

A Systems Perspective on Practicum Experiences in Early Childhood Teacher Education: Focus on Interprofessional Relationships

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Abstract High quality early childhood teachers have a wealth of knowledge and use a range of skills in their daily classroom practices, and research has consistently demonstrated the positive influence effective early childhood teachers have on children’s development and long-term outcomes. Given the importance of practicum experiences in the development of effective teachers, exploration and understanding of these experiences for early childhood teacher candidates is warranted. The relationship between the cooperating teacher and teacher candidate can be viewed as a central element in the experience; this relationship influences and is influenced by additional elements within the practicum experience, including: communication, beliefs, fit, knowledge and learning. In this article, each of these elements is explored, and the interrelatedness of the elements within the practicum experience is discussed. A systems perspective is used to describe the multiple elements of the practicum experiences in early childhood teacher preparation programs, not only to explore the practicum experience, but also to develop recommendations and a research agenda.

Keywords Early childhood education · Teacher preparation · Practica

Introduction

Effective teachers for young children provide the critical foundation for learning and development and set children on a trajectory of social, emotional and academic success (National Institute of Child Health and Human Development (NICHD) Early Child Care Research Network 2002, 2003; Shonkoff and Phillips 2000; Peisner-Feinberg et al. 1999). Even more compelling are the data that teachers’ specialized training in early childhood education is linked with positive child outcomes and high levels of classroom quality (Barnett 2003; Hamre et al. 2014). Although early childhood education has a long history, systematically examining the preparation of teachers for the education of young children is a more recent undertaking in the field. Understanding how best to prepare early childhood teachers is critical to ensuring that a high-quality workforce is available to meet the needs of the number children and variety of settings in which young children receive education and care. In recent recommendations, several professional organizations have underscored the importance of teacher preparation and the association between key components in teacher preparation programs and high quality experiences for young children (National Association for the Education of Young Children (NAEYC) 2009; National Council for Accreditation of Teacher Education (NCATE 2010); Institute of Medicine (IOM) & National Research Council (NRC) 2015). These recommendations, coupled with systematic research regarding teacher preparation, can assist in understanding teacher preparation in early childhood education, further inform practice, and contribute to a continuing research agenda in the field. Using a systems perspective, this paper focuses on one primary component of teacher preparation in early childhood education, the practicum experience. Viewing relationships as the core

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of the system, critical elements of communication, beliefs, fit, and knowledge and learning within practicum experiences are explored. This systems perspective then serves as a foundation for the discussion of future practice and research related to practicum experiences.

The practicum experience (i.e., classroom-based opportunities carried out under the supervision of a lead classroom teacher (i.e., cooperating teacher) provides opportunities for teacher candidates to develop “experiential understanding” of children’s learning and appropriate teaching strategies under the mentoring of a cooperating teacher, prior to the capstone student teaching experience (Retallick and Miller 2010). Repeatedly, practicum experiences have been highlighted as crucial to becoming a teacher, and have been identified as one of the most important experiences in teacher education programs (Baum and Korth 2013; Bornfreund 2011; Zeichner 2010). Although participation in practicum experiences is mandated by accreditation institutions (CAEP 2013; NCATE 2010) and recommended by others (IOM and NRC 2015; NAEYC 2009), relatively little information or research has been accumulated about these practicum experiences in early childhood teacher preparation programs (Anderson and Stillman 2013; Cohen et al. 2013). Early childhood teacher preparation presents some unique challenges for consideration in the preparation and development of effective teachers in their practicum experiences; early childhood teachers may work with children across a range of ages and development, and in a range of settings such as Head Start, community child care, public pre-K classrooms in public school settings, and cooperating teachers may have varied education levels and have taken a variety of pathways to becoming a teacher.

Teacher preparation programs provide opportunities for teacher candidates to develop as effective teachers by gaining knowledge and learning skills through a variety of courses, applying coursework in practicum experiences, and student teaching. Institutions of higher education prepare a large number of teachers for the workforce and these programs can vary within and across states in terms of philosophy, models, courses, and intensity of practicum experiences and student teaching (Center on Enhancing Early Learning Outcomes (CEELO); Schilder 2016; IOM and NRC 2015; La Paro et al. 2014; Sumrall et al. 2016; Whitebook et al. 2012). Some of the variation in teacher preparation programs is state specific; these state differences may reflect licensing and credentialing standards which vary greatly across the 50 states in terms of ages of children and competencies required (Schilder 2016). In terms of practicum experiences, teacher preparation programs differ by the number of classroom-based experiences, the setting in which experiences take place, and the supervision of teacher candidates during these experiences and

the expected competencies and outcomes for teacher candidates. The variability in number of practicum experiences can range from having one classroom-based experience prior to student teaching to multiple experiences in classrooms (Bornfreund 2011; Rice and McLaughlin 2007). The setting can vary across type, ages of children, and racial, socio-economic, and ethnic backgrounds of both teachers and children (Lim et al. 2009). Furthermore, teacher candidates can be supervised differently across programs; in some instances, cooperating teachers are the primary supervisor while in others, adjunct or tenure track university faculty may supervise teacher candidates. Supervisors’ and evaluators’ qualifications vary significantly in selection, training, and experience (Lafferty 2015). Finally, there is little data regarding the actual outcomes of the practicum experience for teacher candidates. Programs vary across the expected and required competencies for teacher candidates during the practicum experience and on using assessments to document learning, outcomes, and growth (La Paro et al. 2014). These variations can contribute to differences among teacher candidates’ experiences in practica across different teacher preparation programs and ultimately affect their effectiveness as classroom teachers. At the same time, the central core of all practicum experience is a system which involves a teacher candidate and cooperating teacher in the classroom within a relationship that includes multiple elements with the intended outcome of developing effective teaching practices. Given the research pointing to the importance of interactions and relationships in children’s learning, it stands to reason that addressing this relational element of the practicum experience is important for understanding the experience of teacher candidates during their practicum experience. Therefore, this paper focuses specifically on the practicum experience component in early childhood teacher preparation, and uses a systems perspective to highlight the interplay and interconnectedness among critical elements within this experience. The intention is to facilitate a greater understanding of the practicum experience to better prepare our early childhood educators and consider implications for teacher preparation programs and future research directions.

Application of a Systems Perspective to Practicum Experiences

In the following section, systems theories and perspectives will be briefly reviewed to set the context of a systems framework of the practicum experience. Learning to teach can be considered a complex phenomenon; the practicum experience is nested within the context of a teacher preparation program, which acts as a system with several participants, varying relationships, and multiple influences

(Clarke and Collins 2007, p. 168; O’Brian et al. 2007; Retallick and Miller 2010). Using a systems perspective to explore and discuss the practicum experience allows us to recognize, consider, and systematically examine various elements of the practicum experience as well as the interactions and interplay among these multiple elements. Whereas much of the literature on classroom dynamics and learning has placed the child in the center of the developing system (e.g., Pianta 1999; Jeon et al. 2010), in the current perspective, the teacher candidate is the focus of the developing system. It is important to note that, although various types of relationships (e.g., interactions with family members) and interactions with environments (e.g. culture, home, and community) are likely to influence the development of the teacher candidate, the focus of this paper is on the developing individual within the context of the teacher preparation program—specifically, the practicum experience. The systems perspective presented is influenced by Bronfenbrenner’s ecological theory and proximal processes and Pianta’s system theory (Bronfenbrenner 1994, 2005; Pianta 1999) which are briefly reviewed below.

Using Bronfenbrenner’s bioecological systems theory, proximal processes have been specified as the key factor in development through which human potential is actualized (Bronfenbrenner 1994). Applying this perspective to the cooperating teacher, teacher candidate dyad within the practicum experience, the proximal processes that occur between cooperating teachers and teacher candidates may have significant associations with development and outcomes for teacher candidates (Maynard et al. 2014; Johnson et al. 2016). The individual characteristics of the learner, in this case the teacher candidate, both influence and are influenced by the environment, in this case the practicum experience. Within this perspective, we acknowledge teacher candidates’ beliefs and experiences related to knowledge and learning as individual characteristics that are part of the system contributing to the development of effective teachers.

Borrowing from Pianta’s systems theory related to children’s learning, the relationships between the teachers and children in the classroom are critical to learning (Pianta 1999). In the case of a systems perspective for teacher candidate learning, the relationships between the cooperating teachers and teacher candidates during the practicum experience are critical to development and learning. Similar to Bronfenbrenner’s proximal processes, the repeated interactions and relationships teacher candidates have with their cooperating teacher set the context for learning and at times serve as a resource for teacher candidates as they are practicing skills and learning new teaching strategies in the classroom (Hamre and Pianta 2006). In their 2006 conceptual model of teacher-student relationships, Hamre and Pianta acknowledged individual characteristics, include

perceptions and beliefs as influencing the teacher candidate–cooperating teacher relationship, and set learning with the context of the broader classroom environment. This perspective is similar to the application of the systems perspective for teacher candidates within the practicum experience presented in this paper (see Fig. 1).

In the next sections, multiple elements of the practicum experiences are explored, and the interrelatedness of the elements experience are discussed. Implications for practice and building a research agenda are also described.

Elements Within a Systems Perspective of Practicum Experiences Relationships

As the theories above highlight the centrality of interactions and relationships in development, perhaps the most salient element in this systems perspective of practicum experiences that directly influences development during practicum experiences are the interactions and relationships between cooperating teachers and teacher candidates. In the research literature, cooperating teachers and teacher candidates have cited their relationship as a critical component in the practicum experience (Darling-Hammond and Frelow 2002; Kim and Danforth 2012; O’Brian et al. 2007). The cooperating teacher–teacher candidate relationship provides the foundation through which cooperating teachers can scaffold teacher candidates’ learning experiences, provide feedback, and impart knowledge and wisdom from teaching experience (Cohen et al. 2013; McIntyre 1983;

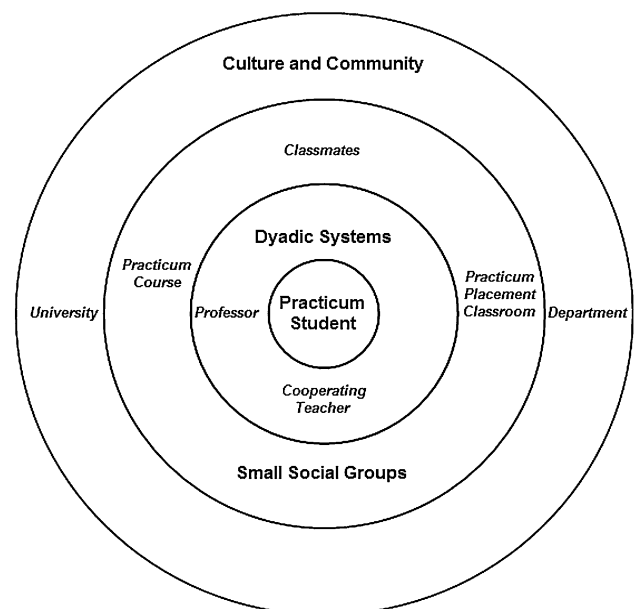


Fig. 1 Context of development for practicum students. Adapted from Pianta (1999)

O'Brian et al. 2007; Weinstein 1989). Simultaneously the comfort and fit of the teacher candidate with the cooperating teacher sets the foundation for trying out newly acquired skills and applying knowledge as well as receptivity to feedback.

Much of the research regarding the cooperating teacher–teacher candidate relationship has examined undergraduate teacher preparation programs focused on elementary or secondary education teachers and/or student teachers. Teacher candidates completing practicum experiences are in a different developmental level than student teacher and have different roles and responsibilities in the classroom as student teachers. Given the unique period of development for very young children and the range of settings in which young children can be enrolled, focusing on these interactions and relationships in early practicum experiences for teacher candidates in early childhood education is needed to provide the guidance for program development and further research.

In an initial study of the relationship between teacher candidates and cooperating teachers, O'Brian et al. (2007) conducted interviews and observations with nine pre-service teachers placed in early childhood through middle-school special education classrooms and their cooperating teachers. Analyses of the interviews indicated that both the teacher candidate and cooperating teacher felt that the relationship was a vital component of the practicum experience; both teacher candidates and cooperating teachers noted the centrality of the relationship to the students' learning experience. When positive relationships were established, students felt that they could take risks and cooperating teachers could allow students to have both more responsibility and independence in the classroom (O'Brian et al. 2007).

Although O'Brian et al. highlight the potential positive and supportive aspects of the relationship between the cooperating teacher and teacher candidate, as with most relationships, the relationship between the cooperating teacher and teacher candidate will be comprised of both positive and negative aspects. Findings from previous studies examining the relationship aspect of pre-service teachers' practicum experiences have revealed several issues within these relationships—including power sharing, tension, and conflict—that may contribute to a challenging relationship and limited learning experience versus a more non-authoritative approach which contributes in part to more positive learning experiences (Kim and Danforth 2012). Hastings (2004) examined the “roller coaster ride of emotions” inherent in relationships from the perspective of the cooperating teachers participating in the practicum experiences of secondary education teacher candidates (p. 135). In her interviews of 20 cooperating teachers, a wide range of emotions about the experiences were shared,

ranging from guilt and frustration to relief and satisfaction. These elements of positivity and negativity in relationships and the foundation for learning that the relationship can provide to teacher candidates underscore the importance of examining relationships between teacher candidates and cooperating teachers in the early childhood education pre-service teacher preparation process. Understanding the context of the relationships between cooperating teachers and teacher candidate provides a foundation to examine, understand, and improve the specific elements of the practicum experience in early childhood education where this research base is much more limited.

In our own work, we found that cooperating teachers' and teacher candidates' reports of positivity and negativity within their relationship were all significantly related to teacher candidates' overall satisfaction with the practicum experience, further contributing to the importance of relationships as an overarching element in the practicum experience system (Johnson et al. 2016). This bidirectional relationship between the cooperating teacher and teacher candidate may facilitate an environment that allows teacher candidates to feel comfortable to practice teaching skills; this thesis is further supported by findings that practicum satisfaction has been linked to teacher efficacy for teacher candidates during their practicum experiences (see Johnson et al. 2016). Relationships between cooperating teachers and teacher candidates within early childhood classrooms are enacted, in part, through the communicative practices within cooperating teacher–teacher candidate interactions which are described next. Then the contributions of beliefs, fit, and knowledge and learning are also briefly addressed as additional elements of the practicum experience for consideration in a systems perspective (see Fig. 2).

Communication

Nested within the relationships between cooperating teachers and teacher candidates and foundational to interactions is communication. Communication within teaching and learning relationships is argued to be the medium through which relationships are initiated, maintained and enhanced (Kalbfleisch 2002). The element of communication has been touted as a vital component to the relationships between cooperating teachers and teacher candidates (Lawley et al. 2014; Roberts et al. 2014). Loizou (2011) underscores the importance of communication between the cooperating teacher (mentor) and student teacher to learn effective ways to negotiate the relationship and highlighting the roles of each member. Specific aspects of the communicative relationships between teacher candidates and their cooperating teachers such as mentoring skills, communication, support, and feedback have been documented as important features of general

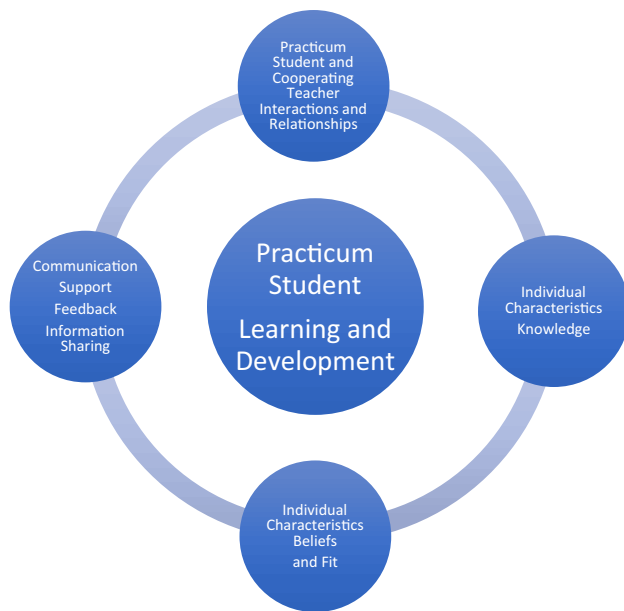


Fig. 2 Practicum student development and learning within a systems perspective

teacher education programs (Alger and Kopcha 2009; Johnson and Birkeland 2003; Lawlwy et al. 2014; McNay 2004; Whitney et al. 2002). The systems perspective presented in this paper allows for the consideration of the dynamic interrelatedness of relationships and communication in practica in early childhood settings, in that communication both affects and is affected by the relationship between the cooperating teacher and teacher candidate.

From a sociocultural discourse perspective, language is viewed as a tool for teaching and learning through a dialogic process of collaboration and joint understanding (Mercer 2004). Communication within interactions between cooperating teachers and teacher candidates are therefore opportunities to transfer knowledge and create mutual understanding and as forum for constructive feedback (O'Brian et al. 2007). Interactions are also situated within institutional contexts and relational histories, and communication within the moment is informed by previous interactions and experiences (Mercer 2004). Additionally, conceptualizations of collaborative learning processes note conversation skills as primary components of the learning process model (Soller et al. 1999). Cooperating teachers' and teacher candidates' communication often center around support, feedback, and information sharing throughout the practicum experience; these communicative practices may be affected by program philosophies and standards, and may be bi-directionally related to teachers' beliefs, learning, and knowledge, supporting the dynamic aspect of a system model. In the next sections, communication elements of support, feedback, and

information sharing within the context of the practicum experiences are presented.

Support

Communication is a mechanism through which cooperating teachers can offer messages of support to their teacher candidates. Teachers' and students' perceptions of their relationship and the supportiveness of the cooperating teacher–teacher candidate communication practices affect the experiences of both parties throughout the practicum experience. Teacher candidates within early childhood education teacher preparation programs discuss communication and support as connected concepts as major themes of their practicum experiences (Maynard et al. 2014). It is important to note that support is a bidirectional construct and must be conceptualized to include both cooperating teachers' communicative practices and teacher candidates' reciprocal responses (Kim and Schallert 2011).

Feedback

A second aspect of communication which is important for the practicum experience is feedback on teacher candidates' performance. This feedback may be provided immediately or may be discussed after the fact in a more formal meeting or review. Scheeler (2008) argues that immediate and positive feedback on teacher candidates' use of skills most promotes effective teaching, especially if, as is the case for teacher candidates, these skills are recently learned. The way in which feedback is communicated greatly influences how teacher candidates learn, and affects how both cooperating teachers and teacher candidates perceive their relationship during the practicum experience. Teacher candidates discuss feedback as a type of communication they have with their cooperating teachers regarding their classroom practices, and note that this type of communication is desired because it gives students an understanding of their performance as teachers (Maynard et al. 2014).

As important as feedback is for students' experience, the feedback students receive during the practicum experience can aid or hinder the overall learning experience for the pre-service teacher. For example, if a cooperating teacher affirms how a pre-service teacher responds to two children arguing that feedback may positively influence the pre-service teacher's beliefs about their teaching skills (i.e., as effective). However, in some situations, students may receive less positive feedback. Rotter (1982) argues that negative reinforcement or the anticipation of negative reinforcement can cause a shift in emotions such as feelings of anger, defensiveness, and cautiousness. These negative feelings can affect the pre-service teachers' learning in

current and future situations by influencing how they feel about their teaching abilities.

Information Sharing

Related to feedback, cooperating teachers' and teacher candidates' communications are means through which to share information and knowledge between parties. Sharing information differs from feedback in that it is not necessarily provided in response to a behavior or action of the student; rather, it can be knowledge or experience that the cooperating teacher shares with the student. Like all communication, information sharing occurs most fluidly when there is the foundation of a supportive cooperating teacher–teacher candidate relationship.

The relationship between cooperating teachers and teacher candidates affects and is affected by the communication between parties, including communication regarding support, feedback, and information sharing. Communication processes between cooperating teachers and teacher candidates have bidirectional effects on: (1) the relationships within the classrooms, (2) the learning occurring within the classrooms, and (3) the perceptions of the practicum experience. Collectively, each of these processes interact throughout the practicum experience and culminate into building effective early childhood education teachers who have gained knowledge and practical skills, established beliefs, and expanded their communication and relationship building skills. Communication of support, feedback, and information sharing throughout the practicum experience informs teacher candidates' development of beliefs and knowledge about teaching. These transactions among variables are supported through conceptualizations of relational communication as well as research in elementary and secondary education settings, yet research specific to relationships and communication practices within cooperating teacher–teacher candidate interactions in early childhood education teacher preparation programs is needed. Communication processes influence the process of the teacher candidate integrating new beliefs and knowledge about teaching into their existing beliefs and knowledge and assessing their fit with their cooperating teacher throughout their practicum experience, each of which are discussed below.

Beliefs

In a systems perspective, it is important to acknowledge that teacher candidate and cooperating teachers have their own set of beliefs that have been shaped by a multitude of previous experiences (Rotter 1982) and may be changed by experiences within the practica experience (Scott-Little et al. 2006). Beliefs are considered critical components of this dynamic systems perspective because they have

significant influence on behavior (Pajares 1992; Vartuli 2005) and are influenced by behaviors. Specifically, in relation to teacher education programs, findings have revealed that beliefs of teacher candidates must be addressed before addressing teaching practices; at the same time, teacher candidates' participation in various kinds of training influences their beliefs (Caudle and Moran 2012; O'Loughlin and Campbell 1988; Scott-Little et al. 2006). Pre-service teachers come to teacher preparation programs and field experiences with ideas, concepts, and beliefs about teaching from many previous experiences, including their own education experiences. At the most basic level, pre-service teachers have formed ideas and beliefs about what it means to be a teacher by being a student, from attending grade school all the way through higher education. Then, throughout their preparation program, teacher candidates generally have multiple opportunities to experience lesson planning, teacher-child interactions, and behavior management strategies; each of these experiences influence and is influenced by their belief in their ability to teach and their beliefs about teaching as a profession (Biesta et al. 2015; Devine et al. 2013; van Uden et al. 2013).

The relationship between the teacher candidate and the cooperating teacher may influence the expression of beliefs and may contribute to change or maintenance of beliefs. Rozelle and Wilson (2012) explore this phenomenon in students during a yearlong internship who shifted their beliefs to those of their mentor. It is possible that the cooperating teacher and teacher candidate relationship provides an opportunity for the candidates to discuss their beliefs about teaching in an early childhood environment. This process of change and growth could possibly challenge some teacher candidates' beliefs if they do not align with their cooperating teachers' beliefs. These interactions may then either contribute to strengthening teacher candidates' current beliefs about teaching or provide opportunities to ponder the possibility of their shifting beliefs based on a new understanding. Several of the elements within the practicum experience contribute to the perceived or real fit between the cooperating teacher and teacher candidate may ultimately influence multiple elements of the practicum experience.

Fit

The element of fit encompasses the elements of communication and beliefs and is related to relationships as previously discussed and includes a unique contribution to the experience of teacher candidates in their practica. Therefore, fit, in terms of communication, similarities and differences of beliefs about teaching, may contribute to the type of relationship (i.e., tension versus open and positive) that develops between the cooperating teacher and their teacher

candidates (Kitchel and Torres 2007). Teacher candidates who feel they are similar across teaching practices with their cooperating teachers may have more positive interactions with their cooperating teacher and over time they may develop a more positive relationship with their cooperating teacher. If teacher candidates are placed in classroom-based settings that have practices that are inconsistent with their beliefs about how a classroom or with a cooperating teacher who holds very disparate beliefs from the teacher candidate, the students' perceptions of the experience and ultimately their level of satisfaction and efficacy with it as a learning opportunity may be influenced (Johnson et al. 2016; Pfitzner-Eden 2016).

Knowledge and Learning

Acting as both an input and outcome to the systems in knowledge and learning. Inherent in teacher preparation programs is the idea that students will learn and gain knowledge about child development, teaching strategies, and the profession that they are entering (among numerous other topics), and this knowledge will be filtered through previous and new knowledge and experiences. Effective early childhood educators must have the appropriate knowledge, skills, and dispositions to effectively teach young children (Sheridan et al. 2009). These facets of teachers' preparation interact to influence the development of effective teaching practices. It is important to note that the complex interplay between teachers' beliefs and effective teaching practices occurs in concert with expansions in teachers' knowledge, as knowledge both affects and is affected by teachers' beliefs. Teacher knowledge is developed through making sense of teaching experiences, and knowledge is established through the filter of teachers' beliefs (Pajares 1992). Teacher candidates come to their practicum experience with the knowledge they have received through program coursework, yet it is the day-to-day events and experiences within classroom contexts that shape and solidify teacher candidates' knowledge about specific teaching practices and teacher candidates' beliefs about effective teaching and their efficacy levels. As such, teachers' practices are based on teachers' knowledge, shaped through their beliefs and previous personal/professional experiences, and their perceptions of the current situation or fit in the classroom (Hedges 2012). What knowledge and learning opportunities are included in a teacher preparation program are influenced by recommendations from professional organizations, state learning and development standards, state licensing requirements, CAEP, and program philosophy. Specifically, professional organizations that teacher preparation programs may align with such as the National Association for the Education of Young Children (NAEYC) may influence the inclusion of professional

preparation standards (NAEYC 2009) as knowledge within the program. Additionally, state standards and licensing may influence knowledge integrated within a program on protocol for safety, teacher-child ratio, and classroom quality instruments.

Implications and Recommendations for Practice

A comprehensive understanding of the elements and inter-relatedness of these elements within the practicum experience of early childhood teacher candidates moves the field forward in terms of addressing practice in teacher preparation programs as well as research needs to determine effectiveness and utility of practices. For example, the impact of the fit between cooperating teachers' and teacher candidates' perspectives regarding teaching practices on students' practicum experiences (i.e., satisfaction, efficacy, and performance) need further definitions and empirical exploration. The element of fit appears to have connections to multiple elements of teacher development and additional work on defining this element would support future research; it will also be important to not contextual variations in efforts related to fit. Based on findings in some of our work, we have learned that, within our program, the relationships between cooperating teachers and teacher candidates need further consideration when pairing teacher candidates with a practicum placement/cooperating teacher. An implication of this research that has altered our approach to practicum placements has been an increased intentionality in placing students in classrooms where there may be the "best" fit between cooperating teacher and teacher candidate; although this consideration comes with its own set of challenges such as finding and retaining high quality early childhood practicum placements, student transportation and work schedule needs, and program specific limitations.

In terms of communication in practicum experiences, intentional work on communication skills between adults is needed in the preparation of effective teachers. Most programs include content related to interactions with children and communication with children, but few include an adult–adult focus. Communication is another component that may be influenced by context; questions such as what are communication norms and what should communication norms be to maximize students' experiences in classrooms will need to be explored. Furthermore, the mentoring and support of cooperating teachers needs focused attention in the field of early childhood. Professional organizations both in the United States and abroad recommend that cooperating teachers have deep expertise and extensive experience, and that they are trained in mentoring students. The role of cooperating teachers has been highlighted in the

field of early childhood education internationally (Caires et al. 2010, 2012) as well as the K-12, and P-12 literatures (Butler and Cuenca 2012; Clarke et al. 2014; Guyton and McIntyre 1990; Hoy and Woolfolk 1990; Iannaccone 1963; Valencia et al. 2009) across contexts; however, specific recommendations regarding cooperating teacher selection, preparation, and roles are lacking in early childhood education. Recommendations for high quality cooperating teachers are included in CAEP's most recent standards for P-12 and include Standard 2, Clinical Partnerships and Practice (CAEP 2013). However, *high quality cooperating teachers* has yet to be defined empirically in early childhood education, birth through kindergarten, and the role and relationships the cooperating teacher has with teacher candidates has yet to be systematically addressed. There is much work to provide the mentoring and support for cooperating teachers in early childhood education so that they are equipped to facilitate positive practicum experiences.

Additionally, supporting field-based experiences with course assignments that include reflection help pre-service teachers to process their interactions and experiences. Processing the experience is an important tool that promotes thinking about new knowledge they are gaining from the experience as well as self-assessing areas of strengths and areas in need for improvement to become an effective teacher (Ritblatt et al. 2013). In addition, self-reflective practices allow students an opportunity to digest the information and observations they have made in the classroom and integrate it with their current understanding and beliefs about effective teaching strategies (Rotter 1982). Somewhat aligned with beliefs is the program philosophy and how the mission statements and vision statements are being implemented in a consistent manner throughout course and the practicum experiences, and how the program philosophy is communicated to cooperating teachers.

Within the systems perspective, knowledge can be conceptualized as both an input and output. The construct of teacher candidate "knowledge" needs to be clearly understood and defined. Effective teachers have multiple layers of knowledge and gain this knowledge through multiple methods. Research has examined teacher knowledge regarding knowledge of specific content areas through program coursework (Cassidy et al. 1995; Riojas-Cortez et al. 2013); teacher preparation programs need to understand the types of knowledge that can be taught through coursework and the type of knowledge that is gained through classroom experience and the relationship between coursework and application. Programs need to address the content knowledge that students gain through coursework and the implementation of this knowledge in the classroom, asking what students know, how they got that information, what they can do with that information, and what else do they need to learn. Based on the interrelatedness of their learning

and individual characteristics, each teacher candidate may understand and implement knowledge in individual ways.

Future Research in Early Childhood Teacher Preparation Programs

Based on both the current available research in teacher preparation and our experience examining these elements in practicum experiences have revealed the usefulness of a systems perspective for understanding the practicum experience and developing recommendations and a research agenda. Understanding the multiple components and the interrelatedness of these components, underscores the need for further research to understand the elements of practicum experiences within a systems perspective and the associations with teacher candidates' outcomes.

Gathering Systematic Data within Programs

Gathering data within and across teacher preparation programs is one of the first steps to develop a foundation of information and understanding about current practice. To fully understand how programs develop effective teachers, we must first understand the diversity of the design and format of the practicum experience across programs. Thus, joint ventures across multiple institutions of higher education will provide additional information for more recommendations for the field at large. Although some data are available in states related to student teachers and pre-K teachers, much less data are available for preparing teachers of younger children (CEELO 2016; La Paro et al. 2014).

Although research and experts in the field indicate the importance of high quality practicum experiences for students, these experiences can come with a long list of challenges (Early and Winton 2001; NAEYC 2009). Policies and regulations at the licensing/certification-, university-, and program-level, however well-intentioned, sometimes limit the ability to develop and maintain relationships with cooperating teachers in high quality classrooms. Because of the variation in licensing and certification requirements (hours, type of classrooms, age groups, location of classrooms etc.) there seems to be no one way of implementing highly consistent practicum experiences across institutions of higher education. However, having gathering this information to fully understand that range of experiences and having a set of reliable measures for ECE teacher preparation programs to use as tools to gather information about the practicum system of learning will help describe key process elements in the practicum experience. In our research, for example, we have identified key elements such as relationships, communication, fit, knowledge and learning, and

beliefs. We have collected data on the associations among these key elements, and have used the findings to implement procedures in our teacher preparation program to support teacher candidates and cooperating teachers. Programs can use such data to examine and improve the level of quality and learning taking place for teacher candidates and ultimately will be better able to support the growth of highly effective early childhood educators.

Longitudinal Data Collection

Future research should examine outcomes for teacher candidates. The long-term outcomes of student satisfaction, efficacy, and overall effectiveness of a teacher with earlier field-based experiences and the practicum experiences' influence on their development of as a teacher is unknown. From a system perspective, relationship positivity, fit, and consistent communication between the cooperating teacher and teacher candidate are necessary components to ensure that teacher candidates benefit from the supports and guidance provided in the practicum experience. Becoming an effective teacher is a complex process and consideration of the various components and their influence on one another may reveal important aspects of early childhood teacher preparation that merit further study or a change in practices. In addition, teacher development does not only occur during teacher preparation but continues after graduation. Therefore, longitudinal data collection is needed to fully understand the impact of these practicum experiences on teachers' first years in the field; this includes data through student teaching and into the first 2 or 3 years of teaching. These data would allow programs to have a greater understanding of what aspects of the practicum experiences have been most influential and meaningful while in the context of their teaching careers. To collect data during practicum and extend through the first few years of teaching after graduation the field needs adequate measures.

Methods to Measure Practicum Experiences

The field lacks existing measures to examine several aspects of teacher candidate competency, beliefs, and attitudes (Horm et al. 2013). More specifically, measures for various aspects of the practicum experience, such as the teacher candidate and cooperating teacher relationship, fit with cooperating teachers, and teacher candidate satisfaction, require further field testing and validation of appropriate measures. Valid and reliable measures are necessary to gather data useful in the design of practicum experiences in teacher education programs and for support and training of

cooperating teachers in both institutions of higher education and to support research in these areas.

Summary

The development of effective teachers is a multi-faceted process. Within the practicum experience, the relationship between the teacher candidate and cooperating teacher is a central component. During practicum experiences teacher candidates are consistently receiving information through interactions with cooperating teachers that influence their teaching (Darling-Hammond and Frelow 2002; Edens 2000; Maynard et al. 2014). Related to these interactions and relationship, elements of communication, fit, beliefs, and knowledge interact and influence experiences and ultimately teacher candidates' development as an effective teacher. Viewing teacher preparation and specifically the early practicum experiences as a system, offers a perspective through which to begin to capture the complexity of the components within early childhood teacher preparation and aids in the understanding of the multiple entry points and elements for attention in teacher preparation programs.

References

- Alger, C., & Kopcha, T. J. (2009). eSupervision: A technology framework for the 21st century field experience in teacher education. *Issues in Teacher Education, 18*(2), 31–46.
- Anderson, L., & Stillman, J. (2013). Making learning the object: Using cultural historical activity theory to analyze and organize student teaching in urban high-needs schools. *Teachers College Record, 115*(3), 1–36.
- Barnett, W. S. (2003). Better teachers, better preschools: Student achievement linked to teacher qualifications. NIEER Preschool Policy Matters, Issue 2.
- Baum, A. C., & Korth, B. B. (2013). Preparing classroom teachers to be cooperating teachers: A report of current efforts, beliefs, challenges, and associated recommendations. *Journal of Early Childhood Teacher Education, 34*(2), 171–190.
- Biesta, G., Priestley, M., & Robinson, S. (2015). The role of beliefs in teacher agency. *Teachers and Teaching, 21*(6), 624–640.
- Bornfreund, L.A. (2011). Getting in sync: Revamping licensing and preparation for teachers in pre-k, kindergarten, and the early grades. Education Policy Program: New America Foundation. Retrieved from <https://static.newamerica.org/attachments/2348-getting-in-sync/Getting%20in%20Sync-%20Revamping%20Licensing%20and%20Preparation%20for%20Teachers%20in%20Pre-K%20Kindergarten%20and%20the%20Early%20Grades.e9be94a875084fa5b66a76f858d51a8c.pdf>.
- Bronfenbrenner, U. (1994). Ecological models of human development. In *International encyclopedia of education*, (Vol. 3). Oxford: Elsevier.
- Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development*. Sage.
- Butler, B. M., & Cuenca, A. (2012). Conceptualizing the roles of mentor teachers during student teaching. *Action in Teacher Education, 34*(4), 296–308.

- Caires, S., Almeida, L. S., & Martins, C. (2010). The socioemotional experiences of student teachers during practicum: A case of reality shock? *The Journal of Educational Research*, 103(1), 17–27.
- Caires, S., Almeida, L. S., & Vieira, D. (2012). Becoming a teacher: Student teachers' experiences and perceptions about teaching practice. *European Journal of Teacher Education*, 35(2), 163–178.
- Cassidy, D. I., Buell, M. I., Pugh-Hoese, S., & Russell, S. (1995). The effect of education on child care teachers' beliefs and classroom quality: Year one evaluation of the TEACH early childhood associate degree scholarship program. *Early Childhood Research Quarterly*, 10(2), 171–183.
- Caudle, L. A., & Moran, M. J. (2012). Changes in understandings of three teachers' beliefs and practice across time: Moving from teacher preparation to in-service teaching. *Journal of Early Childhood Teacher Education*, 33(1), 38–53.
- Clarke, A., & Collins, S. (2007). Complexity science and student teacher supervision. *Teaching and Teacher Education*, 23(2), 160–172.
- Clarke, A., Triggs, V., & Nielsen, W. (2014). Cooperating teacher participation in teacher education a review of the literature. *Review of Educational Research*, 84(2), 163–202.
- Cohen, E., Hoz, R., & Kaplan, H. (2013). The practicum in preservice teacher education: a review of empirical studies. *Teaching Education*, 24(4), 345–380.
- Council for the Accreditation of Educator Preparation (CAEP), 2013, CAEP Standards. Retrieved February 12, 2016 from Downloads/caep-standards-one-pager-061716%20(1).pdf.
- Darling-Hammond, Chung, & Frelow (2002). Variation in teacher preparation: How well do different pathways prepare teachers to teach? *Journal of Teacher Education*, 53(4), 286–302.
- Devine, D., Fahie, D., & McGillicuddy, D. (2013). What is 'good' teaching? Teacher beliefs and practices about their teaching. *Irish Educational Studies*, 32(1), 83–108.
- Early, D. M., & Winton, P. J. (2001). Preparing the workforce: Early childhood teacher preparation at 2- and 4-year institutions of higher education. *Early Childhood Research Quarterly*, 16(3), 285–306.
- Edens, K. M. (2000). Promoting communication, inquiry and reflection in an early practicum experience via an on-line discussion group. *Action in Teacher Education*, 22(sup2), 14–23.
- Guyton, E., & McIntyre, D. J. (1990). Student teaching and school experiences. *Handbook of Research on Teacher Education*, 1, 514–534.
- Hamre, B., Hatfield, B., Pianta, R., & Jamil, F. (2014). Evidence for general and domain specific elements of teacher–child interactions: Associations with preschool children's development. *Child Development*, 85(3), 1257–1274.
- Hamre, B., & Pianta, R. (2006). Student-Teacher Relationships. Retrieved February 12, 2017 from <http://www.pearweb.org/conferences/sixth/pdfs/NAS-CBIII-05-1001-005-hamre%20&%20Pianta%20proof.pdf>.
- Hastings, W. (2004). Emotions and the practicum: The cooperating teachers' perspective. *Teachers and Teaching*, 10(2), 135–148.
- Hedges, H. (2012). Teachers' funds of knowledge: A challenge to evidence-based practice. *Teachers and Teaching*, 18(1), 7–24.
- Horm, D. M., Hyson, M., & Winton, P. J. (2013). Research on early childhood teacher education: Evidence from three domains and recommendations for moving forward. *Journal of Early Childhood Teacher Education*, 34(1), 95–112.
- Hoy, W. K., & Woolfolk, A. E. (1990). Socialization of student teachers. *American Educational Research Journal*, 27(2), 279–300.
- Iannaccone, L. (1963). Student teaching: A transitional stage in the making of a teacher. *Theory into Practice*, 2(2), 73–80.
- Institute of Medicine (IOM) and National Research Council (NRC). (2015). *Transforming the workforce for children birth through age 8: A unifying foundation*. Washington, DC: The National Academies Press.
- Jeon, H. J., Langill, C. C., Peterson, C. A., Luze, G. J., Carta, J. J., & Atwater, J. B. (2010). Children's individual experiences in early care and education: Relations with overall classroom quality and children's school readiness. *Early Education and Development*, 21(6), 912–939.
- Johnson, A. V. S., La Paro, K. M., & Crosby, D. A. (2016). Early practicum experiences: Preservice early childhood students' perceptions and sense of efficacy. *Early Childhood Education Journal*, 45(2), 229–236.
- Johnson, S. M., & Birkeland, S. E. (2003). Pursuing a "sense of success": New teachers explain their career decisions. *American Educational Research Journal*, 40(3), 581–617.
- Kalbfleisch, P. J. (2002). Communicating in mentoring relationships: A theory for enactment. *Communication Theory*, 12(1), 63–69.
- Kim, M., & Schallert, D. L. (2011). Building caring relationships between a teacher and students in a teacher preparation program word-by-word, moment-by-moment. *Teaching and Teacher Education*, 27(7), 1059–1067.
- Kim, T., & Danforth, S. (2012). Non-authoritative approach to supervision of student teachers: cooperating teachers' conceptual metaphors. *Journal of Education for Teaching*, 38(1), 67–82.
- Kitchel, T., & Torres, R. M. (2007). Possible factors in matching student teachers with cooperating teachers. *Journal of Agricultural Education*, 48(3), 13–24.
- La Paro, K. M., Scott-Little, C., Ejimofor, A., Sumrall, T., Kintner-Duffy, V. L., Pianta, R. C., ... & Howes, C. (2014). Student teaching feedback and evaluation: Results from a seven-state survey. *Journal of Early Childhood Teacher Education*, 35(4), 318–336.
- Lafferty, K. E. (2015, February). Practices of Cooperating Teachers Contributing to a High Quality Field Experience. In: the Association of Teacher Educators annual meeting in Phoenix, Arizona.
- Lawley, J. J., Moore, J., & Smajic, A. (2014). Effective communication between preservice and cooperating teachers. *The New Educator*, 10(2), 153–162.
- Lim, C. I., Maxwell, K. L., Able-Boone, H., & Zimmer, C. R. (2009). Cultural and linguistic diversity in early childhood teacher preparation: The impact of contextual characteristics on coursework and practica. *Early Childhood Research Quarterly*, 24(1), 64–76.
- Loizou, E. (2011). The diverse facets of power in early childhood mentor–student teacher relationships. *European Journal of Teacher Education*, 34(4), 373–386. doi:10.1080/02619768.2011.587112.
- Maynard, C., La Paro, K. M., & Johnson, A. V. (2014). Before student teaching: How undergraduate students in early childhood teacher preparation programs describe their early classroom-based experience. *Journal of Early Childhood Teacher Education*, 35(3), 244–261.
- McIntyre, D. J. (1983). *Field experiences in teacher education: From student to teacher*. Washington, DC: Foundation for Excellence in Teacher Education.
- McNay, M. (2004). Power and authority in teacher education. In *The educational forum* (Vol. 68, pp. 72–81). Taylor & Francis Group.
- Mercer, N. (2004). Sociocultural discourse analysis. *Journal of Applied Linguistics*, 1(2), 137–168.
- National Association for the Education of Young Children (NAEYC) (2009). *NAEYC standards for early childhood professional preparation. Position statement*. Washington, DC: National Association for the Education of Young Children.
- National Council for Accreditation of Teacher Education (NCATE) (2010). *Transforming teacher education through clinical practice: A national strategy to prepare effective teachers*. Washington, DC: National Council for the Accreditation of Teacher Education.

- NICHD Early Child Care Research Network (2002). Child-care structure→ process→ outcome: Direct and indirect effects of child-care quality on young children's development. *Psychological Science*, 13(3), 199–206.
- NICHD Early Child Care Research Network (2003). The NICHD Study of Early Child Care: Contexts of development and developmental outcomes over the first seven years of life. *Early child development in the 21st century*, 181–201.
- O'Brian, M., Stoner, J., Appel, K., & House, J. J. (2007). The first field experience: Perspectives of preservice and cooperating teachers. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children*, 30(4), 264–275.
- O'Loughlin, M., & Campbell, M. B. (1988). Teacher preparation, teacher empowerment, and reflective inquiry: A critical perspective. *Teacher Education Quarterly*, 25–53.
- Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62(3), 307–332.
- Peisner-Feinberg, E. S., Burchinal, M. R., Clifford, R. M., Culkin, M. L., Howes, C., Kagan, S. L., & Zelazo, J. (1999). The children of the cost, quality, and outcomes study go to school [Executive summary]. Chapel Hill, NC: Frank Porter Graham Child Development Center.
- Pfitzer-Eden, F. (2016). I feel less confident so I quit? Do true changes in teacher self-efficacy predict changes in preservice teachers' intention to quit their teaching degree? *Teaching and Teacher Education*, 55, 240–254.
- Pianta, R. C. (1999). *Enhancing relationships between children and teachers*. Washington, DC: American Psychological Association.
- Retallick, M. S., & Miller, G. (2010). Teacher preparation in career and technical education: A model for developing and researching early field experiences. *Journal of Career and Technical Education*, 25(1), 62–74.
- Rice, C., & McLaughlin, J. (2007). Providing tools toward quality: The status of P–3 teacher preparation programs in New Jersey. *Policy Brief*. Newark: Association for Children of New Jersey.
- Riojas-Cortez, M., Alanís, I., & Flores, B. B. (2013). Early childhood teachers reconstruct beliefs and practices through reflexive action. *Journal of Early Childhood Teacher Education*, 34(1), 36–45.
- Ritblatt, S. N., Garrity, S., Longstreth, S., Hokoda, A., & Potter, N. (2013). Early care and education matters: A conceptual model for early childhood teacher preparation integrating the key constructs of knowledge, reflection, and practice. *Journal of Early Childhood Teacher Education*, 34(1), 46–62.
- Roberts, C. A., Benedict, A. E., & Thomas, R. A. (2014). Cooperating teachers' role in preparing preservice special education teachers: Moving beyond sink or swim. *Intervention in School and Clinic*, 49(3), 174–180.
- Rotter, J. B. (1982). *The development and application of social learning theory*. New York: Praeger Publishers.
- Rozelle, J. J., & Wilson, S. M. (2012). Opening the black box of field experiences: How cooperating teachers' beliefs and practices shape student teachers' beliefs and practices. *Teaching and Teacher Education*, 28(8), 1196–1205.
- Scheeler, M. C. (2008). Generalizing effective teaching skills: The missing link in teacher preparation. *Journal of Behavioral Education*, 17(2), 145–159.
- Schilder, D. (2016). *Early childhood teacher education policies: Research review and state trends* (Policy Report). New Brunswick: Center on Enhancing Early Learning Outcomes.
- Scott-Little, C., La Paro, K. M., & Weisner, A. (2006). Examining differences in students' beliefs and attitudes: An important element of performance-based assessment systems for teacher preparation programs. *Journal of Early Childhood Teacher Education*, 27(4), 379–390.
- Sheridan, S. M., Edwards, C. P., Marvin, C. A., & Knoche, L. L. (2009). Professional development in early childhood programs: Process issues and research needs. *Early Education and Development*, 20(3), 377–401.
- Shonkoff, J. P., & Phillips, D. A. (2000). *From neurons to neighborhoods: The science of early childhood development [Executive Summary]*. Washington, DC: National Academies Press.
- Soller, A., Lesgold, A., Linton, F., & Goodman, B. (1999). What makes peer interaction effective? Modeling effective communication in an intelligent CSCL. In: *Proceedings of the 1999 AAAI fall symposium: Psychological models of communication in collaborative systems*, pp. 116–123.
- Sumrall, T. C., Scott-Little, C., La Paro, K. M., Pianta, R. C., Burchinal, M., Hamre, B., ... & Howes, C. (2016). Student teaching within early childhood teacher preparation programs: An examination of key features across 2- and 4-year institutions. *Early Childhood Education Journal*, 1–10.
- Valencia, S. W., Martin, S. D., Place, N. A., & Grossman, P. (2009). Complex interactions in student teaching lost opportunities for learning. *Journal of Teacher Education*, 60(3), 304–322.
- van Uden, J. M., Ritzen, H., & Pieters, J. M. (2013). I think I can engage my students. Teachers' perceptions of student engagement and their beliefs about being a teacher. *Teaching and Teacher Education*, 32, 43–54.
- Vartuli, S. (2005). Beliefs: The heart of teaching. *YC Young Children*, 60(5), 76.
- Weinstein, C. S. (1989). Teacher education students' preconceptions of teaching. *Journal of teacher education*, 40(2), 53–60.
- Whitebook, M., Austin, L. J., Ryan, S., Kipnis, F., Almaraz, M., & Sakai, L. (2012). By Default or by Design? Variations in Higher Education Programs for Early Care and Education Teachers and Their Implications for Research Methodology, Policy, and Practice. Report. *Center for the Study of Child Care Employment, University of California at Berkeley*.
- Whitney, L., Golez, F., Nagel, G., & Nieto, C. (2002). Listening to voices of practicing teachers to examine the effectiveness of a teacher education program. *Action in Teacher Education*, 23(4), 69–76.
- Zeichner, K. (2010). Competition, economic rationalization, increased surveillance, and attackson diversity: Neo-liberalism and the transformation of teacher education in the US. *Teaching and Teacher Education*, 26(8), 1544–1552.