classification levels. The primary responsibility for EFE and the associated administrative tasks are placed on faculty within the agricultural teacher education program. Similarities regarding EFE requirements seem to end at broad, categorical levels. Most programs report having requirements; however, the means by which each program fulfills the requirements are considerably different. Teacher licensure, as well as state and national teacher education accreditation, influences procedural and minimum EFE requirements. This study provides the foundation for further research. Additional research is needed to identify the purposes and outcomes of EFE and determine the extent to which student learning occurs.

Introduction and Theoretical Framework

Early field experience is “an integral program component” for initial and advanced teacher preparation (National Council for Accreditation of Teacher Education [NCATE], 2002, p. 27). The Association of Teacher Educators (ATE) described early field experience as the range of school experiences that occur prior to student teaching for those students in preservice teacher education (Guyton & Byrd, 2000). EFE allows preservice teachers to immerse themselves into real classroom settings.

According to NCATE (2002), the purpose of EFE is to apply knowledge, skills, and disposition in a variety of settings appropriate to the content and level of the student’s program. Kelleher, Collins and Williams (1995) identified three purposes for early field experience: exploring teaching as a career, melding theory and practice, and developing teaching skills. The purpose of EFE can be accomplished through a variety of early and ongoing

school-based opportunities, which could include observing, assisting the cooperating teacher, tutoring students, teaching lessons, and conducting applied research (NCATE).

EFE provides the student with the opportunity to start thinking like a teacher, as well as experience the role of a teacher, early in his or her academic career (NCATE, 2002). Staffo, Baird, Clavelli, and Green (2002) and Pierce (1996) suggested that EFE provides a context from which students can relate theoretical and foundational coursework. Preservice teachers begin to choose appropriate teaching strategies as they gain understanding of students’ social and cognitive backgrounds (Liston & Zeichner, 1991). Pierce suggested that EFE learning is authentic, and should take place early and regularly throughout preservice training.

An initial outcome of early field experience is career exploration (Jaquith, 1995; Kelleher et al., 1995; McIntyre, 1983). Additionally, EFEs introduce preservice teachers to the real-world classroom where they begin to experience the role of the

teacher (Jaquith; Knowles & Cole, 1996). Outcomes resulting from that transition include melding theory into practice (Kelleher et al.; NCATE, 2002; Staffo et al., 2002); applying knowledge (NCATE; Pierce, 1996); developing teaching skills (Kelleher et al.; Liston & Zeichner, 1991; McIntyre; NCATE); and transitioning from student to teacher (Liston & Zeichner; McIntyre; NCATE).

McIntyre (1983) mentioned six benefits of early field experience to prospective teachers and teacher education programs. Those benefits include 1) determining if students enjoy working with children and wish to continue in the teacher education program; 2) allowing teacher education programs to gauge students' potential; 3) enabling students to practice teaching skills prior to student teaching; 4) enabling students to develop a base of perceptions related to classroom life; 5) providing an avenue for improving communication between universities and public schools; and 6) accelerating the transition through the stages from student to teacher.

Field experience has experienced criticism. Moore (2003) suggested that many early field experiences are limited to procedural activities (e.g., time management, grading papers, collecting materials, and classroom management). The result is a lack of integration of theory and practice (Erdman, 1983). Applegate (1985) purports a difference in expectations among the triad involved in EFE (i.e. preservice teacher, cooperating teacher, and university supervisor). Additionally, Moore argued that more focus should be on linking what is taught, how it is taught, and what is learned. Such arguments suggest there is a lack of congruence among the goals and expectations of the preservice student, cooperating teacher, and teacher educator (Kelleher et al., 1995).

In agricultural teacher education programs, EFE is an essential component (Dobbins & Camp, 2003) because it aids in the student career decision-making process (Myers & Dyer, 2004). Swartzel (1999) reported that 93% of agricultural teacher education programs required EFE, which on average consisted of 60.2 clock hours. McLean and Camp (2000) found the make-

up of courses and the way the curriculum was offered varied from institution to institution. Similarly, differences were found in the ways EFE were offered at those institutions. Dobbins and Camp used a panel of experts to develop a comprehensive list of 32 EFE tasks. The panel raised concerns regarding the amount of time necessary for cooperating teachers and university staff to plan EFE tasks and for the students to complete them.

Two agricultural teacher education studies found EFE to have no significant impact on preservice teachers. Deeds and Barrick (1986) found no change in student attitudes toward teaching and toward themselves as teachers after their EFE. Similarly, Knobloch (2001) concluded that EFE doesn't significantly impact students' personal or general teaching efficacy.

EFE is situated within the preservice stage of Fessler's (1995) Teacher Career Cycle Model, which provides a framework for analyzing and understanding teacher growth and development. The contextual experiences and knowledge transfer which occurs within the model is the result of a transformative process (Steffy & Wolfe, 2001) and is grounded in Mezirow's (1991) transformative theory. Mezirow espoused that the interpretation of experiences assists in the development of new ways of knowing and provides a venue for changing one's meaning perspective. Such transformation occurs when learners change their "meaning schemes (specific beliefs, attitudes, and emotional reactions)" because of critical reflection of their experiences (p. 167).

McIntyre, Byrd, and Foxx (1996) suggested that there is a "lack of a well conceived theoretical base for field experience" (p. 188). However, the American Association of Agricultural Educators (AAAE) (2001) stated that the basis of EFE is grounded in experiential learning. Therefore, the work of John Dewey (1916; 1938) and others (Kolb, 1984; and Knowles & Cole, 1994; 1996) in experiential learning provided the theoretical foundation for this study.

Dewey (1938) believed that there is an "organic connection between education and personal experience" (p. 25) and that the educational impact is dependent on the

quality of the experience, and its ability to influence later experiences. He promoted what he called the *principle of continuity of experience*. Dewey (1938) defined continuity of experience as a means by which “every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after” (p. 35).

Kolb (1984) argued that people do learn from experience, and that experience-based education has become widely accepted as a method of instruction in higher education. According to Kolb, experience offers “the foundation for an approach to education and learning as a lifelong process that is soundly based in intellectual traditions of social psychology, philosophy, and cognitive psychology” (pp. 3-4).

Knowles and Cole (1996) built upon the experiential learning philosophies of Dewey and Kolb and applied experiential learning theory to teacher education. Teacher

education is a “lifelong process of continuing growth with preservice programs, including field experiences, providing the contexts for the formal beginnings of career long development” (Knowles & Cole, 1996, p. 650).

Knowles and Cole (1994) proposed a cyclical yet spiral framework (Figure 1) for experiential learning, which includes preservice field experiences. The foundation for learning in the model is experience with individual learning and enrichment occurring through the experiential learning process. They believed this process occurs in four stages as students develop, grow, and move on to new experiences. The first stage is personal experience and practice. The second stage is information (internal and external) gathering and documentation followed by the third stage of reflection, analysis and development of personal theories. The final stage is the movement of the student toward informed action.

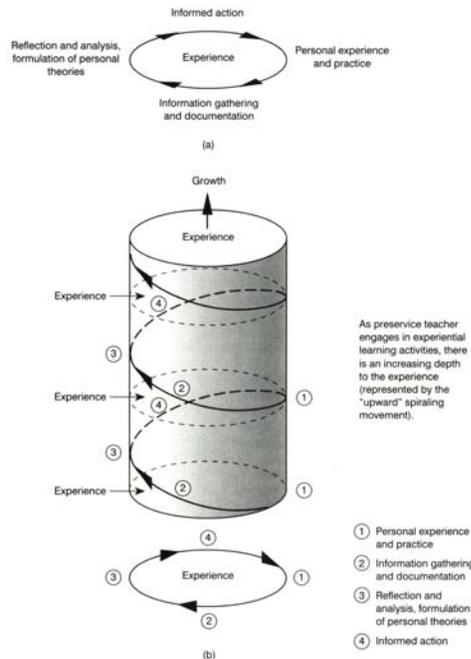


Figure 1. Knowles and Cole’s (1994) experiential learning cycle/spiral. From: *Through Preservice Teachers’ Eyes: Exploring Field Experiences through Narrative and Inquiry* (p. 61), by J. G. Knowles and A. L. Cole, 1994, New York: Macmillan. Copyright 1994 by Macmillan. Reprinted with permission.

Experiential learning validates and solidifies the curriculum as students have opportunities to apply learning in real-world settings and in context (Mentkowski & Associates, 2000) and provides students with experiences that lead to transfer, which is defined as the ability to take what was learned in one context and utilize it in new contexts (National Research Council, 2000). This transfer assists in the initial development of the student as a reflective practitioner. Such reflection provides a natural process by which to derive positive meaning and understanding from the student's potentially negative experiences as a preservice and/or beginning teacher (Feyten & Kaywell, 1994).

Connors and Mundt (2001) encouraged AAAE to "discuss the nature of field-based experiences students receive prior to student teaching" (p. 117). McLean and Camp (2000) believed the development of standards would provide the incentive for such discussions to occur. Standards have been developed to include EFE and to improve teacher education. However, these standards do not outline the specific requirements that should be completed (Connors & Mundt). In addition, Kelleher et al. (1995) suggested that despite the use and acceptance of early field experience, "there is little substantive evidence regarding either the exact nature or resulting outcomes of such programs" (p. 38).

A review of the career and technical education literature revealed that no studies have been conducted to determine the specific requirements of EFE. In fact, the only studies that provided any information on the use of early field experience in agricultural teacher education programs between 1989 and 2005 were published in the *Journal of Agricultural Education* (Connors & Mundt, 2001; Dobbins & Camp, 2003; McLean & Camp, 2000). As a result, the extent to which early field experience has been offered, how it is administered, its requirements, placement restrictions and internal and external factors that may impact preservice agricultural teacher education is not known.

Purpose and Objectives

The purpose of this study was to describe the nature of early field experience (EFE) in agricultural teacher education programs nationally. The study focused on five research questions.

1. To what extent is EFE offered as part of agricultural teacher education programs?
2. What are the requirements of EFE?
3. How is EFE administered in agricultural teacher education programs?
4. What are the placement requirements for EFE?
5. What are the internal and external factors that may impact EFE?

Methods and Procedures

A descriptive census survey research design was used for this study. The target population was all active agricultural teacher education programs ($N = 82$) identified using the AAAE Directory of University Faculty in Agricultural Education (Dyer, 2003). The teacher education coordinator of each program was identified as the contact person.

The descriptive survey design followed the Tailored Design Method (TDM) established by Dillman (2000). The researcher-designed survey instrument was developed using Dillman's 19 principles for writing survey questions and principles for developing a questionnaire. The instrument was divided into five parts: requirements of EFE, administration of EFE, placement and collaboration, external and internal factors, and demographics. A variety of questions including dichotomous (yes or no), close-ended, and open-ended questions were used. Open-ended questions were asked as a means to obtain specific and unique information (Dillman).

An 11-member validation panel was used to evaluate the content and face validity of the instrument. Five agricultural teacher educators from around the United

States served on the panel, as did six teacher educators from Iowa State University, including representatives from agricultural education, curriculum and instruction, and higher education. Their comments and suggestions were incorporated into the final questionnaire. The questionnaire was field tested for suitability and reliability by ten agricultural teacher education coordinators. Reliability was calculated using the test-retest method (Ary, Jacobs, & Razavieh, 2002). The time interval was two weeks. The reliability was calculated for each section: requirements of EFE (.89), administration of EFE (.89), placement and collaboration (.84), external and internal factors (.92), and demographics (.76).

Data collection followed Dillman's (2000) survey implementation plan. Dillman recommended four contacts and an additional "special" contact. For this study, the special contact was a final cover letter and survey instrument sent via certified mail. Elements to achieve a high response rate as outlined by Dillman were also used. The data collection process was concluded on July 1, 2004. Surveys were returned from 73 of the 82 programs for a response rate of 89%. No additional follow-up of the non-respondents was conducted since the response rate exceeded the 85% standard established by Linder, Murphy, & Briers (2001).

Descriptive statistics including measures of central tendency (mode, median, and mean) and measures of dispersion (range, variance, and standard deviation) were calculated using SPSS. Content analysis was used to report the open-ended questions: lists were compiled and grouped according to their content, and then quantified and reported using descriptive statistics (Neuendorf, 2002).

For this study, the following definition was provided as part of the directions within the instrument. EFE is defined as formal, planned experiences prior to student teaching which places preservice teachers (undergraduate and graduate) in a secondary school setting. These experiences can either be a unit or requirement within a course or a stand-alone course. These experiences may be offered within or

outside of the agricultural education curriculum.

Results and Findings

Of the agricultural teacher education programs that responded, 40 (55.6%) were 1862 land-grant institutions, five (6.9%) were 1890 land-grant institutions, 27 (36.1%) were regional or state institutions, and one (1.4%) was a private institution. The number of faculty full-time equivalents (FTE) who were associated with the agricultural teacher education program ranged from zero ($n = 2$, 2.9%) to 7.00 ($n = 1$, 1.4%). The mode for faculty FTE was 1.00. The mean was 2.27 ($SD = 1.59$) and the median was 2.00. Most programs ($n = 49$, 71.0%) did not have professional staff. Of the programs that reported having professional staff, the FTE ranged from 0.33 ($n = 1$, 5% of the programs) to 2.0 ($n = 4$, 20%). Other programs reported having 0.5 FTE ($n = 1$, 5%), 0.75 FTE ($n = 1$, 5%), and 1.0 FTE ($n = 13$, 65%).

Research Question 1: To what extent is EFE offered as part of agricultural teacher education?

Of the 73 agricultural teacher education programs that responded, 71 (97.3%) reported offering EFE as part of their curriculum. Nearly all ($n = 69$, 97.2%) that offered EFE required it within their agricultural teacher education program.

Respondents reported offering EFE in a variety of ways. Many ($n = 28$, 39.4%) programs offered EFE as an imbedded part of another course. Another 20 (28.2%) programs reported using a combination of embedded early field experiences and stand-alone EFE courses. EFE was offered only as a stand-alone course by 15 (21.5%) programs. Other programs ($n = 8$, 11.3%) only offered stand-alone courses that were directly linked to another course.

Nearly three-fourths of the programs ($n = 33$, 71.7%) offered EFE at multiple collegiate classification (grade) levels. The remaining programs offered EFE only at specific grade levels: sophomore ($n = 3$, 6.5%), junior ($n = 4$, 8.7%), and senior ($n = 6$, 13%). Of the 46 programs that responded to the question regarding the offering of

EFE to graduate students, 12 (26.1%) stated that EFE was also designed for and offered to graduate students.

Research Question 2: What are the requirements of EFE?

Respondents were asked a variety of questions regarding EFE requirements.

Table 1 provides the descriptive statistics for the responses to those questions. Nearly all respondents ($n = 66$, 93%) reported requiring one or more early field experiences. The number of required EFEs ranged from one to 10 with a mean of 2.89 ($SD = 1.92$). The mode was 2.0 EFE experiences and the median was 2.5.

Table 1
Range of EFE Requirements

Requirements	<i>n</i>	Mean	<i>SD</i>	Median	Min	Max	Mode
Number of different EFEs required	66	2.89	1.92	2.5	1	10	2
Number of credits earned in EFE	43	2.43	1.53	2.0	1	9	1
Minimum number of hours required	69	57.93	42.07	50.0	4	300	40
Number of lessons planned	53	4.40	3.74	4.0	1	20	2
Number of lessons taught	53	3.09	1.99	2.0	1	8	2
Minimum number of site visits	40	7.15	6.30	5.0	1	25	2 & 5

When the EFE was offered as a stand-alone course, the respondents were asked to provide the total number of credits for all experiences. The number of EFE credits required ranged from one to nine with a median of 2.0 and mode of 1.0. Of the 43 programs which responded, 14 (32.6%) offered one credit of EFE, 10 (23.3%) offered two credits, 10 (23.3%) offered three credits, eight (18.6%) offered four credits, and one (2.3%) offered nine credits.

Nearly all respondents ($n = 69$, 97.2%) reported having a minimum number of student contact hours required within EFE. For the 69 programs reporting, the minimum number of hours required for an EFE ranged from 4 to 300 hours. The mean number of hours was 57.93 ($SD = 42.07$). Most programs ($n = 64$, 92.8%) required 100 hours or less. Five programs required over 100 hours of EFE (102, 105, 120, 168, and 300 hours). The median number of hours was 50 and the mode was 40.

The number of lessons a preservice teacher was to plan and teach as part of his or her EFE was reported. Most programs

($n = 53$, 75.7%) required at least one lesson to be planned as part of the student's EFE experience. The number of lessons planned ranged from one to 20 with a mean of 4.40 ($SD = 3.74$). The median was 4.0 and the mode was 2.0. Over three-fourths of the programs ($n = 53$, 75.7%) required at least one lesson to be taught as part of the EFE experience. The number of lessons taught ranged from one to eight with a mean of 3.09 ($SD = 1.99$), a median of 2.0, and a mode of 2.0.

Over half of the agricultural teacher education programs ($n = 40$, 57.1%) required each student to complete a minimum number of EFE site visits to a secondary agricultural education program. Those site visits ranged from one to 25 with two and five visits being the most prevalent number of visits (17% each). The median was five visits.

Respondents were asked to identify the grading scale(s) used to report the final grade for EFE. Most programs ($n = 33$, 71.7%) offered EFE for a letter grade. In five (10.9%) programs, EFE was taken on a

satisfactory/fail basis. One program (2.2%) offered EFE on a pass/not pass basis. No grade was recorded in two (4.3%) programs. In another five (10.9%) programs, a combination of grading methods was used because multiple experiences were completed.

Research Question 3: How is EFE administered in agricultural teacher education programs?

Respondents were asked if an EFE handbook or bulletin was available for

preservice teachers. Only 49 (69%) programs that offered EFE have an EFE handbook or bulletin. The primary responsibilities related to EFE were categorized into the five major administrative tasks. Respondents were asked what type of position (university, faculty, or staff) was most representative of the individual who had primary responsibility for each task. Faculty had the primary responsibility for all administrative tasks in nearly all programs (Table 2).

Table 2
Primary Responsibility for Administrative EFE Tasks

Responsibility	<i>n</i>	% Faculty	% Staff
Developing the EFE program	69	92.75	7.25
Overseeing the EFE program	69	86.96	13.04
Carrying out the EFE program	68	91.18	8.82
Placing students in EFE	68	83.82	16.18
Evaluating EFE	68	89.71	10.29

Faculty or staff within the agricultural education program may not always have the primary responsibilities related to the five EFE administrative tasks. Table 3 identifies the percentage of agricultural teacher education programs that have primary responsibility for each administrative task. In those cases where agricultural teacher education programs do not have primary administrative responsibility, programs reported that colleges, schools, or departments of education most often have the administrative responsibility. Three programs reported having joint responsibility, and another three programs identified an office or center (Office of Field Experience, Student Teaching Center, and Clinical Studies) as having the primary responsibility for EFE administrative tasks.

Each program was asked if an orientation program, supervision training, and/or student assessment training were offered to the individuals involved with EFE. The percentage of teacher education programs that offered orientation programs to university staff was 28 (40.6%). Orientation programs were offered to cooperating teachers in 32 (47.1%) programs and to EFE students in 57 (81.4%) programs. Only 24 (35.3%) teacher education programs offered supervision training to their college personnel, but over half (*n* = 37, 53.6%) offered supervision training to the cooperating teacher. Student assessment training was offered to those individuals involved with EFE in 30 (42.9%) programs and to cooperating teachers in 35 (50%) programs.

Table 3
Primary Administrative Responsibility of EFE Within Agricultural Education

Responsibility	<i>n</i>	% within ag ed
Developing the EFE program	69	72.5
Overseeing the EFE program	69	69.6
Carrying out the EFE program	68	77.9
Placing students in EFE	68	79.4
Evaluating EFE	69	75.4

Research Question 4: What are the placement requirements for EFE?

Respondents were asked whether or not preservice teachers were required to conduct their EFE within an agricultural education program. In nearly all agricultural teacher education programs ($n = 66, 93\%$), students were required to complete the EFE within a middle or high school agricultural education program.

Most programs ($n = 50, 70.4\%$) have restrictions on where students can complete the required EFE. Respondents were asked to list the placement restrictions. The restrictions listed by the respondents could be categorized into two categories: student and program restrictions. The most prevalent student restriction ($n = 16, 32\%$) was that students could not complete their EFE at their "home" school or with their former agricultural teacher. In some cases ($n = 4, 8\%$), students were required to complete at least one early field experience in the program where they intended to do their student teaching.

The program restrictions listed by the respondents tended to be based upon the policies and procedures of the teacher education program. One-half of the teacher education programs ($n = 25$) had either developed a list, or had in some way identified approved programs where EFE could be completed. Those lists were either approved by the agricultural teacher education program, or jointly by the agricultural teacher education program and the state department of education

agricultural education staff. In two cases, the EFE site was identified as a professional school by the university teacher education program. The cooperating program could be either a single- or multiple-teacher program, but it must be a "high quality," comprehensive program.

Respondents were asked whether or not there were minimum qualifications for teachers to serve as cooperating teachers. Most programs ($n = 45, 64.3\%$) reported having minimum qualifications for teachers to serve as EFE cooperating teachers. Respondents were asked to list the minimum qualifications. A minimum number of years of experience was a common minimum qualification ($n = 30, 66.7\%$). However, the minimum number of years ranged from two to five. Another minimum qualification was that the cooperating teacher must have also been in the current position for more than one year ($n = 7, 15.6\%$). Some programs specified that cooperating teachers must have earned a master's degree ($n = 7, 15.6\%$), be tenured ($n = 3, 6.7\%$), and must have teacher certification in the state ($n = 5, 11.1\%$). In some instances ($n = 5, 11.1\%$), the cooperating teacher must either be a member, or provide service to the professional association. The approval of the principal was required in three (6.7%) programs. One program required the cooperating teacher to complete a three-credit-hour course. Some programs ($n = 8, 17.8\%$) reported requiring the teacher to either be part of the student teaching program, or meet similar requirements as

those who serve as cooperating teachers for student teaching.

Teacher education programs also reported having a few less tangible requirements. These less tangible requirements focused on the type of program for which the cooperating teacher was responsible. The general expectation was that the program should be "excellent." Respondents used terms like "well-rounded," "complete," and "comprehensive" to define an excellent program, which was defined as programs should be in good standing; have met state standards; and have a balance of classroom/laboratory, SAE, and FFA.

Research Question 5: What are the internal and external factors that affect EFE?

Other factors may drive the extent to which EFE is developed and utilized within the agricultural teacher education program. This study focused on two internal factors (i.e., admission to teacher education and teacher licensure) and a single external factor, which was accreditation.

Respondents were asked a question about EFE as a requirement for admission to teacher education and for teacher licensure. Thirty-eight (53.5%) programs reported requiring EFE for admission to teacher education. Respondents were asked to list the EFE requirements necessary for admission to teacher education. The most common response ($n = 15$, 39.5%) was that students must pass the course (stand-alone and/or embedded) related to EFE. One respondent reported that students must earn a grade of C or better in the practicum courses. Other respondents ($n = 10$, 26.3%) listed a specific number of hours of EFE required prior to admission. Those hours ranged from 10 to 260 hours. Within that range, programs reported requiring 24, 30, 40, 50, 60, and 100 hours of EFE prior to admission to teacher education. The 260 hours reported by one program seemed to be an outlier.

When asked whether EFE was required for teacher licensure in their state, 42 (59.2%) programs reported that EFE was required for teacher licensure. Respondents were asked to list the EFE requirements for state licensure. Of the 42 programs

reporting, many ($n = 32$, 76.2%) reported that students must have some type of pre-student teaching or public school contact/experience prior to licensure. Others ($n = 4$, 12.5%) reported that EFE was part of the core course that was required for licensure. A few programs ($n = 3$, 9.4%) indicated that NCATE standards drive their licensure. Finally, many state licensure requirements ($n = 23$, 71.9%) were more specific in that they identified the exact amount of time required. One (4.4%) program required five days of EFE, while other programs ($n = 22$, 95.6%) required a range of hours. The minimum number of hours was 30, and the maximum number of hours was 300. Most ($n = 20$, 62.5%) state licensure requirements for EFE were less than 100 hours.

An external factor that may affect EFE was accreditation of the teacher education program. Only two teacher education programs (2.8%) reported having no accreditation. Many teacher education programs ($n = 24$, 33.8%) reported only having NCATE accreditation, and no programs were solely accredited by the Teacher Education Accreditation Council (TEAC). Nearly one-half ($n = 33$, 46.5%) of the teacher education programs had multiple accreditation. Of the programs that have multiple accreditation, nearly all ($n = 30$, 90.9%) reported having NCATE and state accreditation. Other programs reported having NCATE and TEAC ($n = 1$, 3.0%); TEAC and state ($n = 1$, 3.0%); or NCATE, TEAC, and state ($n = 1$, 3.0%) accreditation. Some programs ($n = 12$, 16.9%) reported being accredited solely by other entities. In those cases, the programs were accredited by state commissions or professional standards boards, which focused on credentialing, preparation, or standards.

Conclusions, Implications, and Recommendations

This study partially fulfills the need for further analysis related to the commonalities among agricultural teacher education programs as recommended by McLean and Camp (2000), and provides some insight into the nature of EFE (Kelleher et al., 1995) in agricultural education.

From the results of this study, it could be concluded that EFE is valued as an important component of agricultural teacher education, which is consistent with Swartzel (1999). EFE is a required component, which is offered as multiple experiences and at multiple collegiate classification (grade) levels. Agricultural teacher education faculty have primary responsibility for EFE administration, which is in contrast to general teacher education programs where field experiences are administered by a director of field experiences (McIntyre et al., 1996).

It can also be concluded that programs have established requirements and specific expectations for EFE. Programs require a minimum number of EFE contact hours as well as a minimum number of lessons to be planned and taught. In addition, students have restrictions on where they can complete their experience.

EFE offerings are driven by external and internal factors. Teacher education programs, state teacher licensure boards, as well as state and national teacher education accreditation influence procedural and minimum requirements for EFE. The mandates established by licensing and accrediting agencies have influenced the programming associated with EFE. Many of the quantifiable requirements associated with EFE have been driven by licensure and accreditation.

Finally, many of the similarities regarding EFE requirements seem to end at broad, categorical levels, which is consistent with McLean and Camp (2000). Most programs report having the requirements; however, the means by which each program fulfills the requirements vary. There seems to be a considerable range in the number of EFE opportunities, credits earned, hours required, and lessons planned.

This study has implications for programs that are planning to evaluate the EFE portion of their agricultural teacher education program. The results of this study provide national data that can be used for program comparison. This study provides program planners and evaluators with baseline data regarding the extent to which EFE is offered in agricultural education, a range of EFE requirements, specific roles of agricultural

education faculty in administering EFE, a list of placement requirements, and reported external factors that affect EFE programming. As part of their program improvement process, agricultural education faculty are encouraged to refer to Dobbins and Camp's (2003) comprehensive list of EFE tasks.

Further research is needed to learn more about the EFEs that are offered in agricultural education. Research topics should include the impact of EFE, the purposes and outcomes of EFE, the activities and procedures associated with EFE, and EFE methods utilized by other secondary teacher education and pre-professional programs. This study focused on what exists related to EFE. Dialogue among teacher education professionals and further study is needed on what may be missing from such experiences. In addition, student learning, the extent to which student learning is transferred to future experiences, and how such learning can be evaluated should be studied. Finally, since Connors and Mundt (2001) reported that nearly half of the agricultural teacher education programs were planning changes, it may be valuable to replicate this study in five years to identify changes in EFE.

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