Teacher Preparation in Career and Technical Education: A Model for Developing and Researching Early Field Experiences

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ABSTRACT

Leading educational researchers have called for a framework for implementing and researching early field experiences (EFE). Yet, a review of literature revealed that a comprehensive model focusing on the structure and content of EFE was an important element missing from the literature. The primary purpose of this study was to synthesize the literature related to the structure and content of EFE. This study resulted in the development of a four-component model depicting a framework for EFE programs. The four primary components of the model are foundation, organization, implementation, and evaluation. The model provides the structure for developing a variety of early field experiences while maintaining continuity among programs and allowing for cultural diversity and individual flexibility. The EFE model provides a framework for focused research within EFE as well as the development, reorganization, and assessment of EFE programs.

Introduction and Background

Experiential learning has been a hallmark of career and technical education (CTE). It has allowed CTE educators to utilize constructivist and contextual learning approaches, which help students integrate new knowledge and experience with previous knowledge in a real-world manner (Gordon, 2008). The same philosophical approach occurs collegiately in professional programs like law, medicine, business, and teaching (Darling-Hammond, 2006). Teacher education programs, especially CTE teacher education programs, have incorporated this philosophy as a means of putting ideals into action. EFE is an experiential component of preservice teacher education, which offers career exploration and later teacher development.

Teacher preparation programs, including CTE, should provide a foundation for continual learning about teaching and develop a greater focus on creating high-quality, clinical learning experiences (National Commission on Teaching and America's Future, 1996). It is imperative for preservice teachers to understand that the world of teaching is complex and such an understanding will lead to better analysis of the teaching and learning processes (McIntyre, Byrd, & Foxx, 1996). A didactic curriculum of course work and clinical field experiences allows preservice teachers to identify linkages between theory and practice.

Field experiences are needed as a means to transition from an academic to a field-based learning environment because those skills students have developed in the academic world (e.g., reading books, writing papers, and studying for exams) are considerably different than the skills needed to learn from their own teaching and field experiences (Carter & Anders, 1996). Not only do field experiences provide opportunities for preservice teachers to interact with the students they will be teaching and develop appropriate teaching strategies (Knowles & Cole, 1996), but

they also increase cognition in professional coursework and better prepare preservice teachers (Cruickshank, 1990).

The importance of field experiences has not been disputed among educators (Guyton & Byrd, 2000). At issue is the degree to which field experiences vary among teacher education programs and the impact such variance has on the effectiveness of EFE. It is the narrow focus of most practicums and the lack of attention to school and community context that often causes students to be unprepared for the full scope of the teaching role (Zeichner, 1996a). Such issues prompted Ducharme and Ducharme (1996) to espouse the need for research on the structure and content of EFE programs. Other researchers have expanded upon this call, asking for a well-developed frame that would allow researchers to develop better questions and methods in an effort to get at the context of the experience (Clift and Brady, 2005; Darling-Hammond, 2006). Yet, such a comprehensive model focusing on early field experiences in teacher education in career and technical education is an important element missing from the literature.

Purpose and Procedures

The primary purpose of this descriptive qualitative study was to make meaning of the literature related to the structure and content of EFE programs. The analysis of information was conducted in two stages. In the initial stage, documents published between 1980 and 2008 that addressed issues related to either the structure or content of EFE were selected for analysis because, as Merriam (2002a) espouses, insights and clues can be obtained from documents. Any documents that referred to the structure, which was defined as those elements that discuss the organization and delivery of EFE, or content, which was defined as learning strategies, activities, and other expectations required of the experience, were retained for the study.

Educational Resources Information Center (ERIC) and Education Abstracts were the primary databases used to find articles focusing on early field experience. Thirty-three articles were gathered from the following sources: *Action in Teacher Education; Childhood Education; Journal of Agricultural Education; Journal of Education for Teaching; Journal of Physical Education, Recreation, and Dance; Journal of Teacher Education; Teacher and Teacher Education; The Teacher Educator; Teaching and Teacher Education;* and *The High School Journal.* An online library catalog search was conducted at a Midwestern Doctoral Extensive Research Institution to identify all holdings related to early field experience. The search yielded 23 books and other sources not indexed in ERIC and Education Abstracts. The examination of these types of documents as a data source adds to the strength of the qualitative study (Merriam, 2002a).

The second stage focused on assessing, reorganizing, and interpreting the existing knowledge (Marsh, 1991). The first author coded and analyzed the literature, allowing general themes to evolve throughout the study. The materials began to delineate into four categories: 1) foundation for EFE, 2) organization of EFE, 3) implementation of EFE; and 4) assessment of EFE. These categories culminated into a framework of EFE (Figure 1). A detailed description and analysis of each category follows beginning with the foundation for EFE and then building upon it with the organization, implementation, and assessment components. The entire process underwent peer review to ensure the validity (Merriam, 2002b).

Foundation: Standards and Conceptual Framework

Many within the education profession acknowledge the role EFE plays in the development of preservice teachers (McIntyre et al., 1996). Because EFE is a valuable experience, accreditation organizations, professional organizations, state licensure units, and teacher education programs have incorporated EFE into their accreditation standards, licensure requirements, and curricula, respectively. The resulting standards, recommendations, and requirements provide the premise for early field experiences.

Figure 1. Model for Early Field Experiences in Teacher Education

Learner-Centered	Assessment				Program

Implementation | Learning Strategies |
Outcomes

| Exploration | Skill Development | Application of Knowledge | Melding Theory | Transition |

| Exploratory | Teacher Development |

Peers | **Interaction** | Students
University Supervisor | Cooperating Teacher

Implementation

Documents

Syllabi | Forms | Handbook

Placement

Experience

Embedded | Stand-alone

Organization

Conceptual Framework

State | Institutional
Professional | **Standards** | National

Foundation

Standards

A confluence of standards from a variety of entities provides the institution with the overarching expectation of EFE. Two nationally recognized accrediting agencies, the National Council for Accreditation of Teacher Education (NCATE, 2002) and the Teacher Education Accreditation Council (TEAC, 2002), provide standards for the development and assessment of EFE. Professional organizations like the Association of Teacher Educators (ATE) have developed a set of standards for field experience, which are meant to "correspond with, compliment, and extend the NCATE standards" (Guyton & Byrd, 2000, p. 4). The American Association for Agricultural Education (AAAE, 2001) is an example of a subject-specific professional organization that has developed what it calls the *National Standards for Teacher Education in Agriculture*. Other professional organizations such as the Interstate New Teacher Assessment and Support Consortium (INTASC, 1992), which offers model standards for beginning teacher development that focus on developing the beginning teacher regardless of subject matter taught, and the National Science Teachers Association (NSTA, 2003), which is a subject-specific organization that provides content standards intended to be used as a framework for teacher education programs, provide standards that effect EFE programming.

States and institutions of higher education have also developed standards, which generally coincide with national and professional organization standards. Most states have developed standards that are used as the basis for state licensure or certification (Hurst, Tan, Meek, & Sellers, 2003). Similarly, educational institutions have developed standards as part of their conceptual framework for their teacher education program as required by NCATE. The inclusion of these standards provides the foundation for the entire EFE program.

Conceptual Framework

The identified standards serve as the context and basis from which the institution's conceptual framework for teacher education is built. The initial step in complying with national standards is the development of a conceptual framework, which establishes a shared vision and provides a direction for programs, courses, teaching, candidate performance, scholarship, service, and unit accountability (NCATE, 2002; TEAC, 2002). The conceptual framework should align with the various aspects of the teacher education program (i.e., learning and program outcomes) with INTASC principles, state and national board standard (Dottin, 2001).

Organization: Experiences, Placement, and Documents

With the foundation for EFE established through the standards and conceptual framework, the organizational phase can be addressed. The organizational stage addresses the types of EFE experiences, placement issues, and the development of EFE documents.

Types and Numbers of Experiences

A primary issue in organizing EFE is the number and type of experiences. McIntyre et al. (1996) espouses that what occurs during the field experience is more important than the length of the experience, but continued by suggesting that teacher education programs increase the number and variety of EFE sites to dilute the impact of any single experience. Similarly, Knowles and Cole (1996) asserted that, too often, field experiences are "too short, too structured, too focused

on the immediacy of the classroom action, and too detached" (p. 654). The result is the development of teachers who continue to teach as they were taught because their field experiences were superficial, procedural, and merely a rite of passage.

The National Commission on Teaching and America's Future (1996) argued that a major flaw in teacher education is the disconnection between coursework and field experiences. Howey and Zimpher (1989) reported that exemplary teacher education programs link coursework and field experiences. Carter and Anders (1996) suggested that EFE, offered in conjunction with methods courses, help to more closely integrate the primary goals of the teacher education program. EFE can be embedded in the foundation, methods, or other pedagogical courses with specific connections back to the course and its related content. At other times, it may be more conducive to offer stand-alone experiences, which may meet and fulfill other expectations of the standards and conceptual framework. A combination of laboratory, clinical, and practicum-based experiences, which would allow more ideal and reflective experiences, should be considered.

Placement

Placement is a crucial component of teacher preparation (McIntyre et al., 1996) and the selection of the cooperating teacher is the single most important activity in determining the success of the experience (Vertuno, 1995). The primary pedagogical practice associated with EFE placement has been the use of exemplary sites, which enables preservice teachers to emulate model teachers (Carter & Anders, 1996). In addition, Goodland (1990) urged teacher education programs to place students in quality programs rather than those that are most convenient. Preservice teachers should be placed cooperatively with input from both the teacher education program and the cooperating school system (Vertuno).

Howey and Zimpher (1989) reported finding a well-developed field experience component among exemplary teacher education programs. Early clinical field experiences should occur in controlled, natural settings as a means to better prepare preservice teachers for what they will experience as student teachers, as well as to help eliminate feelings of anxiety and nervousness (Everhart & Turner, 1996). At a minimum, the site must offer a suitable range of teaching approaches and models (Carter & Anders, 1996). The staff must have a common interest in and a commitment to the preparation of preservice teachers (Carter & Anders) and students must be assigned to outstanding teachers who can serve as models (Jaquith, 1995). Also, adequate diversity of students and teachers is important (AAAE, 2001; Carter & Anders; NCATE, 2002). The importance of placement lies in the fact that preservice students tend to model the teaching style and methods of the cooperating teacher, even when they contradict the theory and practices addressed in the university classroom (Moore, 2003).

Although most structured field experiences are conducted in public or private school settings, alternative settings, which provide a different context for teaching and learning processes, may enhance the professional development of those involved (Carter & Anders, 1996; Knowles & Cole, 1996). There is a need to go beyond the classroom to community-based field experiences where students see their role as part of a whole community rather than as an isolated, individualized classroom (Zeichner & Melnick, 1996). Such sites could include various camps and community-based programs, tutoring or remedial centers, child care centers, community workshops and classes, Sunday school classes, 4-H clubs, and babysitting (Carter & Anders).

Documents

The use of syllabi and handbooks may be predicated in part by the types of early field experiences. The syllabus serves as a checklist (Stark & Lattuca, 1997) and a guide to the instructor's philosophical approach to the course including an explanation of the purpose, rationale, course content, and procedures. Because most student learning occurs outside the classroom, planning for assignments and out of class activities is important (McKeachie, 2002). Although there is no standard model for syllabus development (McKeachie), several authors provide guidelines (e.g., McKeachie; Stark & Lattuca).

A handbook is a broader, more overarching guide that serves as a communication and public relations tool (Slick, 1995). The handbook serves as the means to communicate the guiding principles of the field experiences, describe the purpose and key components of EFE, and articulate the roles and responsibilities of those involved in the experience. As a public relations tool, the handbook communicates the complexity and importance of the teacher education role in teacher preparation and reflects upon the nature of the institution (Slick).

Implementation: Interaction, Outcomes, and Learning Strategies

The previous two components, the foundation and organization, provide the impetus for active learning to occur during EFE, which is the premise for the entire early field experience. Student development occurs at the implementation stage of the model because 1) student outcomes and the associated active learning strategies are developed, and 2) defined roles and positive interaction among the preservice teacher, the cooperating teacher, university supervisor, and peers are established.

Interaction

The success and effect of EFE are completely dependent upon the interaction among those involved in the early field experience including the interaction between the university and cooperating school, and is a result of a dialogic process, where reflection, theory, and practice inform one another (Zeichner, 1996b). There is a need for open and direct communication and the development of EFE programs that have collaboration, accountability, and an environment where communication between the teacher education program and school can occur (McIntyre et al., 1996; NCATE, 2002). The extent and quality of field experiences are dependent upon the attitudes and practices related to guidance and supervision (Knowles & Cole, 1996).

Interaction should be deliberate and intentional in an effort to eliminate the lack of communication between the institution and cooperating site, which includes a lack of agreement as to the responsibility of each participant (McIntyre et al., 1996), the concern for the uneven quality of supervision and mentorship (Zeichner, 1996a), and the frustration associated with the varying expectations between students and teacher educators (Keheller, Collins, & Williams, 1995). Issues of role definition and expectations are critical to any discussion about the relationships within field experiences (Knowles & Cole, 1996). EFE can be enhanced when collaborating teachers assist in the negotiation of the practicum curriculum and are treated as equal participants in the practicum.

Outcomes

Jaquith (1995) believed early field experiences could be divided into two types of experiences: early and mid-tier. The early experiences provide the opportunity for career exploration, and the mid-tier experiences provide the opportunity for preservice students to develop teacher-oriented skills. This logic sets the stage for the identification of the two orientations of the EFE model: exploration and teacher development. The outcomes and related learning strategies evolve from these two orientations of EFE.

An initial outcome of early field experience is career exploration (Jaquith, 1995; Kelleher et al., 1995; McIntyre, 1983). Once students have moved through the exploration phase, additional EFEs allow preservice teachers to begin to develop and transition toward becoming a teacher (Jaquith; Knowles & Cole, 1996). At the teacher development stage, the outcomes of EFE include melding theory into practice (Kelleher et al.; NCATE, 2002; Staffo, Baird, Clavelli, & Green, 2002), applying knowledge (NCATE; Pierce, 1996), developing teaching skills (NCATE; Kelleher et al.; Liston & Zeichner, 1991; McIntyre), and transitioning from student to teacher (NCATE; Liston & Zeichner; McIntyre).

Learning Strategies

The learning strategies by which the outcomes of EFE are fulfilled are paramount (Table 1). The initial learning strategies are used to fulfill the career exploration outcome. Once students determine that they want to continue in the teacher education program, additional early field experiences focusing on teacher development outcomes may be implemented using the appropriate learning strategies for each of those outcomes. By the time students enter the student teaching practicum, they should have established the foundational skills necessary for them to continue becoming critically reflective professional educators.

Table 1.

The learning strategies associated with the outcomes of EFE

Orientation	Outcome	Learning Strategies
Exploratory	Career Exploration	• Guided observation (Carter & Anders, 1996; Dobbins & Camp, 2003) • Journaling (AAAE, 2001; Adler, 1993) • Identify characteristics of good teaching (Dobbins & Camp, 2003) • Dialogue (Carter & Anders, 1996; Cruickshank, 1985) • On-campus seminars (Carter & Anders, 1996; Dobbins & Camp, 2003) • Interview/meet administrators, guidance counselors (Dobbins & Camp, 2003)
Teacher Development	Skill Development	• Structured assignments such as distributing supplies and papers, roll call, grading papers • Teaching mini-lessons (Carter & Anders, 1996) • Tutoring (Carter & Anders, 1996) • Analyze different teaching and learning styles (Dobbins & Camp, 2003)
	Application of	• Development of lesson plans

Knowledge	• Analyze case studies (McIntyre et al., 1996)
	• Assess and analyze student learning (NCATE, 2002)
	• Monitor student learning and adjust instruction (NCATE, 2002)
	• Identify teaching principles and strategies (Dobbins & Camp, 2003)
Meld Theory into Practice	• Portfolio development (AAAE, 2001; Huba & Freed, 2000)
	• Teach lessons
	• Utilize formal and informal student assessment strategies (ATE, 1986; NCATE, 2002)
	• Interact with cooperating teacher and university supervisor (Carter & Anders, 1996)
	• Participate in teacher in-service/professional development (ATE, 1986)
Transition from Student to Teacher	• Reflection through writing about teaching (Carter & Anders, 1996)
	• Critique of teaching, teaching environment, and teaching program (NCATE, 2002)
	• Observe teachers practicing reflection
	• Systematic reflection and analysis (National Commission on Teaching & America's Future, 1996; NCATE, 2002; Guyton & Byrd, 2000)
	• Analyze formal and informal self assessment strategies (NCATE, 2002)
	• Express an understanding of ethical, legal, social, and human issues
	• Communicate an understanding of the teacher's role within the community (Knowles & Cole, 1996)
	• Articulate an understanding of the philosophy and goals, importance, and relationship of agricultural education (Dobbins & Camp, 2003)

Assessment: Preservice Teacher and Program

The EFE model is only complete with the assessment of the preservice teachers and the EFE program (Guyton & Byrd, 2000; ATE, 1986). Excellence can only be achieved through a continual improvement process focused on learner-centered assessment and a holistic assessment of the EFE program. In assessing both the preservice teacher and the program, it is important that the assessment be aligned with the other components of the EFE model including standards, conceptual framework, expected outcomes, and related learning strategies.

Preservice Teacher Assessment

The purpose of preservice teacher assessment is to confirm the growth and development in teaching (Guyton & Byrd, 2000). The focus should be on learner-centered assessment.

Learning should be documented by the student through critical thinking, problem-solving, and reflection (Huba & Freed, 2000), rather than on a checklist of completed activities. Rubrics and portfolios are appropriate methods of assessing student-centered learning (Huba & Freed). One pedagogical approach for such assessment and self-evaluation is self-study (Loughran, 2007).

Program Assessment

Program assessment serves as both a validation device and information source for program improvement (Guyton & Byrd, 2000). With a focus on outcomes and learning strategies, outcome mapping would be an appropriate approach to continual improvement. Earl, Carden, and Smutylo (2001) provide a step-by-step approach, which focuses on the areas of intentional design, performance monitoring, and evaluation planning. Ongoing assessment and adequate feedback will ensure that the EFE program continues to be effective (ATE, 1986).

Summary

The ultimate goal of EFE is to prepare preservice teachers to enter field settings knowing what they can accomplish, what they can expect to learn, and how they should conduct themselves (Carter & Anders, 1996). The teaching profession expects teachers to enter the field able to interpret what they see, discern what is being accomplished in a culturally diverse classroom, identify problems to be addressed, and talk ethically and professionally about their observations and experiences. Such field experiences should be encouraged because they have been associated with increased cognition in professional coursework and better preparation as a preservice teacher (Cruickshank, 1990). And, as part of a comprehensive teacher education program, EFE serves a mechanism for creating significant learning experiences, which as Mentkowski and Associates (2000) espouse, helps to validate and solidify the curriculum because students have opportunities to apply learning in real-world settings and in context.

Toms (1996) posited that teacher education programs find themselves attempting to reconcile the program with often conflicting standards from various external influences. The various elements found in each of the four components of the model (i.e., foundation, organization, implementation, and assessment) provide the structure on which an EFE program can be built, evaluated, and reconciled. Early field experiences provide the opportunity for initial exposure and skill development, which if approached properly, will provide the impetus for lifelong learning and the development of a critically reflective professional educator. The result is a framework that further integrates the knowledge deciphered from the literature and is derived from a conceptualization of what it is like to be a teacher (Cruickshank, 1996).

Conclusion

In order for learning and, more importantly, life-long learning to take place, students need 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). As such, significant learning can only occur when students are engaged, learning is encouraged, and a context for learning is promoted (Fink, 2003). The overarching outcome of this framework and 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 (Keheller et al., 1995; NCATE, 2002).

While the overall development and implementation of EFE is as individual and contextual as teaching itself, Keheller et al. (1995) endorsed early field experiences that were well-defined and well-developed yet maintained enough flexibility to meet the individual needs of the students. No matter what types of field experiences are developed, preservice teachers will have different experiences because of the variations in the classrooms and cooperating teachers (Chastko, 1993). However, the EFE must be developed conceptually to ensure that the individual development is appropriately focused on meeting the ultimate outcomes of the experience, as identified by the standards and conceptual framework. EFE should be approached with rigor and emphasis similar to that of the student teaching experience. When EFE is fully implemented, active learning begins to prepare preservice students as lifelong learners for their role as a student teacher and, ultimately, as a professional teacher.

This study was a synthesis of literature organized into an integrated model for the purpose of incorporating the wide range of knowledge related to EFE and was assembled and organized in a format appropriate for making practical educational decisions. The model provides structure for the teacher education curriculum and the organizational arrangement as recommended by Zeichner (2005). The results were not developed to depict any institutional or state perspective and only represent information found in the literature.

The EFE model begins to address the concerns of teacher educators and researchers like Cruickshank (1996) who identified a need for identifying outcomes for field experiences, determining the validity of experience as related to the outcome, defining the roles and relationships of all involved, determining methods for preparing each group for their role, establishing the structure and the means for offering a variety of experiences, establishing the assessment of each experience, and enhancing the experience through identifying and verifying new knowledge. The model also begins to address Knowles and Cole (1996) who argued that field experiences should be considered integrally connected and a symbiotic component of the teacher education program. The EFE model serves as the structure for the further integration of extensive, well-supervised clinical experiences that link theory and practice and the enhancement of collaborative relationships between schools and universities (Darling-Hammond, 2006). The model provides a well-developed frame, which could lead to more focused EFE research while also allowing researchers to more fully explore the context of the experience, as recommended by Clift and Brady (2005).

The Framework for Early Field Experience in Teacher Education can be useful to teacher education programs as the profession attempts to meet Zeichner's (1996a) challenge to treat the EFE practicum as seriously as other collegiate courses and components of the teacher education program. The model provides the structure for identifying the various elements of a comprehensive EFE program and serves a mechanism to enable continuity and consistency among programs. Because the framework provides both structure and content for the development, reorganization, and assessment of EFE programs, it could be used as a template for organizing and improving the early field experience, thus increasing the value and utility of EFE.

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