Early Field Experience of Business and Family and Consumer Sciences Teacher Education

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Abstract

The purpose of this national descriptive study was to describe early field experience (EFE) practices used in business and family and consumer sciences (FCS) teacher education by using the EFE model. This study replicates similar research in the agricultural education discipline. For this study, EFE was defined as all field experiences—offered within or outside of the business and FCS teacher education curriculum—that occur before student teaching. The study population was business and FCS teacher education programs (N=139) identified by the American Association of Family and Consumer Sciences and the National Business Education Association. The teacher education coordinator for each program was the contact for this study. Data were collected via an online survey. Programs required a minimum number of contact hours and a minimum number of lessons taught while in the field. The most common student assessments included cooperating teacher signatures, reflective writing and university supervisor's review of documents. Most programs had specific EFE requirements and expectations. This study supports the career and technical education profession by identifying differences and similarities in EFE programming across disciplines. This information could be used to provide a more congruent EFE for all preservice teachers.

Keywords: early field experience, preservice education, business education, family and consumer sciences

Introduction

An early field experience (EFE) is one aspect of the process for any student preparing to enter the teaching profession. An EFE allows preservice teachers to begin experiencing—or immerse themselves in—a real classroom environment.

Guyton and Byrd (2000) defined EFE as the range of school experiences that occur prior to student teaching for students in preservice teacher education. The

interaction with peers, cooperating teacher and teacher coordinator is known as the triad. This triad is vital for the preservice teacher to learn from the EFE and develop an understanding of the profession (McIntyre et al., 1996).

Pierce (1996) suggested that learning is authentic in EFE, and that learning should be taking place early and regularly. Authentic classroom experiences like EFE are necessary because they create significant learning experiences for preservice teachers (Aiken and Day, 1999). To ensure effectiveness, EFE should be aligned with the entire teacher preparation program (Little and Robinson, 1997).

The National Council for Accreditation of Teacher Educators (NCATE, 2008) identified the purpose of EFE as the application of preservice teacher knowledge and skills in various settings. This purpose can be accomplished by many early school-based opportunities, which could include teaching lessons, tutoring students, or observing in the classroom (NCATE, 2008). NCATE requires institutions to develop a purpose statement, outline the educational process and define student outcomes as part of a conceptual framework for their teacher education program. These frameworks meld EFE and courses taught on campus (McIntyre et al., 1996).

Educators have not disputed the importance of EFE (Guyton and Byrd, 2000). However, Hudsonet al. (1993) identified five issues that affect the impact and effectiveness of EFE: (a) lack of a common goal, (b) lack of control, (c) limited learning due to the lack of experiences the preservice teacher can compare, (d) the difference between what is being practiced in the classroom and what is being taught on campus and (e) limited opportunities. Moore (2003) noted that many EFE are procedural activities that focus on time management, classroom management and content.

Much has been written about EFE, but little research has been conducted—especially in career and technical education. In recent years, EFE has been explored in the agricultural education discipline (Retallick and Miller, 2007, 2010; Smalley and Retallick, 2011, 2012). Retallick

and Miller (2007) found that agricultural education EFE programs require a minimum number of contact hours and a minimum number of lessons planned and taught. Additionally, EFE offerings are driven by internal and external factors including licensure as well as state and national accreditation. Having a quality EFE is important for all preservice teachers because it helps ensure they are prepared for the teaching profession.

Smalley and Retallick (2012) confirmed that agricultural teacher education programs were requiring a minimum number of contact hours and minimum number of lessons taught while in the field. In addition, they found that the most common student assessments included university supervisor's review of documents, cooperating teacher signatures, reflective writing and student journaling.

Our literature review revealed no EFE research in other career and technical education disciplines, including business and family and consumer sciences (FCS). Because many secondary teacher licensure programs rely on faculty to develop, facilitate and evaluate students' field experiences, including EFE, it's important to have a clear understanding of the EFE practices used in all teacher education disciplines.

Purpose and Objective

The purpose of this national descriptive study was to describe current EFE practices used in business and FCS teacher education. The study focused on two research questions:

- 1. What EFE practices—in both business and FCS teacher education—occur in each component of the EFE model (i.e., foundations, organization, implementation and assessment)?
- 2. Do differences exist between business and FCS teacher education EFE programs?

Theoretical and Conceptual Frameworks

The conceptual framework for this study is Retallick and Miller's (2010) model for EFE in teacher education, which was developed to address the need for a comprehensive EFE model for teacher education and is the only known EFE model. The model identifies four major components of EFE (Figure 1): foundation, organization, implementation and assessment.

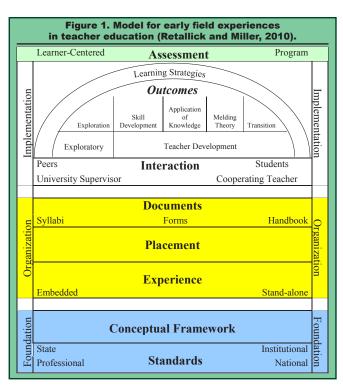
The foundation component includes teacher education standards and a conceptual framework, which provides a basis for how EFE can evolve. The organization component involves syllabi, forms, handbooks and other documents; placement; and embedded or standalone experiences. The implementation component includes four elements: (a) interactions among EFE participants, university supervisors, cooperating teachers, and peers; (b) orientation to outcomes and learning strategies; (c) outcomes; and (d) learning strategies necessary to accomplish the outcomes. The final component addresses the need for individual and program assessment.

Smalley and Retallick (2011) further enhanced the EFE model by asking agricultural teacher education experts to identify appropriate types of interaction and activities. According to that study, EFE should be documented via a combination of journaling and portfolio development. And those documents should be verified by the cooperating teacher and through university assessments. Students can document an EFE through journaling, cooperating teacher signatures, reflective papers, or a review of collected documents.

Methods

This national descriptive survey study was a replication of research conducted by Smalley and Retallick (2012) to explore current use of EFE practices agricultural education. Because the study purpose was identical expect for discipline, the same online survey instrument was used. The survey was modified to reflect business and FCS language.

The survey had five parts: implementation, assessment, foundation, organization and demographics. The implementation section covered EFE interaction, activities and assessment. Respondents were asked to identify from 15 statements the purpose of EFE. For this study, the statements were categorized as either exploratory or teacher development in nature. Exploratory was defined as providing students the opportunity to investigate the profession and develop an understanding of what it means to be an educator. Teacher development was defined as the stage of development after students have explored and determined that teacher education is the career for them. During this stage, preservice teachers begin to transition from student to teacher by developing and enhancing skills and knowledge prior to entering the teaching profession (Retallick and Miller, 2010).



Early Field Experience

The assessment section, which consisted of nine statements, asked respondents to identify the type of assessment used in their program and what type of review is conducted of their program. The assessment questions were specific to student assessment and the review questions focused on program review.

The foundation section included two questions regarding standards that drive the EFE program and the type of accrediting body that oversees the program.

The organizational section had three parts. Respondents were asked to identify how EFE activities, placement and documents are handled.

Cronbach's alpha was computed to assess the internal consistencies of the summated scales in Smalley and Retallick's (2012) survey. The coefficients obtained for each section of the instrument included interaction were 0.84, 0.81 for activities and 0.74 for assessments. A panel of experts including agricultural teacher educators and graduate students reviewed the survey for content validity and their suggestions were integrated. The survey was pilot tested for face validity. Panelists were asked to read the items carefully and indicate if any of the items were not suitable. This study was exempt from IRB approval, since adults were the human subjects.

The study population consisted of all business (n=65) and FCS (n=74) teacher education programs (N=139) identified by contacting the American Association of Family and Consumer Sciences and the National Business Education Association, respectively. The teacher education coordinator for each program was the contact for this study.

Data collection followed Dillman's (2009) electronic survey plan, which includes four contacts and a special contact. For this study, a special contact was a phone call to non-respondents. For this study, EFE was defined as all field experiences—offered within or outside of the business and FCS teacher education curriculum—that occur before student teaching. This definition was provided in the cover letters and the introduction to the survey.

The overall response rate was 66.90%; 40 of 65 (61.53%) business and 53 of 74 (71.62%) FCS teacher education coordinators responded. To control for non-response error, early and late respondents were compared; no significant differences were found.

Findings

Respondents represented programs at several types of institutions: regional/state (58.52%), 1862 land grant (14.82%), private (14.63%) and 1890 land grant (12.19%). A majority of programs (89.02%) offered a Bachelor of Science in business and FCS teacher education, 4.87% offered a Bachelor of Science plus one year, 21.95% offered a Master of Science in business and FCS teacher education and 26.82% indicated they offered other degrees.

We report the remaining findings in the context of Retallick and Miller's (2010) EFE model (Figure 1).

Foundation

The foundation component of the EFE model includes teacher education standards and a conceptual framework. Respondents identified state standards (82.79%) and institutional standards (73.11%) as the most influential in driving their EFE program (Table 1).

For accreditation, the majority of programs (81.72%) were associated with NCATE (Table 2). During the study, NCATE and the Teacher Education Accreditation Council (TEAC) voted to consolidate and formed a new accrediting body called the Council for the Accreditation of Education Programs (NCATE, 2010).

Organization

The organization component of the EFE model involves experience, placement and documents.

Experience. An EFE can be part of a course or a stand-alone experience. Respondents were able to identify all ways their programs offer an EFE. Overall, it was most common for EFE to be embedded within a course (80.64%) and also stand-alone experiences. This was also the case within each discipline: FCS and business respondents reported that 84.90% (n=45) and 75.00% (n=30), respectively, of EFE were embedded within a course. Overall, 43.01% of EFE were considered standalone experiences. The FCS and business respondents identified 33.96% (n=18) and 55.00% (n=22), respectively, of EFE as stand-alone experiences.

Programs require students to complete unique EFE activities throughout their teacher education program. Overall, 21 (22.58%) program coordinators reported their EFE students complete four unique experiences. This total represents 13 (24.52%) FCS respondents and 8 (20.00%) business respondents.

Placement. Programs offer EFE at many different stages of preservice teacher development to help students transition from student to teacher. In terms of timing, no single grade level or combination of grade levels emerged from the data.

Appropriate EFE placement is crucial to ensuring that preservice teachers have a quality experience. Half

Table 1. Standa	ards that	Drive E	arly Fiel	d Experi	ence Pr	ogram	
	FCS Business Total						
Standard (n=93)	n=53	%	n=40	%	n=93	%	
State	43	81.13	34	85.00	77	82.79	
Institutional	44	83.01	24	66.70	68	73.11	
National	36	67.92	27	75.00	63	67.74	
Professional	32	60.37	26	72.20	62	66.66	
Other Standards	1	2.00	0	0.00	1	1.07	

Table 2. Accrediting Body for Teacher Education Program										
	FCS		Business		To	tal				
Accrediting agency/organization (n=93)	n=53	%	n=40	%	n=93	%				
National Council for Accreditation of Teacher Education (NCATE)	42	79.24	34	85.00	76	81.72				
Other Accreditation	24	45.28	21	52.50	45	48.38				
State Accreditation	18	33.96	19	47.50	37	39.78				
Teacher Education Accreditation Council (TEAC)	6	11.32	3	7.50	9	9.67				
National Board of Professional Teaching Standards (NBATS)	3	5.66	3	7.50	6	6.45				

of the respondents reported that their programs required preservice teachers to select an EFE site from an approved list and 83% of programs required preservice teachers to complete their EFE in a high school or middle school education program. Fifty-three percent of all programs did not require students to complete an EFE before being admitted to the teacher education program. On average, the minimum numbers of hours expected of students to participate in EFE for licensure was 110 hours (range: 20 to 200 hours).

Most programs (70.93%) offered an orientation to EFE students. This was also true in each discipline: 67.92% (n=36) of FCS programs and 75.00% (n=30) of business programs offered an orientation for EFE students. However, in most cases, FCS programs did not offer orientations for college/university staff 41.50% (n=22) or cooperating teachers 49.05% (n=26). Only some business programs provided an orientation for college/university staff 50.00% (n=20) and for cooperating teachers 42.50% (n=17).

More than 60% (62.36%) of all programs had minimum qualifications for teachers to be eligible to serve as an EFE cooperating teacher. This number was higher for FCS programs (66.03%, n = 35) and lower for business programs (57.50%, n = 23). Approximately half (49.46%) of all programs required a minimum number of site visits to the secondary program as part of the EFE. This number was lower for FCS programs (47.16%, n = 25) and higher for business programs (52.50%, n = 21).

Documents. Documents for an EFE program can include handbooks, lesson plans and evidence of teaching a lesson. Overall, 73.11% of programs used a handbook or bulletin to communicate with preservice teachers. Just 66.03% (n=35) of FCS programs used a handbook or bulletin, whereas 82.50% (n=33) of business programs did so.

More than half of all programs (58.06%) required preservice teachers to plan a lesson as part of their EFE. Additionally, almost three-fifths (59.13%) of all programs expected preservice teachers to teach a lesson. Within the disciplines, 56.60% (n=30) of FCS programs and 60.00% (n=24) of business programs required preservice teachers to plan a lesson. And 54.71% (n=29) of FCS programs and 65.00% (n=26) of business programs expected preservice teachers to teach a lesson. On average, respondents indicated that their programs expected preservice teachers to teach six lessons during the EFE.

Implementation

The implementation component of the EFE model involves interaction, activities and assessment. In nearly two-thirds (61%) of programs, some collaboration occurs among the preservice

student, the EFE cooperating teacher and the teacher educator during the required EFE. Respondents also reported no collaboration (8.79%), very little collaboration (12.08%) and much collaboration (17.58%).

EFE interactions can be exploratory or related to teacher development. Respondents identified the purposes of their program's EFE from among 16 listed types of interactions (Table 3).

Overall, the most common purpose of an exploratory EFE was to identify the roles of professional educators (69.89%). Within the disciplines, 71.69% (n=38) of FCS respondents and 67.50% (n=27) of business respondents identified this as the purpose of an exploratory EFE. Overall, the most common purpose of a teacher-development EFE was to identify skills development (classroom instruction/management, program planning) of a teacher (80.64%). Within the disciplines, 83.01% (n=44) of FCS respondents and 77.50% (n=31) of business respondents identified this as the purpose of a teacher-development EFE.

Table 4 lists 13 activities respondents report using within their EFE program. Nearly all programs (92.47%) have a preservice teacher observe a cooperating teacher. Programs are less likely to provide student-led preservice teacher discussions (47.31%) and review case studies in a university setting (39.78%). Other types of EFE activities identified but not listed in Table 4 include grading papers, tutoring students, observing middle school, classroom management procedures and observing other teachers outside of the business or FCS discipline.

Assessment

There are two types of EFE assessment: program and student. Respondents identified how EFE are

Table 3. Purpose of Early Field	d Expe	rience.	Groune	d by Ty	ne	
	FCS		Business			tal
Interaction (<i>n</i> =93)	n=53	%	n=40	%	n=93	%
Exploratory						
Identify the roles of a professional educator	38	71.69	27	67.50	65	69.89
Observe classroom instruction	37	69.81	27	67.50	64	68.81
Affirm the desire for becoming a family consumer sciences teacher/business educator	35	66.03	25	62.50	60	64.51
Develop observational skills and techniques	34	64.15	24	60.00	58	62.36
Teacher Development Identify skill development (classroom instruction/	44	83.01	31	77.50	75	80.64
management, program planning) of a teacher						
Recognize a successful teaching strategy	42	79.24	31	75.00	73	78.49
Identify cooperating teacher behavior/s that influences student behavior	41	77.35	30	75.00	71	76.34
Interact with community members, school staff, and administration	42	79.24	28	70.00	70	75.26
Recognize a successful classroom and laboratory management strategy	40	75.47	30	75.00	70	75.26
Develop understanding of a complete business/ family and consumer sciences program	42	79.24	26	65.00	68	73.11
Recognize awareness of student engagement	39	73.58	28	70.00	67	72.04
Develop understanding of what is involved in being a business and family and consumer sciences teacher	37	69.81	29	72.50	66	70.96
Have a positive experience	37	69.81	28	70.00	65	69.89
Define and describe characteristics of an effective teacher	37	69.81	25	62.50	62	66.66
Educate preservice teacher about what is means to learn to teach as they reflect on why, whom, and how they will teach	34	64.15	27	67.50	61	65.59

Early Field Experience

documented in their program | (Table 5). Nearly all programs document EFE with cooperating teacher signatures (80.64%), preservice student reflection papers (75.26%) and university supervisor's review of documents (73.11%). Additional methods of documentation identified but not listed in Table 5 include discussion with program advisory council, completing an online portfolio, completion of a lesson and having a faculty member observe the preservice student teaching a lesson.

Evaluation of an EFE program can occur at various levels and is important to the continued success of an EFE program. Overall, 78% of respondents reported their EFE program was evaluated, and a departmental review was most common (63.44%) (Table 6).

Conclusions, Recommendations, and Implications

"The overarching outcome of EFE is the establishment of lifelong learning strategies and skills, which can

be transferred to the student teaching practicum and continued throughout an individual's teaching career" (Retallick and Miller, 2010, pp. 70–71). The findings of this study indicate that the majority of FCS and business teacher educations programs have quality EFE that are developed using national, state, institutional and professional standards and adhere to the standards of at least one accrediting body. These EFE are usually embedded within a course and occur in a middle or high school setting. Preservice teachers who participate in these EFE often receive an orientation and have access to a handbook or bulletin. A large proportion of FCS and business teacher education EFE programs are designed for similar purposes and use similar activities and assessments.

This study also revealed a few differences between FCS and business teacher education programs in the elements of EFE that were not prevalent among all programs. Stand-alone EFE are less common in FCS (33.96%) than in business (55.00%). Only half of all programs use an approved list of EFE sites for students to select from, yet 62.36% of programs have minimum qualifications for cooperating teachers. Surprisingly, less than half (47%) of programs require that students complete an EFE before being admitted to the teacher education program. Additionally, only three-fifths of programs require preservice teachers to develop a lesson plan and teach a lesson.

Table 4. Early Field Experience Activities									
	FCS		Business		To	tal			
Activity (n=93)	n=53	%	n=40	%	n=93	%			
Preservice teacher observation of cooperating teacher	50	94.33	36	90.00	86	92.47			
Orientation from university faculty on the expectation of EFE	48	90.56	33	82.50	81	87.09			
Observation of student's behavior by preservice teacher	47	88.67	31	77.50	78	83.87			
Develop reflection paper throughout experience (micro-reflections)	45	84.90	32	80.00	77	82.79			
Note taking of observations while on EFE	44	83.01	32	80.00	76	81.72			
Preservice teacher teaching a lesson	41	77.35	33	82.50	74	79.56			
Observation of student's learning by preservice teacher	45	84.90	27	67.50	72	77.41			
Develop written portfolio documentation of experience	38	71.69	26	65.00	64	68.81			
Compile list of information regarding the EFE program visit	31	58.49	23	57.50	54	58.06			
Interviewing middle/high school students, cooperating teacher, school counselor, principal, etc.	30	56.60	24	60.00	54	58.06			
Observing the supervision of student BPA/DECA/FCCLA projects and activities	32	60.37	15	37.50	47	50.53			
Student-led discussion by preservice teacher	27	50.94	17	34.00	44	47.31			
Review case studies in a university setting	23	43.39	14	35.00	37	39.78			

Table 5. Assessment of Early Field Experiences									
	FCS		Business		То	tal			
Documentation (<i>n</i> =93)	n=53	%	n=40	%	n=93	%			
Cooperating teacher - certification/signature	43	81.13	32	80.00	75	80.64			
Preservice student completing a reflective paper on experience	41	77.35	29	72.50	70	75.26			
University supervisor review of documents	40	75.47	28	70.00	68	73.11			
Journaling of experience	35	66.03	27	67.50	62	66.66			
Cooperating teacher evaluation	34	64.15	26	65.00	60	64.51			
Development of a portfolio	36	67.92	21	52.50	57	61.29			
Seminar for EFE students to discuss and compare experiences as a group	36	67.92	18	45.00	54	58.06			
Preservice student completing an observation of the visited business/family and consumer sciences education program (reviewing teaching resources, curriculum, facilities, budget, etc.)	34	64.15	17	42.50	51	54.83			
Collection of key resources and documents	33	62.26	16	40.00	49	52.68			

Table 6. Level of Early Field Experience Evaluation										
	FCS		Busi	ness	Total					
Level of review (n=93)	93) n=53 % n=40 % n=93 %									
Departmental	34	64.15	25	62.50	59	63.44				
Accreditation	36	67.92	22	55.00	58	62.36				
State review	22	41.50	22	55.00	44	47.31				
University	25	47.16	12	30.00	37	39.78				
Other levels	3	5.66	0	0.00	3	3.22				

Most business and FCS teacher education EFE programs use a variety of student assessments. The most common student assessments are the university supervisor's review of documents, cooperating teacher signatures and reflective writing. However, FCS and business programs differ in the extent to which they use other assessments. The FCS programs are more likely to use seminars for EFE students to discuss and compare experiences as a group, complete an observation of the visited education program (reviewing teaching resources, curriculum, facilities, budget, etc.) and require a student to collect key resources and documents. There was difference between disciplines in the use of a handbook or bulletin for communication with preservice teachers; business programs (82.50%) use this resource more than FCS programs (66.03%)

While the responses of both business and FCS faculty in this study were relatively similar, but there are some differences between these findings and those from Smalley and Retallick's (2012) study, which focused on agricultural teacher education. Agricultural education programs are more likely to be housed at 1862 land grant

intuitions, whereas the majority of FCS programs are at a regional or state institution. Nearly all agricultural education programs offer an orientation program. Agricultural education programs use EFE handbooks at nearly the same rate (69.09%) as FCS programs, but much less than business programs. Agricultural education EFE participants also teach considerably more lessons (n = 14) than business and FCS EFE participants.

This study has implications for teacher education programs that are planning to evaluate their current programs or preparing to revamp their EFE programs. This study reveals the extent to which teacher education programs in two career and technical education disciplines (business and FCS) use elements identified in Retallick and Miller's (2010) EFE model. These results can be used as comparisons for FCS and business teacher education programs nationwide.

"While the overall development and implementation of EFE is as individual and contextual as teaching itself, consistency among teacher education programs using best EFE practices as identified in the literature will provide a better experience for all students and ensure the student learning outcomes of EFE are achieved" (Retallick and Miller, 2010, p. 71). Retallick and Miller (2010)'s model provides the framework to answer the necessary questions when evaluating and developing EFE programs and offers a synthesis of learning strategies to meet the various learning outcomes associated with EFE. Referencing this work will ensure that each element of EFE is addressed and best practices are used. It will also ensure that all teacher education programs, including those in CTE, have continuity and consistency in EFE programs (Retallick and Miller, 2010), which addresses Zeichner's (1996) concern that EFE programs lack the rigor and relevance of other college coursework and teacher education components.

Expanding opportunities for preservice teachers during the exploratory and teacher development stage will increase the number of real-world opportunities they have prior student teaching. This could, in turn, affect recruitment and retention of preservice teachers as well as introduce them to the lifelong learning skills required in the teaching profession.

Further research needs to take place to determine if changes have occurred in career and technical education programs based on the activities and assessments provided to preservice teacher education students. Ongoing monitoring of the EFE model is required to determine if changes occur in the foundation, organization, and implementation stages. Additional research could address how often career and technical education programs' EFE are regularly reviewed and how recommendations are handled.

Literature Cited

Aiken, I.P. and B.D. Day. 1999. Early field experiences in preservice teacher education: Research and student perspectives. Action in Teacher Education 21(3): 7–12.

- Dillman, D.A., J. Smyth and L. Christian. 2009. Internet, mail, and mixed-mode surveys: The tailored design method (3rd ed.). Hoboken, NJ: John Wiley and Sons.
- Guyton, E. and D. Byrd (eds.). 2000. Standards for field experience in teacher education. Reston, VA: Association of Teacher Educators.
- Hudson, L., D. Bergin and C. Chayst. 1993. Enhancing culturally responsive pedagogy: Problems and possibilities. Teacher Education Quarterly 20(3): 5–17.
- Little, M.E. and S.M. Robinson. 1997. Renovating and refurbishing the field experience structures for novice teachers. Journal of Learning Disabilities 30(4): 433–441.
- McIntyre, D.J., D.M. Byrd and S.M. Foxx. 1996. Field and laboratory experiences. In J. Sikula (ed.), Handbook of research on teacher education (pp. 171–193). New York, NY: Simon and Schuster Macmillan.
- Moore, R. 2003. Reexamining the field of experiences of preservice teachers. Journal of Teacher Education 54(1): 31–42.
- National Council for Accreditation of Teacher Education (NCATE). 2008. Professional standards for the accreditation of schools, college, and departments of education. Washington, DC: Author.
- NCATE. October 25, 2010. NCATE and TEAC Form New Accrediting Body; The Council for the Accreditation of Educator Preparation (CAEP) [Press Release]. http://www.ncate.org/Public/Newsroom/NCATENewsPressReleases/tabid/669/Entryld/121/NCATE-and-TEAC-Form-New-Accrediting-Body-The-Council-for-the-Accreditation-of-Educator-Preparation-CAEP.aspx
- Pierce, D.R. 1996. Early field experience and teacher preparation: Authentic learning. The Teacher Educator 31: 217–225.
- Retallick, M.S. and G. Miller. 2007. Early field experience in agricultural education: A national descriptive study. Journal of Agricultural Education 48(1): 127–138. DOI:10.5032/jae.2007.01127.
- Retallick, M.S. and G. Miller. 2010. Teacher preparation in career and technical education: Model for developing and researching early field experiences. Journal of Career and Technical Education 25(1): 62–75.
- Smalley, S.W. and M.S. Retallick. 2011. Purposes, activities, and documentation of early field experience in agricultural teacher education: A national Delphi study. Journal of Agricultural Education 52(3): 100–109. DOI:10.5032/jae.2011.03100.
- Smalley, S.W. and M.S. Retallick. 2012. Agricultural education early field experience through the lens of the EFE model. Journal of Agricultural Education 53(2): 99–109. DOI10.5032/jae.2012.02099.
- Zeichner, K. 1996. Designing educative practicum experiences for prospective teachers. In K.M. Zeichner, S. Melnick and M.L. Gomez. (eds.). Currents of reform in preservice teacher education (pp. 215–234). New York, NY: Teachers College Press.