Members of the Task Forces on Field Experience Standards in Teacher Education

Task Force on Field Experience Standards in Teacher Education (2012-2015)

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Task Force on Field Experience Standards in Teacher Education (1995-2000)

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In 1995, Peggy Ishler, then president-elect of the Association of Teacher Educators, appointed the first Task Force on Field Experiences Standards in Teacher Education. For over three years, the group developed categories for standards, and then explored the literature and developed standards and support for them. One draft of the standards was presented at an open hearing at the ATE summer conference in Las Vegas. A subsequent draft was sent to organizations (e.g., AACTE and NCATE) and individuals (e.g., a random sample of the National Field Directors Forum) for feedback. In 1998, the ATE Delegate Assembly approved the standards in draft form. Open hearings were held at the 1998 annual meeting and at the 1998 Minneapolis summer conference. State ATE presidents were sent the standards and asked to have open hearings.   A new draft set of standards was developed based on input from these meetings and from people who responded to the request for feedback. In February 1999, the ATE Delegate Assembly approved the standards with a few minor modifications. An open hearing was held after approval regarding impact and dissemination. Ongoing work of the task force included dissemination and use of the standards.

Former ATE President Ann Shelly then appointed a second Task Force on Field Experience Standards in Teacher Education in 2012. The task force was charged to review and propose revisions for the current standards. Members of the ATE Delegate Assembly approved the revised standards in the spring of 2016.

Support for the Standards for Field Experiences

Introduction

Field experiences are often considered the most important and powerful component of teacher education programs (Mclntyre, Byrd, & Foxx, 1996; Darling-Hammond & Bransford, 2005). Over the past twenty years, most teacher education programs incorporated more field experiences into their programs and increased the number and variety of sites in which students are placed (Black & Ammon, 1992; Garibaldi, 1992). In addition, school context, especially the school-based supervisor, has been found to have a significant impact on teacher development. Mclntyre, Byrd, and Foxx (1996) asserted, "the placement of the prospective teacher for both early field experiences and student teaching is a critical stage in teacher preparation" (p. 173). Graham (2006) also emphasized that the two components critical to the success of the intern experience are the cooperating teachers who guide and support students and the sites where the experiences occur.

In 1904, John Dewey spoke of "miseducative" practices and believed that practice should be accompanied by reflection on the effects of practice. Many teacher education programs have the goal of preparing reflective teachers and espouse field experiences that give opportunities for analysis of and reflection on teaching (Zeichner, 1982). However, Monk (2015) stated that in order for the field of teacher preparation to flourish, there is a need for knowledge about not only what constitutes effective teaching, but also what constitutes best practice for preparing people to become effective teachers.

Although it is clear that field experiences have a profound effect on teacher development, it is not clear that the impact always is positive. Mclntyre, Byrd, and Foxx (1996) concluded that

> Despite the overwhelming positive feeling about the efficacy of field experiences, there does not exist enough data to determine that extending field experiences, whether at the early field experience or student teaching stage, will develop more effective, thoughtful teachers than those prepared in shorter field experience programs. Although there remains a great need for additional research in this area it appears that what occurs during the field experience is more important than the length of the experience (p. 176).

Goldstein and Lake (2003) supported this notion and believe that during field experiences, teacher candidates' images of themselves as teachers and their understandings of the contours of the job of teaching are constantly in a state of flux.

A nation-wide study of teacher education programs revealed that often little connection is made between courses and field experiences and that faculty and school based personnel often do not connect field experiences to particular goals (Goodlad, Soder, & Sirotnik, 1990). Mclntyre, Byrd, and Foxx (1996) reported that there is a trend towards more thematic programs, but research does not support that field experience activities are well connected to these themes or conceptual frameworks, particularly to themes of reflection and inquiry (Howey, 1986; Howey & Zimpher, 1989; Zeichner & Liston, 1987; Zeichner & Tabachnik, 1982).

Some evidence indicates that the school context of field experiences is not always a positive influence on student teacher development (Guyton & Mclntyre, 1990). Adequate attention is not always paid to the impact of the choices made in selecting student teaching placements (Zeichner, 1986), although there is a trend toward more careful selection and more intense involvement of school based personnel.

Mclntyre, Byrd, and Foxx (1996) reported from their extensive review of the literature on field experiences that (a) increased practice without reflection and analysis does not lead to professional growth; (b) the context of field placements is very influential on professional development; and (C) evaluation of field experiences should reflect the complex world of teaching. Finally, Zeichner (2010) concluded that although many programs include field experiences throughout the curriculum, the time that teaching candidates spend in schools is often not as carefully planned as are campus based courses so that little or no clinical curriculum exists.

The importance of field experiences is not disputed among educators. How field experiences are conducted, though, varies greatly from teacher education program to teacher education program. Some variability is desirable in order for programs to be able to respond to their unique circumstances, but some of the differences reflect variations in the quality of programs. Roth (1996) identified setting standards as one way to deal with quality preparation of teachers, to ensure a minimum level of program quality. The purpose of standards is to create significant change. The Council for the Accreditation of Educator Preparation has developed and implemented rigorous standards for teacher education programs (CAEP, 2014.) These standards address field experiences in Standard 2, Clinical Partnerships and Practice: 2.3 Clinical Experiences.

Context/Culture of Field Experiences

A national study by Goodlad (1990) found that many teacher education programs had no influence over the placement of their student teachers and that convenience rather than a quality experience tied to teacher education goals was the major criterion for placement. Other studies suggested that haphazard placements can undermine program goals. For example, Winitsky, Stoddart, and O'Keefe (1992) found that when student teachers used a constructivist approach to teaching, as taught in the teacher education program, cooperating teachers intervened and made these teacher candidates conform to more didactic methods used by the teachers.

Contexts include the classroom, school, and community and offer the prospective teacher an opportunity to reflect on the roles and responsibilities of teachers, the structure of the school, and the relationship of the school to the community, particularly as it applies to the teaching and learning process (Maxie, 2010). Savage, Cannon, and Sutters (2015) claimed that multiple factors must be considered when planning placements for teacher candidates in their teacher preparation program, including faculty input, personal interviews, and individual candidate needs. However, as the placement period draws near, fewer teachers are available to serve since the economy affects the number of available qualified teachers. Teacher education programs have had to adapt how they place teacher candidates, cajole overworked teachers into serving as cooperating teachers, create digital reporting systems that simplify required paperwork, and rethink what our teacher candidates can reasonably expect to gain from their practicum placement.

Monk (2015) asserted that we must be clear about what constitutes a rich clinical experience. He stated that most students he sees who are preparing to become teachers tend to be very bright, very idealistic, and sometimes naïve about the institution they plan to enter. Typically, their personal K-12 schooling experiences have been good and they can identify an inspirational teacher or two they admire and wish to emulate. If we equate 'rich clinical experience' with spending time with similarly excellent and inspirational teachers, we risk compounding the naïveté that is already present. Moreover, one of the things we know about excellent teachers is that they make what they do look easy. To an inexperienced student teacher this can be misleading and potentially mis-educative. He believes that insights can be gained from teachers who are struggling and that while it may seem counterintuitive, a portion of 'rich clinical experience' might include time with a less than excellent teacher.

The context of field experiences has been posited to have a strong influence on teacher socialization (Guyton & McIntyre, 1990; Zeichner, 1990). Hoy and Feldman (1987) averred that school context had two constructs: (a) affective context that is the ambience of the school created by such things as teacher morale; and (b) objective context that is the socio-economic status of the school. Zeichner (1982) found that the following factors influenced the development of teachers' perspectives: teacher-pupil ratio, material resources, authority relations, school values and ideals, and collegial influence. Kagan (1992) reviewed current research on the role of context in teacher socialization. She reported four contextual factors affecting growth and success: the teaching assignment (the nature of the content and pupils to be taught); colleagues' willingness to provide support; parental relationships; and degree of autonomy and leadership afforded teachers. Guyton and Wesche (1996) studied the contexts of field experiences and found that (a) placing preservice teachers in schools with good morale, pleasant surroundings, a compatible and welcoming cooperating teacher who is a good role model may be just as important

as pupils' backgrounds in determining success in full time field experiences, and (b) students whose attitudes are consistent with teacher education program experience enhanced teaching performance.

Coffey (2010) argued that research in teacher education suggests that field experiences in community settings offer pre-service teachers a context for understanding the link between theory and practice. She documents the experiences of pre-service educators participating in a service-learning experience at a Children's Defense Fund Freedom School in the southeastern United States. The pre-service teachers engaged in critical reflection, online journals, and daily debriefing sessions. Afterwards, they praised the benefits of a service experience in an urban context and explained how interactions within the program gave them the insight into the teaching profession. Coffey asserted that this particular context successfully bridged the gap between teacher education theory and practice. Boyle-Baise and McIntyre (2008) supported this argument in their book chapter focusing on developing a professional development school in a community context.

Recently, Zeichner (2010) argued for the creation of a *third space* in teacher education programs that brings together school and university-based teacher educators and practitioner and academic knowledge in new ways to enhance the learning of prospective teachers. In opposition to the traditional disconnect of campus and schools and to the assumption of academic knowledge as the authoritative source of knowledge for learning about teaching in traditional college and university models of teacher education third spaces bring practitioner and academic knowledge together in less hierarchical ways to create new learning opportunities for prospective teachers. He makes the point that it is crucial for teacher education programs to work with schools and communities in closer and more respectful ways across teachers' careers if we are to remain a source for future teachers.

More general arguments also are posited for multiple field experiences. One argument is that increasing the number and variety of placements can dilute any negative influence of any one context (Garibaldi, 1992). Zimpher (1990) claimed that a single field experience placement limits the student's ability to become reflective and restricts learning about school communities. Others, though, have argued that reflection is facilitated by more long-term placements (Schon, 1987).

Diversity

A generally accepted and understood goal for teacher education is the development of teachers capable of working with diverse student populations. Sleeter (2001) stated that one of the major challenges in preparing pre-service teachers for the 21st-century classroom, as well as for an increasingly competitive job market, is providing the necessary skills and background to effectively educate diverse populations of students.

The primary method for achieving the goal is placing students in field experiences in schools with diverse populations. Diversity sometimes is defined broadly, but its most typical application is in terms of racial/ethnic/economic differences. America's school children are becoming more ethnically and culturally diverse. This is particularly evident in the largest urban school systems across the country, where ethnic students

are a majority of the school-age population. This increase in diversity is accompanied by rising numbers of poor children, especially in inner city schools. These student demographic trends are in stark contrast to the demographic profile of the American teaching force. Over 86 percent of America teachers are European Americans, mostly from the middle class, suburban communities surrounding the city. The socio-cultural gap between teachers and students often has a negative effect on student learning and achievement. Since it is not likely that these demographic trends will be reversed in the foreseeable future, it is imperative that teacher education institutions begin to address them in their programs. In urban settings, teachers deal with the complexities of teaching children beset by poverty, deal with teaching children whose social class and/or ethnicity often is not that of the teacher; deal with bureaucratic inflexibility and social isolation. The numbers of teachers of color are diminishing while the numbers of students of color are rising (AACTE, 1987; Fuller, 1992; Graham, 1987; King, 1993; Tewell & Tribowitz 1987). Reasons for the shortage are related to finances, attitudes toward teaching, prestige, other career opportunities, competency tests, and integration (Tewel & Tribowitz, 1987; Graham, 1987; King, 1993), and solutions focus on recruitment (AACTE, 1987; Bainer, 1990; Henninger, 1989). Increasingly, though, it has become accepted that the majority white teaching force needs opportunities to learn how to teach diverse students.

Eisenhardt, Besnoy and Steele (2011-12) reported on a field experience program whereby pre-service teachers acquired a perspective of their students that transcended their preconceived notions. The pre-service teachers developed both knowledge of these diverse learners and very positive interpersonal relationships. The impact of the dissonance between their prior beliefs and experiences broadened their understanding of the range of students' needs and how these influence learning.

Mclntyre, Byrd, and Foxx (1996) summarized the findings from research on the impact of teacher education programs on preservice teachers.

> From these findings, three conclusions can be drawn. First, preservice teachers do not enter teacher education programs with the skills, knowledge, and attitudes necessary to work successfully with a diverse population of students. Second, although students can be educated to have greater awareness and understanding of issues regarding multicultural education, they do not necessarily practice what they have learned. Third, preservice students need to be placed in schools where they have the opportunity to work with a diverse student body. Furthermore, they need to be encouraged and supported in their analysis of decisions they and others make as teachers and the effects those decisions have on students (p. 183).

Weiner (1993) emphasized the importance of role models when learning to teach in urban schools. Additionally, Cochran-Smith (1991) insisted that urban teachers needed to learn to "teach against the grain."

> ...teaching against the grain is deeply embedded in the culture and history of teaching at individual schools and in the biographies of particular teachers and their individual or collaborative efforts to alter curricula, raise questions about common practices, and resist inappropriate decisions. These relationships can only be explored in the company of experienced teachers who are themselves engaged in complex, situation-specific, and sometimes losing struggles to work against the grain (p. 280).

Therefore, Miller and Mikulec (2014) believed that early field experiences also must be meaningful in the sense that they provide teacher candidates with opportunities to work with diverse populations of students. In terms of relating to the students, they found that the pre-service teacher participants were initially hesitant and lacked confidence in their ability as future teachers to interact with and relate to students in an urban setting. This clinical experience served to demystify diversity and provided teacher candidates with a demonstration of diversity in practice that led to the realization that "diverse" students have more in common with their peers than meets the eye. In a related study, Research reveals that field experiences are an important component of a teacher preparation program for achieving the goal of culturally responsive teaching (Lee, Eckrich, Lackey, & Showalter, 2010). However, in order to lead pre-service teachers toward this goal, it is important that teacher educators facilitate meaningful dialogue that examines pre-service teachers' existing dispositions and beliefs, as well as opportunities to for them apply knowledge to practice (He & Cooper, 2009). In a related study, Burbank, Ramirez and Bates (2016) indicated that there appears to be potential for helping teacher candidates understand the varying degrees of diversity and how they will respond to them during their teaching experience thru the use of critically reflective teaching. However, they stated that lingering questions remain regarding the depth of that impact when inconsistencies surface after teacher candidates leave their teacher preparation programs and enter the teaching profession.

As a result, teacher educators must seek out unique clinical experience sites that will challenge teacher candidates to redefine their definition of diversity and teaching.

Collaborative Review and Reform

Definitions of collaboration suggest that joint work between two kinds of organizations can produce cooperation, but collaboration requires each to stretch to meet the other (Darling-Hammond, 1994). Kanter (1984) asserted that collaboration is essential for innovation--"...to produce innovation, more complexity is essential; more relationships, more sources of information, more angles on the problem, more ways to pull in human and material resources, more freedom to walk around and across the organization (p. 148)."

Garland and Shippy (1995) found that traditionally, teacher education faculty work with teachers and administrators in public schools to provide a variety of clinical experiences for teacher candidates. Graham (2006) stated that in many countries there has been an attempt for teacher preparation programs to become increasingly more collaborative between the university and schools. Unfortunately, these arrangements are often more cooperative than collaborative, because in most instances they were programs initiated and directed by personnel from the college or university. Collaborative arrangements, however, are substantially different. They are viewed as (a) being true partnerships between colleges or universities and public schools; (b) involving shared decision-making, and in doing so, creating new roles, relationships, and responsibilities for all participants; and (C) focusing on outcomes that are intended to benefit the personnel and the programs at both institutions. The success of collaborative efforts rests on a variety of factors.

The key players during the field experience are the teacher candidate, the school-based teacher educator, and the campus-based teacher educator. This threesome is often referred to as the triad. A number of studies conducted in the United States, Great Britain, and Australia indicate that the primary roles and functions of each

member of this triad are typically implicit rather than explicit and are likely to be unclear (Guyton & Mclntyre, 1990; Cope, 1973; Tittle, 1974; Yates, 1981; Yee, 1967). Each member may, therefore, develop role conceptualizations and expectations that do not align with the expectations of other members of the triad.

Research also has shown this lack of clarity may give rise to a number of interpersonal problems or tensions within the triad, including the emergence of competitive versus cooperative attitudes, the inclination to become increasingly more negative toward one another, and the tendency to blame each other when problems arise (Tittle, 1974; Yee, 1967). Lack of clearly agreed upon and delineated goals, roles, and responsibilities not only hampers teacher education programs in general but also more specifically hinders the effectiveness of the triad as a supportive alliance to advance the growth and development of the teacher candidate (Mclntyre, Byrd, and Foxx, 1996).

In addition, Hancock and Gallard's (2004) study indicated that university teacher educators and K-12 teachers who host preservice teachers must be mindful of the tensions likely to result from participation in field experiences. Those tensions noted involve complex notions of teaching and learning that are based upon previous experiences as K-12 students, content of university methods courses, and current field experiences in K-12 schools. Additional factors almost certainly include subtle influences, such as cultural norms for teacher practice, established social interaction patterns, and tacitly held role conceptions. As preservice teachers gain experience and grow, it is important to consider the things that happen during and between field experiences. Their case study participants described viewing few examples of student-centered, experiential learning, providing them with little opportunity to explore that element of their own beliefs.

The findings of Hoffman, Werzel, Maloch, Greeter, Taylor, DeJulio, and Vlach's (2014) literature review of 46 studies indicated a need for a stronger theoretical framing of the work of cooperating teachers in supporting teacher development and a need for teacher education as a whole to be more proactive and responsible in the preparation of cooperating teachers.

True collaboration takes time. Collaborative ventures never proceed as smoothly and quickly as those undertaken by one or two individuals. It takes time to build trust and working relationships, particularly when forming partnerships among institutions with different missions and cultures. There are inevitable differences, disagreements and conflicts that must be resolved within this complex relationship. Both the public school and higher education institutions may look upon the partnership as an addition to an already heavy workload; consequently collaboration should ultimately be a part of the job rather than an addition to it (Sandholtz, 1996). Participants in the field experiences triad must take steps to collaboratively ensure that role expectations are made explicit and are clearly articulated among all three members of the triad. True collaboration also requires that the public schools share with higher education institutions the responsibility for the field-based portions of teacher education and incorporate the role of teacher education into the school structure.

Reflection and Analysis

Much research shows that interventions must affect teacher cognitions (i.e., teachers' thinking about their

own acts of teaching) in order to affect teacher performance. Research also shows strong links between teachers' cognition and student outcomes (higher order skills). Teacher education assumes that the more time observing practicing teachers, the better, but the value of observation (guided or unguided) in early field experiences is unknown (Arrastia, Rawls, Binkerhoff, & Roehrig, 2014). As a result, teacher education needs to move preservice teachers to higher conceptual levels, including more complex thinking about teaching and to influence teachers to make connections between their lives in classrooms and what is being learned (Jacobs, Yendol-Hoppey, & Dana, 2015). Caprano, Caprano, and Helfledt (2010) stated that these early field experiences must be meaningful and conducive to instilling confidence rather than simply fulfilling another requirement. This may be best achieved through structured field experiences that also require pre-service teachers to reflect on their experiences and the impact they have on their development as teachers.

There also is a growing acceptance of the belief that teaching performance is a function of complex intellectual processes. Sprinthall, Reiman and Thies-Sprinthall (1996) summarized findings from a research program/study of teacher education (Griffin, 1986). "Effective teacher education programs are based on a conception of teacher growth and development; acknowledge the complexities of classroom, school, and community; are grounded in a substantial and verifiable knowledge base; and are sensitive to the ways teachers think, feel, and make meanings from their experiences" (p. 687). The authors then advocated a model for cognitive-developmental instruction that includes: role taking, taking on a more complex role; reflection (journals, demonstrations, case studies for dialogue on the meaning of experience); balance of role taking and reflection that forms an interactive praxis; continuity; and a balance between support and challenge (p. 692). They advocated working on the development of programs that promote more efficient cognitive problem solving by teachers and on developing authentic assessments to judge the effectiveness of the interventions (p. 673).

Teachers' thought processes have been a subject of study for some time (Clark & Peterson, 1986). Many studies have shown some connection between teacher cognition and student outcomes. Miller (1981) found that people functioning at higher conceptual levels exhibited behaviors such as reduction in prejudice, greater empathic communication, a greater focus on internal control, more thoughtful decision making, more flexible teaching methods, more autonomy and interdependence, and superior communication and information processing. McKibbin and Joyce (1981) found a direct relationship between level of cognitive development and employment of innovative teaching methods learned in workshops. Sprinthall, Reiman, and Thies-Sprinthall (1996), in a review of the literature, found strong support for the relationship between cognitive developmental level and more competent, effective, and efficient teachers (p. 677). Fennema, Franke, Carpenter and Carey (1993) conducted a case study which showed a strong link between teacher conceptual complexity and student higher-order thinking and problem solving. Peterson, Fennema, Carpenter and Loef (1989) found that teachers at higher levels of cognitive complexity employed increased higher order teaching skills such as problem posing, active listening, ongoing assessment, and continuous adaptation. Knapp and Peterson (1991) found teachers at higher cognitive levels were more likely to use new and innovative teaching techniques. Kennedy (1991) also reported a connection between teachers' level of cognitive processing and student outcomes. Costa and Garmston (1994) summarized a number of studies that found a relationship between cognitive complexity of teachers and student achievement (Glickman, 1985; Sprinthall & Thies-Sprinthall, 1983). All of these studies support the need for an emphasis on developing teachers' cognitive development.

The literature also indicates that cognitive development is not automatic. King and Kitchener (1994) found that adults exhibit stage and sequence growth in reflective judgment with the highest stage being similar to Dewey's conception of scientific problem solving. Finally, Philipp, Ambrose, Lamb, Sowder, Thanheiser and Chauvot (2007) found that student teachers who were poised to emerge from student teaching as reflective practitioners were those most reflective about their own beliefs as compared to the beliefs of others.

This growth does not happen as a result of age or experience; it requires a stimulating and supportive environment along with appropriate interaction. A study (NCRTE, 1991) also found that experience is not necessarily an indicator of growth. There were no significant differences between novice and experienced teachers in elementary schools in attitudes, conceptual skills, and classroom practice. These studies strongly suggest that intervention is needed to promote teachers' cognitive growth. As Dewey (1938) posited, experience at times can be miseducative. There must be ways of drawing meaning from experience. Much theoretical support exists for developing the reflective ability of teachers (Schon, 1983, 1987; Reiman & Parramore, 1993; Sprinthall, Reiman, & Thies-Sprinthall, 1993). Ross (1988) asserted that teacher education programs must contribute to teacher reflectivity, and Nolan and Huber (1989) identified one of the goals of supervision as engaging teachers in reflection on practice.

Krug, Love, Mauzey and Dixon (2015) believe that a well-designed student teaching experience can help future teachers develop problem-solving confidence. In their study, they gave the problem-solving inventory (PSI) to university education majors in a pretest-posttest format where the teacher candidates responded before and after the completion of student teaching. Analyses indicated the student teachers thought they had more confidence for problem solving during the posttest condition as indicated by significance on the PSI's subscales. The semester spent in the classroom as a student teacher played an essential role in the development of the necessary subjective confidence for solving classroom problems.

Coaching (by peers and experts) is a procedure that shows much promise for affecting teachers' cognitions and for engaging them in reflection. Joyce and Showers' (1989) meta-analysis of more than 200 studies found a large effect size for coaching on the transfer of new skills and models of teaching learned in professional development. Several studies (Buttery, 1988; Phillips & Glickman, 1991) reported that developmentally based peer coaching had a positive effect on teachers' conceptual levels. Costa and Garmston (1994) summarized several studies that showed positive effects of cognitive coaching on teachers' cognitive development.

Maxie (2011) described a framework that recognizes the developmental nature of learning to teach and considers the field experience as an ideal opportunity for novice teachers to reflect on self, contexts, relationships with students, and the work of teaching. During the early field experience, self refers to introspection into teaching-related concerns and a focus on personal change with respect to teaching science. She described reflections on self as captured in autobiographies, journals, and in lesson analyses. Contexts include the classroom, school, and community and offer the prospective teacher an opportunity to reflect on the roles and responsibilities of teachers, the structure of the school, and the relationship of the school to the community, particularly with respect to the teaching and learning of science. In this framework, participants reflect on contexts in weekly journals. As participants work with students, they reflect upon what they are learning about students from student work and from interactions

with students. They examine how students come to understand science concepts. They become familiar with cultures, languages and styles of learning that students bring to the classroom. This is the domain of relationships. Finally, participants reflect on specific teacher knowledge and activities, including how teachers craft successful environments for student learning; how teachers support student learning; and, how teachers plan instruction.

Selection, Preparation and Assignment of Campus-Based and School-Based Teacher Educators

Specific guidance for teacher candidates is valuable (Odell, 1986; Darling-Hammond, 1995). Educators have concluded that this guidance should come from school-based and campus-based teacher educators. The school-based teacher educators should be specially prepared, trained in supervision, aware of the goals and objectives of the field experience, and have holistic knowledge about the teacher education program in which they are participating (Applegate, 1982; Faire, 1994; Killian & Mclntyre, 1987). They also should be professional role models who are able to articulate their concepts of the teaching profession and who are active in professional organizations (Grimmett & Ratzlaff, 1986; Hauwiller, Abel, Ausel, & Sparapani, 1988-89) Good school-based teacher educators are mentors who provide opportunities for the teacher candidate to reflect upon and understand teaching (Lewis, 1993; Rekkas, 1995) and coaches who provide regular feedback (Farris, Henninger, & Bischoff, 1991; Mclntyre, Byrd, & Foxx, 1996).

Campus-based teacher educators should be involved in the field experience and should be associated with the university and its programs beyond the supervision of the particular field experience (Enz, Kimerer, & Freeman, 1996; Goodlad, 1990). They also should be specially prepared for the role (Faire, 1994). The campus-based teacher educator is the liaison between campus and school and communicates the goals and objectives of the program to school personnel and to the teacher candidate when necessary (Goodlad, 1990; Johnson, 1988). It is desirable that the campus-based educator have associations with the school beyond the single field experience, participates in school activities, provides professional development opportunities for school-based teacher educators, is ultimately responsible for evaluating the teacher candidate and should provide regular feedback to the teacher candidate in collaboration with school-based educators (Applegate & Lasley, 1986). The campus-based and school-based teacher educators facilitate formative and summative evaluations, and provide holistic evaluation (Williams, et al. 1997).

Becher and Ade (1982) found that being a good role model, in and of itself, is not sufficient for school-based teacher educators to influence positively the behaviors of teacher candidates. It is important that they give feedback and allow opportunities for innovation. Many school-based educators are unable or unwilling to articulate good teaching practices (Wright, Silvern, & Burkhater, 1982). Several studies found that teachers with specific training in clinical supervision are better at giving feedback to teacher candidates (Killian and Mclntyre. 1986); improved their communication with teacher candidates (Hauwiller, Abel, Ausel, and Sparapani, 1988-89); and made positive changes in teachers' cognitive growth, active listening, use of different teaching models, and self-direction (Thies-Sprinhall, 1984; 1986). Joyce and Showers (1980) analyzed over 200 studies and concluded that instruction, demonstration, and coaching were all essential elements of supervision, and their later research (Joyce & Showers, 1995) confirmed the importance of coaching skills for supervisors. These findings suggested that school-based educators need to be educated to have the maximum influence on teacher candidates'

teaching. Graham's study (2006) included interview data collected through extended conversations with cooperating teachers and highlighted four conditions—strong organizational structures with clearly articulated expectations for all participants; affective engagement among participants; cognitive involvement with the complex intellectual tasks of teaching, and professional mentoring—that contribute to successful field experiences.

The theories of Vygotsky (1978) also support education for school-based and campus-based teacher educators. Vygotsky believed growth is enhanced by interaction with a more experienced person in one's zone of proximate development, the place at which one can perform adequately with the help of the more experienced person. Supervisors of teacher candidates can benefit from knowing this theory and learning the kinds of social interaction and dialogue that will promote teacher growth.

Assessment in Field Experiences

Program feedback and evaluation are important aspects of field experiences programs. Assessing teacher candidates in terms of goals of the program can be a validation device for the program, as well as a source of information for program improvement.

Mclntyre, Byrd, and Foxx (1996) stated, "The evaluations of students in practicum experiences are based on a limited knowledge base." (p. 186). They advocate models of evaluation that incorporate demonstration of competencies (more quantitative, low inference measures of teaching) as well as more naturalistic, holistic approaches (more qualitative, high inference measures of teaching. If assessment is authentic, then it is useful not only in providing information to teacher candidates about their teaching but also is useful in assessing if the teacher education program is meeting its goals. Tellez (1996) stated, "Assessments are authentic to the degree to which they are meaningful to and helpful for teachers in the exploration of their practices" (p. 707). The purpose of assessment is teacher growth and development. Measuring teachers' development within a framework of teacher education program goals is the best way to assess field experience programs. Obviously if the goals include such outcomes as reflective teaching, then more traditional, quantitative, low inference models of assessment will not yield good information for the program. Support for observations in combination with written feedback and conferences is abundant (Wood, 1991; Wilkins, Shin & Ainsworth, 2009). Goldhammer, Anderson, and Krajewski (1993) provided a strong rationale for conducting conferences that address longitudinal issues related to instructional decisions and teaching and promote self-reflection. Portfolios allow teacher candidates to show actions and decisions made over time by compiling artifacts of their work. Candidates can document their work and analyze their decision-making processes. The value of portfolios for teacher growth is well-documented. InTASC's Performance Assessment Development Project (1996) offers criteria for evaluating portfolios. Many institutions include portfolio requirements in their teacher education programs.

Conclusions

□ Field experiences are part of a complex developmental process of becoming a teacher. Field experiences should recognize the developmental level(s) of the teacher candidates engaged in them.

□ More field experiences are not the answer. Better-planned and more deliberative field experiences based on program goals are more likely to influence teacher candidates in positive ways.

□ Field experience programs are the co-responsibility of institutions of higher education and of P-12 schools and should be collaboratively developed and implemented.

□ Field experience programs must attend to helping teacher candidates be able to teach diverse children in diverse settings.

□ Reflection on and analysis of teaching and learning is an essential component of learning to teach.

□ Well-qualified school based and campus based teacher educators who work with teacher candidates are essential to the appropriate development of teacher candidates.

□ Contexts for field experiences should be carefully chosen.

□ Effective field experience programs are highly related to the teacher education program 's goals and standards.

□ Feedback and assessment are essential characteristics of good field experience programs.

□ Good communication among all parties involved in field experiences is essential.

Definition of Terms

Campus-Based Teacher Educator -- the person from the college/university who works with a teacher candidate on campus and in the schools

Collaboration -- partnerships between schools and colleges/universities that include shared decision making and mutual benefits and are focused on simultaneous reform of schools and higher education. This term denotes relationships that are deeper than cooperative ones in which schools simply participate in the

teacher education program designed by higher education institutions.

Context -- the social, political, economic, morale conditions prevalent in a classroom, school, or school system.

Diverse Student Populations — populations of students representing ethnic, racial, socioeconomic, intellectual ability, and physical differences

Field Experiences -- denotes the entire range of school experiences, includes early field experiences to student teaching

Program outcome — what should happen in a teacher education program when a standard is achieved

Performance outcome — what the teacher candidate should know and be able when the standard is achieved

School-Based Teacher Educator — the P-12 teacher with whom a teacher candidate is working in a school

Teacher candidate --- a person engaged in a field experience who is being prepared to be a teacher

Standards for Field Experiences in Teacher Education

Standard 1.   Field experiences occur in sites characterized by school/campus collaboration where there is a commitment to simultaneous review and reform of the pre-K-12 and teacher education programs for the purpose of better serving students in the schools.

Indicator:

1.a   The goals and mission of the campus-based teacher education program as well as the goals and processes of the field experiences component are developed and agreed upon collaboratively by campus based and school based teacher educators and administrators.

Standard 2.   Field experiences are assessed using a model that addresses realistic goals and objectives and promotes high expectations. Assessment is ongoing and used for program improvement. The model includes input from those involved in field experiences regarding areas such as: Context/Setting, Placement Process, Collaborative Relationships/Fostering Professionalism, Supervisory Roles, Program Goals, Outcomes for Teacher Candidates, Benefits to PK-12 Students, Resources, Rewards and Accountability, and Compliance with State and Local Policies/Practices

Indicators:

2.a   Field experiences are designed collaboratively to enhance the education of P-12 students, and benefits to the students are made clear to all stakeholders in the process, including parents.

2.b   Collaboration takes place among school and campus administrators, teacher education faculty, and teachers.

2.c   The field experiences program is based on knowledge from research, theory and practice.

2.d   Decisions concerning the field experiences program are made collaboratively.

2.e   Roles and functions of all parties in the field experiences are clear.

2.f   Both campus and school-based teacher educators have ownership of the field experiences program and work on issues and problems together.

2.g   Regular communication is well articulated, ongoing and consistent among all constituent groups.

2.h   Campus-based teacher educators collaboratively develop and review program evaluations.

2.i   The program has a procedure for identifying problems that involves campus and school-based teacher educators in addressing the problems.

2.k   The program conducts collaborative research and applies it to program improvement.

Program Outcomes:

2.l   Program assessment consistently informs practice.

2.m   Field experiences programs reflect the best knowledge from research, theory, and practice.

2.n   Campus and school-based teacher educators' standards and expectations for field experiences are consistent for all parties.

Standard 3. The selection, preparation, and assignment of school-based teacher educators are systematic, collaborative, and based on a framework agreed upon by campus-based and school-based educators.

Indicators:

3.a   Teacher candidates work under the direct guidance of a school-based teacher educator who is able to serve as professional role model, mentor, and coach in a manner that is consistent with program goals.

3.b   School-based teacher educators are selected based on experience, quality of instruction, and other relevant criteria developed by campus based and school based educators.

3.c   Campus-based educators and school administrators collaboratively choose school-based teacher educators.

3.d   Program objectives and assessment are well articulated.

3.e   School-based teacher educators are provided written guidelines and teacher development opportunities.

Program Outcome:

3.f   School-based teacher educators are well qualified to work with teacher candidates in field experiences.

Standard 4. The selection, preparation, and assignment of campus-based teacher educators are systematic, collaborative, and based on a framework agreed upon by campus-based and school-based educators.

Indicator:

4.a   Each teacher candidate interacts in a variety of ways with a prepared campus-based educator who is able to serve as a liaison, collaborator, and clinical instructor in the field experience program.

Program Outcomes:

4.b   Campus-based educators are well-versed in knowledge and skills regarding teacher development, supervision, conferencing, and assessment.

4.c   The teacher education program provides guidelines and information to describe the campus-based educator's job/role.

4.d   School based educators are involved in the selection of campus-based educators.

4.e   Campus-based teacher educators are involved in teacher education program development and implementation.

4.f   The teacher education program has procedures for facilitating communication, meetings, workshops, and assistance with problems.

Performance Outcome:

4.g   Campus-based teacher educators are well qualified to work with teacher candidates in field experiences.

Standard 5. Engagement among teacher candidates, campus-based teacher educators and school-based teacher educators is focused on the teacher candidate's professional growth linked to teaching and student learning. This interaction focuses on specified areas featured in the teacher education program as well as course outcomes that include high standards developed by the program and current state and national standards.

Indicators:

5.a   All field experience participants demonstrate pedagogical and content knowledge, skills, and dispositions that are congruent with teacher education program outcomes.

5.b   Field experience interaction is aligned with specific teacher education program outcomes.

5.c   The focus of demonstrations of professional learning match program goals.

5.d   Field experiences are aligned to meet programmatic and/or national/state standards.

Program Outcome:

5.e   Teacher candidates participate in field experiences focused on demonstrations of professional growth in relation to specific teacher education program outcomes.

Performance Outcomes:

5.f   Teacher candidates support practice with theory and research.

5.g   Teacher candidates reflect on teaching.

5.h   Teacher candidates make sound educational decisions.

5.i   Teacher candidates articulate the connections and/or disconnections between the teacher education program outcomes and practices in the field.

5.j   Teacher candidates demonstrate increased professional learning in areas outlined above.

Standard 6. Teacher candidates receive verbal and written feedback on a continuous formative and summative basis regarding progress in demonstrating professional learning in relation to explicitly stated program and course outcomes agreed upon by campus-based and school-based educators.

Indicators:

6.a   The program provides resources for giving feedback to teacher candidates.

6.b   The program has systematic procedures for assessing the readiness of teacher candidates to progress in the program and to enter the teaching profession.

6.c   The experience is designed with regularly scheduled times for conferences among the teacher candidate, school-based teacher educator, and campus-based teacher educator.

6.d   Performance-based feedback and assessment procedures incorporate multiple procedures such as professional portfolios, self-assessment, and peer-assessment.

6.e   Teacher candidates are aware of the field experience expectations.

6.f   Teacher candidates develop the knowledge, skills, and attitudes in each field experience needed to be successful at the next level of field experiences and to be a competent teacher.

Program Outcomes:

6.g   Teacher candidates are provided feedback for improving practice.

6.f   Assessment and decisions about progression in the teacher education program and entry to the profession are shared functions between the campus and school-based teacher educators.

Performance Outcomes:

6.g   Teacher candidates use feedback on practice to make changes to increase student learning.

6.h   Teacher candidates assess their own teaching on a regular basis.

Standard 7. Teacher candidates, school-based teacher educators, and campus-based teacher educators interact on a regular basis about issues, best practice, and research related to teaching and learning through frequent on-site observations and conferences, cross-site interactions, and the use of interactive, electronic communication networks which link school, campus, and home locations.

Indicators:

7.a   Teacher candidates, school-based teacher educators, and campus-based teacher educators communicate with each other in some way at least once a week.

7.b   Quality interaction among teacher candidates, school-based teacher educators, and campus-based teacher educators facilitates a professional learning community.

Program Outcomes:

7.c   Teacher candidates and school-based and campus-based teacher educators experience satisfaction with their interactions.

7.d   School and campus-based teacher educators create safe and supportive environments for constructive criticism and reflection.

7.e   Teacher candidates are part of an ongoing dialogue about teaching focused on important aspects of teaching and learning.

7.f   Problems during field experiences are resolved in a timely manner.

Performance Outcomes:

> 7.g   Teacher candidates demonstrate increased self-confidence and skills in communication.

> 7.h   Teacher candidates understand that teaching is complex and demonstrate an ability to reflect on educational issues and to apply good decision making skills.

Standard 8. Field experiences incorporate opportunities for ongoing reflection and analysis of teaching and learning, conditions of schooling, and student development in light of teacher education program goals agreed upon by campus and school-based educators.

> **Indicators:**

> 8.a   Teacher candidates routinely are required to reflect on their field experiences.

> 8.b   Campus and school-based teacher educators pose critical thinking questions about the nature of teaching, learning, and schooling to teacher candidates.

> 8.c   Tools for reflection, such as journals and portfolios, are a part of field experiences.

> 8.d   Teacher candidates analyze teaching in terms of "why" as well as "how".

> **Program Outcomes:**

> 8.e   Teacher candidates understand that teaching is complex.

> 8.f   Teacher candidates view teaching as ongoing decision-making rather than a prescriptive activity.

> 8.g   Teacher candidates achieve praxis.

> **Performance Outcomes:**

> 8.h   Teacher candidates discuss the complexities of the teaching role in meeting the challenges of the classroom.

> 8.i   Teacher candidates demonstrate an ability to be an effective decision maker using data regarding students, school context, goals, and available knowledge.

Standard 9. Field experiences occur in a context and in a sequence consistent with the goals and mission of the teacher education program.

Indicators:

9.a   Campus and school-based teacher educators hold compatible views and philosophies about teaching and learning.

9.b   The content of campus-based education is modeled in school-based field experiences.

9.c   The changing nature of schools is studied in teacher education.

9.d   The teacher education program has varied field experiences designed to meet varied and sequential goals of the teacher education program.

9.e   Field experiences are sequential and cumulative and based on models of professional development.

9.f   The scope and sequence of field experiences is highly related to the developmental stages of the teacher candidates.

Program Outcomes:

9.g   Field placements meet different goals of the teacher education program.

9.h   Field experiences are sequenced to meet the developmental needs of teacher candidates.

Performance Outcomes:

9.i   Teacher candidates relate theory and practice to instructional decision-making.

Section 10. Field experiences occur in contexts that welcome teacher candidates with a warm, supportive environment.

Indicators:

10.a   Teacher candidates feel comfortable in the schools in which they are placed.

10.b   Stakeholders are aware of benefits to P-12 students resulting from having teacher candidates in their classrooms.

10.c   Administrators, teachers, students, and parents in the school setting want and support teacher candidates in their schools and classrooms.

Program Outcome:

10.d   Teacher candidates are able to learn more from field experiences because their personal standing in the school is clear, and they feel welcome.

Performance Outcome:

10.e   Teacher candidates participate in the life of the school as a member of a learning community.

Standard 11. Field experiences occur with diverse student populations and in diverse settings.

Indicators:

11.a   Teacher candidates have extended field experiences with diverse school populations including students of different age levels, diverse racial and ethnic groups, diverse socioeconomic backgrounds, and diverse special needs.

11.b   The teacher education program has a systematic way of providing diverse placements for teacher candidates.

11.c   Teacher candidates have field experiences in schools with diverse administrative, curricular, and structural features.

Program Outcome:

11.d   Teacher candidates have opportunities to work with diverse student populations and in different school structures.

Performance Outcomes:

11.e   Teacher candidates plan instruction that addresses the needs and interests of diverse students.

11.f   Teacher candidates work effectively in a variety of settings with diverse students.

Standard 12. Field experience programs receive adequate resources including financial support for the administration and implementation of quality field experiences.

Indicators:

12.a   Field experiences programs are able to meet the standards above as demonstrated by the indicators.

12.b   Administration of field experiences is a school based and a campus based activity and includes teacher educators and/or administrators from both contexts.

12.d   A person or group of persons is designated and compensated for handling logistical responsibilities of the field experience program including teacher candidate clearance; procurement and placement of teacher candidates in field assignments; development of field experience guidelines, handbooks, etc.; arranging seminars and meetings that include large groups of teacher candidates; and developing and implementing assessment and research procedures.

12.e   School and campus based teacher educators take responsibility for providing resources.

References

American Association of Colleges for Teacher Education. (1987). Minority teachers' recruitment & retention: A public policy. Washington, DC: Author.

Applegate, J. (1982). The impact of construct system development on communication and impression formation in persuasive contexts. *Communication Monographs, 49*(4), 277-289.

Applegate, & Lasley,. (1985). Students' expectations for early field experience. *Texas Technical Journal of Education, 12*(1), 27-36.

Arrastia, M., Caridad, R., E. S., Brinkerhoff, E., Hammond, E. & Roehrig, A. D. (2014). The nature of elementary preservice teachers' reflection during an early field experience. *Reflective Practice,* 15(4), 427-444.

Bainer, C. (1990). The relationship between instructional domain and the content of reflection among preservice teachers. Paper presented at the annual meeting of the Midwestern Educational Research Association, Chicago.

Becher, R., & Ade, W. (1982). The relationship of field placement characteristics and students potential field performance abilities to clinical experience performance rating. *Journal of Teacher Education, 33*(2), 24-30.

Black, A. & Ammon, P. (1992). A developmental-constructivist approach to teacher education. *Journal of Teacher Education*, 13(2), 189-206.

Boyle-Baise, M. & McIntyre, D.J. (2008). What kind of experience? Preparing teachers in PDS or community settings. In M. Cochran-Smith, S. Feiman-Nemser, D.J.McIntyre, & K. Demers, (Eds.). *Handbook of Research in Teacher Education: Enduring Questions in Changing Contexts. Third Edition*. (pp. 307-330) New York: Rouledge/Taylor & Francis Group.

Burbank, M.D., Ramirez, L.A. & Bates, A. J. (2016). The impact of critically reflective teaching: A continuum of rhetoric. *Action in Teacher Education*, 38(2), 104-119.

Buttery, T. J. (1988). Group clinical supervision as a feedback process. *Journal of Research and Development in Education, 21*(4), 5-12.

Council for the Accreditation of Educators Preparation (2014). *Standards*. Retrieved from
http://caepnet.org/standards/

Caprano, M,, Caprano, R, M,, & Helfeldt, J, (2010), Do differing types of field experiences
make a difference in teacher candidates' perceived level of competence? *Teacher Education Quarterly*, 37(1), 131-154.

Clark, C. And Peterson, P. (1986). Teachers' thought processes in M. C. Wittrock (Ed.). *Handbook of Research in Teaching*, 3rd ed., New York: Macmillan Publishing Co.

Cochran-Smith, M. (1991). Reinventing student teaching. *Journal of Teacher Education, 42*(2), 104-118.

Cope, E. (1973). School experience and student learning. In D. E. Loomas (Ed.), *The Education of Teachers in Britain* (p. 243-261). London: Wiley.

Costa, A.L. & Garmston, RJ. (1994). *Cognitive coaching: A foundation for renaissance schools*. Norwood, MA: Christopher-Gordon Publishers, Inc.

Darling-Hammond, L. (1994). *Professional development schools*. Mew York: Columbia University, Teachers College.

Darling-Hammond, L. & Bransford, J. (Eds.) (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do.* Jossey-Bass Wiley: San Francisco.

Dewey, J. (1904). The relation of theory to practice in education. In National Society for the Study of Education (Ed.), The relation of theory to practice in the education of teachers. Third yearbook, Part 1 . Bloomington, IL: Public School Publishing Co.

Eisenhardt, S, Besnoy, K. & Steele, (2011-2012) Creating Dissonance in Pre-Service Teachers' Field Experiences, *SRATE Journal*, 21(1), 1-10.

Enz, B., Kimerer, K., & Freeman, D. (1997). Does the university have an obligation to care? *The Educational Forum, V.62*, 62-73.

Faire, M. (1994). Improving the practicum: The professional development needs of lecturers, associate teachers, and student teachers. Paper presented at the annual conference of Australian Teacher Education Association (24th, Brisbane, Queensland, Australia, July 3-6, 1994).

Farris, P., Henniger, M., & Bischoff, J. (1991). After the wave of reform, the role of early field experiences in elementary teacher education. *Action in Teacher Education, 13*(2), 20-24.

Fennema, E., Franke, M., Carpenter, T., & Carey, D. (1993). Using children's mathematical Knowledge in instruction. *American Educational Research Journal*, 30(3), 555-584.

Fuller, M. L. (1992). Monocultural teachers & multicultural students: A demographic clash. *Teaching Education, 4*(2), 87-93.

Garibaldi, A. (1992). Preparing teachers. In M. Dilworth (Ed.), Diversity in teacher education (pp. 23-39). San Francisco: Jossey-Bass.

Garland, C. & Shippy, V. (1995). Perspectives on the future. Guiding clinical experiences. Norwood, NJ: Ablex.

Glickman. (1985). The supervisor's challenge: Changing the teacher's work environment. *Educational Leadership, 42*(4), 38-40.

Goldhammer, Anderson , & Krajewski. (1993). Clinical supervision: special methods for the supervision of teachers. New York: Holt, Rhinehart, and Winston.

Goldstein, L.S. & Lake, V.E. (2003). The impact of field experience on preservice teachers' understandings of caring. *Teacher Education Quarterly*, September 2003, 115-132.

Goodlad, J. (1990). Teachers for our nation's schools. San Francisco: Jossey-Bass.

Goodlad, J., Soder, R., & Sirotnik, K. (1990). Places where teachers are taught. San Francisco: Jossey-Bass.

Graham, P. A. (1987). Black teachers: A drastically scarce resource. *Phi Delta Kappa* (April), 598-605.

Graham (2006). Conditions for successful field experiences: Perceptions of cooperating teachers, *Teaching and Teacher Education*, 22 1118–1129.

Griffin, G. (1986). Clinical teacher education. In J. Hoffman & S. Edwards (Eds.), Reality and reform in clinical teacher education (pp. 1 -24). New York: Random House.

Grimmett, P. P. & Ratzlaff, H. C. (1986). Expectations for the cooperating teacher role. *Journal of Teacher Education, 37*(6), 41-50.

Guyton, E. & Mclntyre, D.J. (1990). Student teaching and field experiences. In W. R. Houston (Ed.), Handbook of research on teacher education (pp. 514-534). New York: Macmillan.

Guyton, E. & Wesche, M. (1996). Relationships among school context and student teachers' attitudes and performance. In Mclntyre, D.J. & Byrd, D.M., Preparing tomorrow's teachers: The field experience. Thousand Oaks, CA: Corwin.

Hancock, E.S. & Gallard, A.J. (2004). Preservice Science Teachers' Beliefs About Teaching and Learning: The Influence of K-12 Field Experiences, *Journal of Science Teacher Education* 15(4): 281–291.

He, Y., & Cooper, J. E. (2009). Tbe ABCs for preservice teacher cultural competency development. *Teaching Education*, 20(3), 305-322.

Henninger, M. L. (1989). Recruiting minority students: Issues & options. *Journal of Teacher Education, 40*(6), 35-39.

Hauwiller, J., Abel, F., Ausel, D., & Sparapani, E. (1988-1989). Enhancing the effectiveness of cooperating teachers. *Action in Teacher Education*, 10(4), 42-46.

Hoffman, J., Werzel, M. M., Maloch, B., Greeter, E., Taylor, L., DeJulio, S., Vlach, S.K. (2015). What can we learn from studying the coaching interactions between cooperating teachers and preservice teachers? A literature review. *Teaching and Teacher Education*, Vol. 52, 99-112.

Howey, K. (1986). The next generation of teacher preparation programs. In T. Lasley (Ed.), The dynamics of change in teacher education (pp. 161-185). Washington, DC: American Association of Colleges for Teacher Education.

Howey, K. &Zimpher, N. (1989). Profiles of preservice teacher education. Albany: State University of New York Press.

Hoy, W. K. & Feldman, J. A. (1987). Organizational health: The concept and its measure. *Journal of Research and Development in Education, v. 20*,30-38.

Interstate New teacher Assessment and Support Consortium. (1996). Model standards for beginning teacher licensing and development: A resource for state dialogue. Washington, DC: Council of State School Officers.

Jacobs, J., Yendol-Hoppey, D. & Dana, N. F. (2015) Preparing the next generation of teacher educators: The role of practitioner inquiry, *Action in Teacher Education*, 37(4), 373-396.

Johnson, P. T. (1988). Improving the curriculum for limited English speaking students at Sierra Junior High. *NAASP Bulletin*, v.72, 95-100.

Kagan, D. M. (1992). Professional growth among preservice and beginning teachers. *Review of Educational Research, v. 62*(2), 129-169.

Kanter, R.M. (1984). The change masters. New York: Simon & Schuster.

Kennedy, M. (1991). An agenda for research on teacher learning (technical report). East Lansing, MI: Michigan State University.

King, S. H. (1993). The limited presence of African American teachers. *Review of Educational Research, 63*(2), 115-150.

Knapp, N., & Peterson, P. (1991, April). What does CGI mean to you? Teachers' ideas of a research-based intervention four years later. Paper presented at the annual meeting of the American Educational Research Association, Chicago.

Krug, K., Love, J., Mauzey, E. & Dixon, W. (2015) Problem solving ability confidence levels among student teachers after a semester in the classroom, *College Student Journal*, 49(3). pp.331-340.

Lee, R. E., Eckricb, L. T., Lackey, C, & Showalter, B. D. (2010). Pre-service teacher pathways to urban Teaching: A partnership model for nurturing community-based urban teacher prepararation. *Teacher Education Quarterly*, 37(3), 101-122.

Maxie, A. (2001). Developing early field experiences in a blended teacher education Program: From policy to practice." *Teacher Education Quarterly*, Winter, 115-131.

McKibbin, M., & Joyce, B. R. (1981). Psychological states. Theory into Practice, 19(4), 248-255. McNerney, R. F. & Carrier, C. A. (1981). Teacher development. New York: Macmillan Publishing Company.

Mclntyre, D. J., Byrd, D. M. & Foxx, S. M. (1996). Field and laboratory experiences. In J. Sikula, T. J. Buttery, & E. Guyton (Eds.), *Handbook of Research on Teacher Education* (2nd ed., pp. 171-193). New York: Macmillan.

Miller, P.C. & Mikulec, E.A. (2014), Pre-Service Teachers Confronting Issues of Diversity Though a Radical Field Experience, Multicultural Education, 21(2), 18-24.

Monk, D. (2015). Reflections on teacher preparation, Symposium: 21st Century Ecellence in Education: Part 2. Published online, Springer Science+Business Media New York: 21 April 2015.

National Council for Accreditation on Teacher Education (NCATE). (1995). Standards, procedures, policies for the accreditation of professional education units. Washington, D.C.: NCATE.

Nolan, T., & Huber, T. (1989). Nurturing the reflective practitioner through instructional supervision: A review of the literature. *Journal of Curriculum and Supervision, 4*(2), 126-145.

Peterson, P., Fennema, E., Carpenter, T., & Loef, M. (1989). Teachers' pedagogical content beliefs in mathematics. *Cognition & Instruction, 6*(1), 1-40.

Philipp, R.A., Ambrose,R., Lamb, L.L.C., Sowder, J.T., Schappelle, B.P., Sowder, L., Thanheiser, E. and Chauvot, J. (2007) Effects of Early Field Experiences on the Mathematical Content Knowledge and Beliefs of Prospective Elementary School Teachers: An Experimental Study. *Journal for Research in Mathematics Education,* Vol. 38, No. 5 pp. 438-476

Reiman, A. R., & Paramore, B. M. (1993). Promoting preservice teacher development through extended field experience. In M. O'Hair & S. Odell (Eds.), Teacher education yearbook I: Diversity and teaching (pp. 11-121). Fort Worth, Harcourt Brace Jovanovich.

Rekkas, A. J. (1994). Early field experience: How well are student's expectations met? Paper presented at the Annual Meeting of the Midwestern Educational Research Association (Chicago, IL, October 13, 1994).

Ross, D. (1988). Reflective teaching: Meaning and implication for preservice teacher educators. In H. Waxman, H. J. Freilberg, J. Vaugham, & M. Weil (Eds.), Images of reflection in teacher education. Reston, VA: Association of Teacher Educators.

Roth, R. (1996). Standards for certification, licensure, and accreditation. In J. Sikula, T. J. Buttery, & E. Guyton, (Eds.), Handbook of research on teacher education (2nd ed., pp. 242-278). New York: Macmillan.

Savage, Cannon, & Sutters (2015). The Yellow Brick Road to Licensure: Mentoring Student Teachers through the Practicum Experience. *Art Education,* 22-27.

Schon, D. (1983). The reflective practitioner. New York: Basic Books.

Schon, D. (1987). Educating the reflective practitioner. San Francisco, CA: Jossey-Bass.

Sleeter, C. (2001). Preparing teachers for culturally diverse schools: Research and the overwhelming presence of whiteness. *Journal of Teacher Education*, 52(2), 94-106.

SprinthalI, N., & Thies-Sprinthall, L. (1983). The teacher as an adult learner — A cognitive developmental view. Staff Development: 82nd Yearbook of the National Society for the Study of Education, Part II, Chicago, IL: University of Chicago Press.

Sprinthal I, N. A., Reiman, A. J., & Thies-Sprinthall, L. (1993). Roletaking and reflection: Promoting the conceptual and moral development of teachers. *Learning and Individual Differences, 5*(4), 283-299.

Sprinthall, N. A., Reiman, A. J., & Thies-Sprinthall, L. (1996). Teacher professional development. In J. Sikula., T. Buttery and E. Guyton (Eds.). Handbook of research in teacher education. New York: Macmillan.

Tellez, K. (1996). Authentic assessment. In J. Sikula, T. J. Buttery, & E. Guyton (Eds.), Handbook of research in teacher education (2nd ed., pp. 704-721). New York: Macmillan.

Tewell, K. J. & Trubowitz, S. (1987). The minority group teacher: An endangered species. *Urban Education*, 22(3), 355-364.

Tittle, C. K. (1974). Student teaching: Attitudes and research bases for change in school and university. Metuchen, NJ: Scarecrow.

Vygotsky, L.S. (1978). Mind in society. Cambridge, MA: Harvard University Press.

Weiner, C . (1993). Preparing teachers for urban schools: Lessons from thirty years of school reform. New York: Teacher College Press.

Wilkins, E.A., Shin, E., & Ainsworth, J. (2009). The effects of using peer feedback practices with elementary education teacher candidates. *Teacher Education Quarterly, 36*(2), 79-93.

Williams, D., Ramanthan, H., Smith, D., Cruz, J., & Lipsett, L. (1997). Problems related to participants' roles and programmatic goals in student teaching supervision. *The Midwestern Researcher, 10*(4), 2-10.

Winitsky, N. Stoddart, T., & O'Keefe, P. (1992). Great expectations: Emergent professional development schools. *Journal of Teacher Education, 43*(1), 3-18.

Wright, P. J., Silvern, S. B., & Burkhater, B. B. (1982). An evaluation of teacher input in field-based instruction. *Journal of Research and Development in Education, 15*(2), 34-37.

Yates, J. W. (1981). Student teaching in England: Results of a recent survey. *Journal of Teacher Education, 32*(5), 44-47.

Yee, A. H. (1967). The student teaching triad: The relationship of attitudes among student teachers, college supervisors, and cooperating teachers. Austin: University of Texas, College of Education.

Zeichner, K. (1982). Reflective teaching and field-based experience in teacher education. *Interchange, 12*(4), 1-21.

Zeichner, K. (2010). University-based teacher education: Rethinking the connections between campus courses and field, Journal of Teacher Education, 61(89), 89-99.

Zeichner, K. & Liston, D. (1987). Teaching student teachers to reflect. *Harvard Educational Review, 57*(1), 23-48.

Zeichner, K. & Tabachnik, B. R. (1982). The belief systems of university supervisors in an elementary student teaching program. *Journal of Education for Teaching, 8*(1), 35-54.

Zimpher, N. L. (1990). Creating professional development school sites. *Theory into Practice,* 29(1), 42-49.