PRE-SERVICE TEACHER EFFICACY DEVELOPMENT WITHIN CLINICALLY-

BASED PRACTICE: EXAMINING THE STRUCTURES AND

STRATEGIES IN THE COLLABORATIVE COHORT

by

Kathryn Deeanne Will-Dubyak

A dissertation submitted in partial fulfillment
of the requirements for the degree

of

Doctorate of Education

in

Curriculum and Instruction

MONTANA STATE UNIVERSITY
Bozeman, Montana

April 2016

DEDICATION

To my mother, who made this happen through her life and her death. Thank you for teaching me what it means to work hard for something you want while never losing sight of the things that are important. You made me the person I am today. This one is for both of us.

ACKNOWLEDGEMENTS

An enormous debt of gratitude is owed to my doctoral committee for their time, efforts and continuous support in my development as a researcher. To Nick Lux, thank you for your invitation to be a part of the cohort; it was truly an experience that will influence the trajectory of my career. You empowered me to take ownership of the process and showed me how to trust the process of qualitative research. To Tena Versland, I could never quantify how influential your loyalty to me and passion for community has been throughout this work. Your dedication to the education profession and the compassion you have for students of all ages are inspirational. To David Henderson, thank you for inspiring me to live with my heart. Your work with teaching and leading in my life has helped guide me to speak to my truth and engage each day with purpose. To Lynn Kelting-Gibson, you have been a steady rock, always leading by example and willing to answer my questions. The four of you have guided me through this process, empowering me to grow and develop in this work. It has truly been an honor to have each of you on my committee.

I would not be where I am today with out the longstanding presence of Patricia Ingraham in my life. From being my first principal to introducing me to field placement, you have been a guiding star on my journey. Thank you for believing in me.

Finally to my husband and my children, thank you for your encouragement and enduring patience on this arduous journey. I know it was not always easy and I could not have done it with out you.

TABLE OF CONTENTS

TABLE OF CONTENTS-CONTINUED

TABLE OF CONTENTS-CONTINUED

TABLE OF CONTENTS-CONTINUED

LIST OF TABLES

LIST OF TABLES-CONTINUED

ABSTRACT

Research indicates that teachers benefit from education coursework in their preparation that provides opportunities to develop and practice pedagogical understandings (Darling-Hammond, 2000, 2006). Research also indicates that opportunities to enact learning from coursework are beneficial in teacher efficacy development within teacher preparation (Tschannen-Moran, 2007). Therefore, teacher education programs need to examine their structures and practices in an effort to provide the opportunities to enact their coursework to develop teachers' pedagogical understandings and teacher efficacy. What needs to be better understood are the actual structures and strategies within the communities of practice that provide and encourage opportunities for growth of teacher efficacy for pre-service teachers. A case study methodology was used to explore the structures and strategies that pre-service teachers identified as contributing to the development of teacher efficacy within the collaborative cohort during the fall 2015 semester in a teacher education preparation program located in the Rocky Mountain West.

The findings suggest that (a) school communities matter as a context for pre-service teacher efficacy development, (b) purposeful, aligned, situated learning experiences which bridge course and field work contribute to efficacy development, and (c) a mindset of continual professional growth within practice develops confidence.

CHAPTER 1

INTRODUCTION

"I hear and I forget, I see and I remember, I do and I understand."

Confucius, 450 B.C.

"There is an intimate and necessary relation between the process of actual experience

and education."

John Dewey, 1938.

Upon entering the first grade classroom on the initial day of field experience in

my teacher preparation program, I was full of excitement and joy to enact some of the

things I had been learning in my classes at the University. How quickly my hopes were

dashed when my mentor teacher said, "You can forget what they have been teaching you

at the University; we do things differently here in the real world." You can imagine the

shock and subsequent sense of dissonance that remained with me throughout the entire

semester. That semester, my field supervisor observed me twice during which I was able

to teach two lessons from the packaged curriculum. I struggled to make connections

between the two seemingly different worlds where few commonalities or places of

alignment seemed to exist. As a result, I seriously questioned my abilities as an educator.

Thankfully, I went on to have a different experience in my student teaching internship at

the laboratory school associated with my teacher education program. It was in this final

experience of my education preparation that I came to understand the enactment of my

university coursework into classroom practice and my ability to impact student learning.

Through the support of a committed mentor teacher and field supervisor willing to

provide scaffolded support to me, I was able to develop strong understandings of how the

theory I had learned at the University aligned with and connected to the daily work I was

doing as novice teacher. I left this second experience with a strong belief in my abilities

as an educator to impact student learning. I share this personal narrative as a

demonstration of the possible points of contradiction between theory in practice in

teacher education, and because this thinking shapes my own approaches as a teacher

educator and researcher. I value the scientific work at the university level, but also know

that, without the experiential and contextualized connections in the classrooms, we are

not capitalizing on all of the assets available to prepare future educators (Darling-

Hammond, 2000).

Foundation of the Study

> Teaching is a complex and multidimensional process that requires deep
> knowledge and understanding in a wide range of areas and the ability to
> synthesize, integrate, and apply this knowledge in different situations,
> under varying conditions and with a wide diversity of groups and
> individuals. In quality teaching, this knowledge is applied in ways that
> provide equitable access and opportunities that build upon and extend
> what learners already know in facilitating the ability to acquire, construct
> and create new knowledge. (Hollins, 2011, p.395)

Where do educators learn how to do the complex work of teaching? The answer

to this question has of course changed over time, as in all professions, but as of 2010

approximately 75% of our nation's teachers complete their preparation in a University-

based teacher education preparation program (NRC, 2010).

Historically, educational reform in the 1800's was the first movement to create norms for teaching practice that led to procedures for professional certification. This movement catalyzed a system which would provide certain levels of education for a broader audience in a public school setting by teachers with formalized training (Whitford & Villaume, 2014). This gave rise to "normal schools", and moved the credentialing of teachers away from religious institutions to civil authorities. From the beginning of normal schools for training teachers, there was variation in content and length of training. Due to the high demand of credentialed teachers, teacher institutes were created, which were in many ways the first "alternative pathways" with even more variation in the trainings provided.

By the late 1800's. there was a movement to centralize teacher credentialing to the state level. In the 1890's, normal schools began moving into credentialing programs housed at the college level, but still did not provide completers baccalaureate degrees. During all of these transitions, the content, pedagogical considerations and experiences in the field were highly variable with no standardization. Teacher colleges came into being followed by the transition to regional state colleges before officially becoming a part of state universities. This process was beneficial for teacher education due to the strength of offerings from the academic curriculum and norms of higher education, but it also distanced teacher education from the normal schools and the strong relationships with the community schools.

As teacher education preparation programs (TEPP) became firmly rooted within the institutions of higher education in the first half of the 20th century, the certification-

by-exam route went away and the completion of the TEPP for licensure came into being.

In the mid 1900's, teacher educators began focusing efforts on enhancing and elevating

the status of TEPP with the creation of standards to which TEPP would be held. These

first set of standards were developed through the American Association of Teachers

Colleges (AACT), and included clinical experiences as an important component to

teacher education. This work eventually gave rise to the standards adopted by the

National Council for Accreditation of Teacher Education (NCATE) at its establishment

in 1954. Examples of these recommendations included: (1) laboratory experiences be an

integral part of work in each of the four years of college; (2) before student teaching,

laboratory experiences be integrated into other parts of the college program; (3)

provisions be made for post-student-teaching experiences; (4) provisions be made for

full-time student teaching; (5) assignments be made cooperatively by the people most

acquainted with the student and his or her needs and the opportunities in the laboratory

situation; and (6) the college faculty member and the cooperating teacher share in

supervision (as cited in Whitford & Villaume, 2014, p. 426).

This approach was a marked change in the way student teaching was seen as an

event at the end of teacher preparation. This idea of integrated clinical experience is

apparent through multiple revisions of the NCATE standards as well as in the 1997

formation of the Teacher Education Accreditation Council's guidelines that linked

clinical practice to academic preparation. In the 1980s-1990s, the national conversations

about K-12 school and university partnerships led to the creation of the professional

development schools (PDS). PDS were seen as the place for teacher preparation focusing

on professional development for K-12 faculty and application of research and improved

learning for K-12 students. This resulted in the creation of Standards for PDS in 2001

through NCATE. The learning that arose from these partnerships between K-12

institutions and TEPP provided the foundation for the formation of guidelines for clinical

practice. These guidelines were released in NCATE's Blue Ribbon Panel Report,

"Transforming Teacher Education Through Clinical Practice: A National Strategy to

Prepare Effective Teachers". It is this report that calls for teacher education to be fully

grounded in clinical practice with integrated content and pedagogical courses that is the

basis for the most current work in teacher education as it relates to clinically-based

practice.

The merger of NCATE and TEAC in 2013 gave rise to the most current

accreditation standards for TEPP with the creation of the Council for the Accreditation of

Educator Preparation (CAEP). Although these standards cover all aspects of teacher

training, Standard Two of the CAEP standards, in particular, is devoted entirely to

clinical practice. Standard Two emphasizes the importance of building mutually

beneficial partnerships. Mutually beneficial partnerships allow the development of the

education profession by engaging all stakeholders, P-12 and TEPP in the unifying goal of

preparing teachers to meet the educational needs of society in the 21st Century

Looking Ahead

Research and practice in teacher education is still largely influence by the role

practice plays in the development of learning to teach. More specifically, teacher

educators and researchers are examining the perceived gaps that exist between theory and

practice, knowledge for teaching and knowledge from teaching, and among university courses and fieldwork (Ball & Forzani, 2009; Zeichener, 2012). Darling-Hammond (2014) states,

> A good part of the magic of teaching and of teacher education is how teachers come to integrate theory and practice in a way that allows them to become expert in making and enacting decisions to meet the very different needs of the children they serve. The 'secret sauce' in teacher education appears not to be the structures adopted by programs (p. 547), but instead the closely integrated study of what happens in the field makes a significant impact.

This perspective on teacher education suggests the development of communities of practice in which the learning of pre-service teachers is scaffolded and informed by both the field and coursework in their teacher preparation (Darling-Hammond, 2014). It is only within a community of educators made up of both university and K-12 members that pre-service teachers will have the opportunities to develop their teaching practice in such a way that allows them to fully enact theory into practice. Without the community the pre-service teachers will not have situated learning in a scaffolded structure to learn how to develop their teaching practices.

Field experiences are important contexts for learning, rather than opportunities for application of theory (Zeichner, 1996). The work of Rosaen & Florio-Ruane (2008) address how the assumption of field experience as a place to practice divorced from the coursework limits the clinical experience's capacity to be fully embraced as a productive learning environment. Whitford & Villaume (2014) encourage partnerships to flip their thinking

> and conceptualize curriculum as a series of carefully designed clinical experiences wrapped in coursework that focuses on the development of

the knowledge, skills, and dispositions teacher candidates need to contribute in meaningful ways to the learning needs of K-12 students at specific school sites. Designing standards-based curricula grounded in clinical experiences and attuned to the learning needs of students at different school sites challenges the ways we are accustomed to thinking about curriculum, instruction and assessment (p. 433).

Situating teacher education into the context of practice requires new ways of imagining teacher education. This includes simultaneous course and fieldwork that is integrated. Integrated course and fieldwork provides pre-service teachers opportunities to better make connections between theory and practice, and to be comfortable with the process of learning to teach and implement what they are learning into practice (Hammerness, 2005). The research of Darling-Hammond (2006) and Tatto (1996) both demonstrate the positive influence and effectiveness in supporting pre-service teacher learning when campus coursework is carefully coordinated with intentionally constructed fieldwork that aligns with one another.

In structuring the connected alignments between coursework and fieldwork there are some key strategies that have been proven effective. More specifically, research on these key strategies indicate they help build that critical alignment between coursework and fieldwork. One strategy, lesson study (Fernandez & Chokshi, 2002), is the process whereby teachers collaborate to plan and teach lessons, examine the results and discuss their learning from the shared experience. Grossman et al. (2009) examined methods used in professional practice education for teachers, clergy members and clinical psychologists. They found that professional practice is often discussed in terms of representations, decompositions and approximations of practice. These are essential

components to making sense of events that happen in clinical practice for pre-service teachers, clinical educators and teacher educators.

Darling-Hammond (2006) acknowledged that, "organizing candidates' learning experiences so that they can effectively integrate and use their knowledge in practices is likely the most challenging aspect of designing a teacher preparation program" (p. 26). Step one is to focus on teaching as the center of learning to teach. If practice is to be the core of teacher education curriculum, TEPP must shift from a focus of what teachers know to what teachers do. This is strongly aligned to situated learning within a community of practice (Lave & Wenger, 1991) where pre-service teachers can develop their understandings of teaching within the social context of a school. This does not discount the foundational knowledge and understandings that are critical to the work that teachers do, but instead builds concrete understandings through "repeated opportunities for novices to practice carrying out the interactive work of teaching and not just talk about that work" (Ball & Forzani, 2009, p. 503). The goal of coherence and integration is to create thoughtfully designed, carefully sequenced, mutually reinforcing course, and clinical experiences that guide pre-service teachers as they construct their understandings of teaching and learning. These elements are essential to the development of the Zone of Proximal Teacher Development. Tatto (1996) found that teacher candidates prepared in programs with a coherence in the vision of teaching with consistency between courses and integration of field experiences and coursework are better prepared than in programs with a set of required courses and number of hours in the classroom to complete.

Within teacher preparation there are great variations in the content and structures (Darling-Hammond, 2006; Goodlad, 1991; Levine, 2006; Walsh, 2001; Zeichner, 2011). Coupled with this great variation, there has been a consistent call for the redesign of teacher (Darling-Hammond, 2006; Dewey & Archambault, 1964, Goodlad, 1991; Levine, 2006; Walsh, 2001; Zeichner, 2011). This critique has been present throughout the history of American teacher preparation (Fraser, 2007). At a speech given at the Columbia University Teachers College, Arne Duncan, the United States Secretary of Education in 2009, suggested that:

> by almost any standard, many if not most of the nation's 1450 schools, colleges and departments of education are doing a mediocre job of preparing teachers for the realities of the 21st century classroom. America's university-based teacher preparation programs need revolutionary change-not evolutionary tinkering

More specifically, these calls for revolutionary change in teacher preparation have included everything from reorganization (Levine, 2006; Zeichner, 2010) to complete elimination (Hess, 2002; Walsh, 2001).

Critics of university-based teacher education have argued that teacher preparation does not matter, citing evidence that it does not impact student learning (Paige, 2002) and that teachers can learn on the job (Walsh, 2001) or that teaching only requires high verbal ability (Steiner & Rozen, 2004). Conversely, a body of research exists that challenges these claims, demonstrating a strong connection between effective teachers and the training they receive in teacher education preparation programs that include teacher education content methodology (Monk, 1994). Research has also demonstrated the need for teacher preparation to be more than a focus on content coursework. In other words,

teaching is more than knowing content (Darling-Hammond, 2000, 2006). Teacher

preparation cannot happen solely within the context of the university coursework, but

instead requires consideration of enactment of practice within context. Future educators

need to experience how to put content knowledge into practice using foundational

pedagogies.

Further, a wide body of research has examined the role experience plays in

student achievement, with research indicated that more experience in a teacher leads to

higher student achievement. Darling-Hammond's research (2006) indicates four teacher

qualifications that have an influence on K-12 student achievement. These include:

general academic and verbal ability, subject matter knowledge, knowledge about teaching

and learning reflected from teacher education preparation, and experience teaching.

Additionally, Ferguson's (1991) research examined teacher "expertise" (defined as a

combination of licensing examinations scores, experience and education) influence on

student achievement. He found higher teacher expertise to have a greater impact on

learning than socioeconomic status of the students. In a quantitative analysis of existing

research and state level policies, Darling-Hammond (1999) confirmed the impact of

knowledge about teaching or pedagogy in the achievement levels of learners emphasizing

the understanding that specific measures of teacher preparation including education

coursework have strong relationships to greater learning outcomes.

There are numerous studies that substantiate the need for teacher training to occur

in programs that provide foundational preparation. This foundational preparation

includes an emphasis on pedagogical content knowledge as well as practice teaching

experiences connected to meaningful clinical field experiences in diverse settings rather than shortened fast track programs which bypass the basic components of teacher preparation (Boyd, et al., 2006; Darling-Hammond et al., 2002; Darling-Hammond, 2006). These basic components include constructs that allow future teachers to enact pedagogical practices in classrooms or other settings with children (Darling-Hammond, 2006). Although TEPP consider the inclusion of these components of the foundational preparation within, a cycle of constant improvement based on best practice is important for the most effective preparation possible.

<div align="center">Problem and Purpose</div>

Teacher education programs need to routinely examine their structures and practices in an effort to provide the most effective coursework and clinical opportunities. Research indicates that teachers benefit from education coursework in their preparation that provides opportunities to develop and practice pedagogical understandings (Darling-Hammond, 2000, 2006). Research indicates that opportunities to enact learning from coursework are beneficial in teacher efficacy (TE) development within teacher preparation (Tschannen-Moran, 2007). Teacher efficacy is defined as the construct that is a combination of teachers' perceptions of the teaching task and of their personal capabilities. It is not the actual level of competence, but instead the self-perception of competence based on prior experiences (Tschannen-Moran, et al., 1998). However, a gap in the research exists about the actual structures and strategies within the communities of practice that provide and encourage opportunities for growth of TE for pre-service

teachers. Further, existing research has focused on the development of TE through field-based experiences, but not the structures and strategies within that are specific to the development of teacher efficacy (Campbell, 2012). To that end, a gap in the research exists about the specific structures and strategies that contribute to the development of TE.

Therefore, the purpose of this qualitative study was to better understand the structures and strategies used in teacher education coursework that took place in a K-5 school context that provided and encouraged opportunities for growth of TE for pre-service teachers. I conducted this research by examining a case where a semester of teacher education preparation was embedded in a K-5 school setting with intentional efforts made to integrate field and coursework expectations and assignments. This unique design provided opportunities for scaffolded learning experiences and provide side-by-side learning (between pre-service and inservice teachers) within the school community. The results of this study will be used to inform teacher education preparation programs about specific events within the case which contributed to the development of teacher efficacy for the pre-service teachers during the semester.

Research Questions

This study was designed to explore the structures and strategies within a set of integrated course and field experiences that were embedded in the context of K-5 school during the fall of 2015. All places and persons are assigned a pseudonym for the purpose of anonymity. Using a lens of critical sociocultural theory to examine the development

of teacher efficacy in the pre-service teachers participating in the embedded component

of the teacher education program, this study was organized around the following

questions:

1. Do pre-service teachers experience positive growth in their teacher efficacy

   during a semester long embedded experience?

2. What student identified structures in the integrated, embedded model

   strengthened TE for pre-service teachers? How did they influence their

   teacher efficacy?

3. What student identified strategies intentionally employed in an integrated field

   and coursework strengthened teacher efficacy for pre-service teachers? How

   did they influence their teacher efficacy?

The goal of this qualitative research investigation was to gain insight into the

phenomenon of TE development of pre-service teachers through embedded, integrated

semester in a TEPP. This research study employed case study to investigate these

questions. Trainor and Graue (2013) speak of the "qualitative touchstones" (p. 58) of

case studies being complex, evolving, and contextualized. This study has been built upon

each of these touchstones. It was not possible to examine this question simply, but

instead the context of the school and the integration of course and fieldwork were

considered through multiple sources of data thus making it complex. This research

developed throughout the fall semester due to its occurrence within the school setting and

intentional structure of the context to be adaptive to the opportunities within the context.

Finally, this research was highly contextualized requiring careful description of the

setting, participants and multiple events throughout the study by myself who was intimately involved in the content and context of the research (Creswell, 2013; Stake, 1995).

A case study was an appropriate choice of methodology to investigate the development of TE in this context because of the specificity of the characteristics unique to this situation, yet with potential applicability to other contexts (Baxter & Jack, 2008; Trainor & Graue, 2013). This case is bound by the Fall 2015 semester and the participation in the embedded, integrated field and coursework by the pre-service teachers in a TEPP in a mid-size land grant university in the Rocky Mountain West. Participants in this model of instruction within the TEPP were enrolled in the following courses during a semester long experience: English Language Arts Methods for K-8 Teachers, Practicum for K-8 Teachers, and Advanced Digital Internship. All of the previous mentioned courses were held at a classroom within a local K-5 classroom that was designated as a collaborative classroom through a partnership between the university and the school district.

The pre-service teachers were partnered with a classroom teacher or teachers in the school in order to complete their clinical field experience hours over the course of the semester. Multiple participants of the embedded, integrated model were included in the data collection that explored the specific experiences, events and constructs that contributed to the development of their TE during their participation in the semester. A focus on only the participants of the embedded, integrated model grew from the research that has determined good clinical practice with strongly integrated field experiences

positively affect teaching practices through the development of TE. It was anticipated

that there would be growth of TE by the participants, but the purpose of this investigation

was to understand the specific components of the structures and strategies within the

model that lead to the growth by focusing only on the participants in the embedded,

integrated model. All of the pre-service teachers enrolled in the cohort were invited to

participate in the research after I explained the purpose and requirements.

Significance of the Study

> Teacher education programs all over the world are charged with the task of preparing pre-service teachers to become highly effective educators. Along with the necessary pedagogical skills and content knowledge, educators need to be confident in their abilities to enact effective instructional practices that result in students' learning, motivation and other positive outcomes. That is, they need efficacy for teaching…
> (Duffin et al., 2012, p. 827)

The findings from this research could be used to examine the structures and

strategies implemented within a teacher education preparation program in consideration

of the development of teacher efficacy (Campbell, 2012). Researchers could consider

how further studies could be designed to quantify the effects of coursework aligned to

and embedded within field-based practice. Research has shown that teachers are more

successful when they participate in clinically based practices that are strongly aligned to

university coursework, it is imperative for us to investigate the structures and strategies

that occur within them that contribute to the development of high TE (Woolfolk Hoy &

Spero, 2005). This would also allow practitioners to consider how they structure their

instruction within teacher preparation to most significantly impact the development of teacher efficacy.

Limitations and Delimitations of the Study

The limitations in this study include the volunteer nature of participation and the pre-service teachers who chose to enroll in the cohort of classes. The enrollment in the cohort was influenced by need for specific schedules, courses involved as related the participant progress in the TEPP, and interest. Participants in the cohort were required to enroll in all of the courses involved at the school site, but were not restricted from taking additional courses during the semester. The delimitations in this study include pre-service teachers and the place of progress they are in the TEPP. Seven of the fifteen pre-service teachers enrolled in the semester were chosen to represent the larger group. Two grade level teams (First grade, $n = 3$; and Fifth grade, $n = 4$) were chosen to represent a primary and intermediate grade level. These two grade level teams were chosen to provide a breadth of experience while also allowing comparison within the grade level participants of the events such as the professional development presentation. I did not choose to study all of the participants in order to complete a more in depth analysis of the evidence, but feel that these two grade level teams represent the larger group in their make up of gender (Female, $n = 6$; Male, $n = 1$) as well as level of practicum experience (Practicum I, $n = 3$; Practicum II, $n = 4$). I chose to focus only on the pre-service teachers participating in the cohort and not the population of pre-service teachers enrolled in the traditional structure of the teacher education program as I was not looking to compare the outcomes, but rather to investigate what was effective within the cohort model.

The results of this study may be generalized to similar structures within mid-sized university TEPP. Sources of data for this study include the results from a pre and post Teacher Sense of Self Efficacy Scale (TSES) Long Form (Tschannen-Moran & Woolfolk Hoy, 2001) survey, reflective practice assignments, professional growth presentations, classroom observation notes, an exit survey, focus group, video of presentations in professional development and individual interviews. The goal of these multiple sources was to develop a rich set of data to use in consideration of construct validity. The data were collected, maintaining the privacy of the participants while also asking them to review the draft of the case study. Avoidance of over generalizability will be considered with relation to minimizing external invalidity. The results from this research will only be generalizable to other institutions with the same contexts and structures in place as the one examined in this study (Yin, 2009).

Definitions of Key Terms

1. Teacher education preparation program (TEPP): A program of study offered by an institution of higher education that leads to a degree and licensure for teaching in the public schools.

2. Coursework: The assignments included in a typical university class.

3. Fieldwork: The internship work associated with a field experience in the teacher preparation program

4. Practicum: The seminar associated with the fieldwork in the teacher preparation program.

5. Side-by-side learning: A structure by which two or more groups of people are participating in a learning opportunity collaboratively and for a unified goal.

<u>Chapter Summary and Organization of the Study</u>

This chapter introduced and outlined the basis for this study and its potential contributions to the understandings of key structures and strategies to build teacher efficacy for pre-service teachers in their education preparation programs. This chapter included the purpose and statement of problem, research questions addressed, limitations and delimitations of the study, the significance of the study and key terms. Chapter Two will provide a review of the literature that serves as a foundation to this study as well as conceptual framework of teacher efficacy and the elements of social constructivism that are pertinent to this research. Chapter Three provides a detailed description of the research methodology, methods and materials for this study. Chapter Four presents the results of the study, organized by research question with Chapter Five presenting the discussion and implications of the results.

CHAPTER TWO

LITERATURE REVIEW

The purpose of this qualitative study was to examine a case where a semester of teacher education preparation was embedded in a K-5 school setting with intentional efforts made to integrate field and coursework expectations and assignments, provide opportunities for scaffolded learning experiences and provide side-by-side learning (between pre-service and inservice teachers) within the school community. By locating the events of the cohort in a school, the participants were embedded within an authentic context of the teaching profession. The structures of the work integrating the field and coursework provided opportunities for support, or scaffolding, for the pre-service teachers as university faculty and mentor teachers worked together. The results of this study will be used to inform teacher education preparation programs about specific events within the case which contributed to the development of teacher efficacy for the pre-service teachers during the semester.

This study was based on the assumption that learning is situated in social constructivism where individuals interact within their social worlds. Learning to teach is as complex as teaching, requiring pre-service teachers to navigate multiple social spheres including various classrooms in which they take on different roles as teachers and learners. Chapter Two presents a review of the literature regarding social constructivism learning theory based in the work of Lev Vygotsky and John Dewey as a pertinent conceptual framework. The research supporting self efficacy and subsequent

development of teacher efficacy are presented, as well as the need for strong teacher

efficacy through an explanation of the positive effects of high teacher efficacy for

learners, teachers and the education profession. Finally, considerations for the structures

within teacher preparation to promote the development of teacher efficacy including the

importance of coherence and integration of field and coursework are presented.

<div align="center">Social Constructivism</div>

Because clinical practice in teacher education is largely dependent on both

context and experience, it is important examine the literature base in which those ideas

are founded. Social constructivism is one theoretical construct that can be used to

examine the role context and experience plays in teacher education. Though social

constructivism is defined by many, Lev Vygotsky is considered by many to be the

"seminal theorist" (Bentley, 1998, p. 239). There is evidence of striking similarities

between John Dewey's experimentalist education approach where there is an "organic

connection between education and personal experience" (Dewey, 1938, p.25; Phillips,

2000). The purpose of this section is to define social constructivism, bringing forth the

commonalities and differences between the work of Vygotsky and Dewey, and relate the

social constructivist theory to the preparation of educators.

Social Constructivism Defined

Johnson (2003) defined social constructivism based upon Vygotsky and Dewey's

work, and suggested "knowledge is constructed where earlier experience is the

foundation for building or reconstructing knowledge within an interactive and

interdependent environment that encourages growth in both the individual and society."
(p. 33). The principles within this framework are experience, continuity, and growth with
a focus on the learner as actively engaged in the construction of understandings and on
doing in a social context rather than simply knowing (Vygotsky, 1997; Bredo, 2000).
These will be further explored below in an examination of the work of Vygotsky and
Dewey in order to develop a better understanding of the paradigm of social
constructivism.

Commonalities Between the Work of Vygotsky and Dewey. There are several
commonalities that occur within the theorists' work. The first is that of context or
experience. Both Vygotsky and Dewey set forth the belief that learning is best done
actively within context (Brooks & Brooks, 1993). Vygotsky compared this to learning to
swim, and stated, "Just as you cannot learn how to swim by standing on the seashore, that
to learn how to swim you have to, out of necessity, plunge right into the water even
though you don't know how to swim" (1997, p. 339). Dewey referred to this as unity of
knowledge whereby knowledge is inseparably united with doing. This component of
Dewey's theory indicates that learning cannot occur in a vacuum, but instead occurs
through activity. Instruction in this model was based on the idea that knowledge is a by-
product of activity; people doing things in the world, and doing results in learning
something that, if deemed useful, gets carried along to the next activity" (Menand, 2001,
p. 322). This suggests importance in being able to apply learning from one context to
another, and a continuity to the application of new knowledge. Moving the learner
forward in their construction of understanding in a continuous manner is a foundational

principle in both of their work. This places the learners at the center of learning, not the

teacher or the material to be learned (Johnson, 2003). It allows for an "organic relation of

theory and practice" (Dewey, 1990, p. 85) that is responsive to both the learner and the

context but propels the learner forward which is the third common principle between the

work of the two theorists. Within this idea of the growth and continuity the experiences

of the learner " are the fundamental basis of pedagogical work" (Vygotsky, 1997, p. 47).

Differences Between the Work of Vygotsky and Dewey. While both of the

theorists emphasized the importance building a community of learners, and the nature of

active involvement by all participants including the teacher, each suggested subtle but

important differences in the role of the members within the context (Johnson, 2003). For

Vygotsky, the teacher was the controller of the environment and this was the leverage for

learning or what he called the "formula of the educational process: Education is realized

through the student's own experiences, which is wholly determined by the environment,

and the role of the teacher then reduces to directing and guiding the environment"

(Vygotsky, 1997, p.50). Vygotsky viewed the teacher as the authority figure fully in

charge, pulling the learner to the next steps needed for growth. Dewey however, referred

to the school context as an "embryonic community" (Cremin, 1961, p. 177) where the life

of the larger society was reflected. Within this environment he believed that "The teacher

is not in the school to impose certain ideas or to form certain habits in the child, but is

there as a member of the community to select the influences which will affect the child

and to assist him properly responding to those influences (Dewey, 1963, p. 432). He

believed that the teacher should be less controlling than Vygotsky. This difference is

surely impacted by their beliefs in the role of individuals within the society. For

Vygotsky, enculturation that promoted change in the individual for the members of the

group was important, as cultural transmission was an essential component of his vision of

education. His belief in Marxist philosophy strongly impacted his view that emphasized

the collective culture (Johnson, 2003). Dewey, an avid believer in democracy, viewed

the purpose of education as a means to empower the individual through literacy and

social consciousness (Johnson, 2003).

This view of individual focus versus collective culture leads to the next and most

significant difference between the two philosophers. For both, the teacher is an active

participant in the community of learners. For Vygotsky the teacher must "live within the

school collective as if an integral part of it. It is in this sense that the relationship

between the teacher and student can attain a force, a transparency, and a depth without

equal in the entire social scale of human relationships" (Vygotsky, 1997, p. 345). This

resonates in the words of Dewey as well, but for Dewey he recognizes the individualism

of the learners. He believed the teacher should value the prior experiences the students

bring with them to learning and ask them to reflect upon how the prior experiences

impact their understandings. While this might seem to be a subtle difference, it is

actually a significant departure from Vygotsky's belief system. Dewey refers to this as

the "reconstruction of experience" (Johnson, 2003, p. 111) whereas Vygotsky's position

is that learning is construction of understanding based on experience. It is not as if

Vygotsky does not value prior experience, but he does not value the revisiting of

it. Vygotsky's Zone of Proximal Development explains this construct as the individual

"learner within the concrete social situation of learning and development" (Moll, 1990, p. 5). Vygotsky defines this construct as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p. 86).

A staircase analogy developed by Johnson (2003) is helpful in more clearly understanding the implications of the differences. A Vygotskian staircase is straight and the teacher is always one step above the learners, ready to assist them by pulling them to the next level. There is no need for the learners to look behind them or set goals as the teacher will create the environment necessary for the next step to be achieved. A Dewian staircase is a set of spiral stairs where both the learners and the teacher can see behind the current location as well as a bit of what lies ahead to peak the learners' interest in progressing forward through inquiry. The teacher is positioned behind the learners offering guidance and support through reflective questioning as well as encouragement to self-direct their learning. In both of these staircases the learners are at the center, but the position and role of the teacher is different, as are the learning outcomes. For Vygotsky, the teacher is the controller and in full charge of the learning environment which is the key to learning development whereas for Dewey it is

> ...the educator's responsibility to see equally to two things: First that the problem grows out of the conditions of the experience has in the present and that it is within the range of capacity of students; and secondly, that it is such that it arouses in the learner an active quest for further experiences in which new problems are presented. The process is a continuous spiral. (1963, p. 79)

The teacher continually asks the learners to look back to what they know and what they have experienced to drive the next steps in understanding. This component of reflection is a significant difference between the two theorists. Shepel (1999) defines reflective thinking as "a human ability of the agent of action to be self-conscious, the ability to regard oneself, or one's own action as the other, as the subject of purposeful change. Reflective thinking is socially constructed in the course of culturally mediated human activities." (p. 87). In Dewey's world, the valuing of prior experience is a valuing of the individualism that learners bring with them to the environment. It is through reflection upon the past experiences and the encouragement to consider the direction for next steps in continuous growth that we are able to see the significant difference in desired outcomes between the two theorists. For Dewey this leads to freedom of thought and an exchange of ideas that align to his democratic beliefs. (Johnson, p. 114) whereas for Vygotsky the end goal is to provide situated learning opportunities at the level of the learner, driving their learning through manipulation of the environment for the good of the collective group.

Aligning the Work of Vygotsky and Dewey. Key to social constructivism is an acknowledgement that learning occurs within socio-cultural contexts (Adams, 2006) and not in isolation. It is within the social context that the construction of knowledge and understanding occurs, as the learner makes connections to prior experiences, through engagement with learning opportunities. In this framework, the learners are actively engaged utilizing language and other forms of communication to build knowledge constructs within the social context before internalizing understandings within

themselves (Daniels, 2001). Learning within this paradigm occurs primarily through the social processes that occur between the teacher and learners as well as between learners within the community.

The learning environment within the social constructivist theory is dual-agentic, shaped by both teachers and learners (Silcock, 2003). Within this framework the teacher takes on the role as a facilitator who creates an environment where the scaffolded opportunities for experiential engagement are the focus as students construct knowledge within the social context. (Vygotsky, 1978). This requires that the teacher understand the stages of learning development and conceptualize and enact the transference of the learning agenda to the learner (Brooks & Brooks, 1993). Therefore, the teacher does not remain in control of the learning with no consideration for the learners and the contributions they bring to the social context.

The purpose for learning is also a key component of social constructivism in that consideration of prior learning as well as connection to future use of learning is essential. This allows learning to be authentic. Research (Bereiter, 2002) demonstrates that purposeful learning is more highly transferable when the socio-cultural context is wider than the immediate content learning. When learning opportunities are considered within the social constructivist framework Adams suggests that the following question is essential: "How is this meaningful for my students given their life-world?" (Adams, 2006, p.251). This offers consideration for where the learner has been and where the learner is progressing. This again requires the learner to have a voice in the construction

of the learning opportunities and for the teacher to be responsive and reflexive to the members within the learning community.

Based upon the above existing literature, I propose the following synthesized definition of social constructivism: Social constructivism is then a theory of learning that encompasses the understanding that learning should consider the learners contributions based on background and existing understandings, experiential learning opportunities within social contexts, and the role of the teacher as a facilitator for progression in the construction of knowledge with real life-world meaning. The next section then addresses how this might be considered in teacher preparation.

Social Constructivism as it
Relates to Teacher Preparation

Both Vygotsky and Dewey's work was focused on the learning of children, but it holds some profound implications for the preparation of teachers. If we consider the ideal construct of the preparation of teachers to be framed in social constructivism, it would allow teacher preparation to focus on the elements of democracy that Dewey envisioned for society- "...interactivity and interdependency with the goal of change in the social environment. Dewey emphasized not the individual, but how the individual serves and advances the social" (Johnson, 2003, p. 91). Dewey defined education as the "...reconstruction or reorganization of experience which adds to the meaning of experience, and which increases ability to direct the course of subsequent experience (1966, p. 76).

If we consider the context of teacher preparation to include both university faculty

and professional practitioners working together to prepare teachers, there then could be

the potential for a group of

> people held together because they are working along common lines, in a
> common spirit and with reference to common aims. The common needs
> and aims demand a growing interchange of thought and growing unity of
> sympathetic feeling" (Dewey, 1990, p. 14).

Dewey viewed the teacher "as an active experimenter who constructs the

educative experiences on the grounds of continuous reflective inquiry" (Shepel, 1999, p.

73). Opportunities for learning in practice (the classrooms) with support from a

community of educators have the potential to benefit the larger society while developing

individual educators. John Dewey's work espouses the importance of a balance of

theoretical understandings with pragmatic application (Dewey, 1904). His ideas gave

birth to the development of teachers as reflective practitioners who are able to examine

their work critically with a mindset for growth through practice for oneself as well as the

development of shared understandings that become the communal expertise and

contribute to the development of standards of practice (Shulman, 1998). Two key

constructs which facilitate these opportunities are, situated learning in communities of

practice and the zone of proximal teacher development (ZPTD). These two constructs

are grounded in the theory of social constructivism, but further address the role of the

community and the scaffolding specific to teacher education.

Situated Learning in Communities of Practice. Within this study, the community

of educators including the pre-service teachers, university faculty and mentor teachers

played a vital role in the development of teacher efficacy for the pre-service teachers.

Lave and Wenger (1991), the seminal theorists of situated learning, put forth the idea that

learning cannot be exclusively characterized in terms of outcomes or acquisition of

knowledge, but instead focuses on the interactions within social and physical contexts;

that learning occurs through participation in a community of practice. The theory of

situated learning maintains that it is the thinking processes, action of participation in the

environment, and the meaning making activities that build new understandings within a

community of practice. Wenger (1998) claims that it is only through the "realignment of

experience and competence, the ability to negotiate new meanings, and the

transformation of identity" (pp. 226-227) that learning can occur.

Situated learning within teacher preparation requires a paradigm shift from

instruction of increasingly complex concepts at the university to teacher preparation that

is grounded in social participation in the school community (Korthagen,

2010). Korthagen (2010) specifically argues that:

> This points towards the need for many opportunities of peer supported
> learning in teacher education, which also prepares teachers for the kind of
> professional development that is much more grounded in collaboration
> and exchange with colleagues than is common in many schools. It implies
> an emphasis on the co-creation of educational and pedagogical meanings
> within professional communities of teachers-as- learners, as also proposed
> by Simons et al. (2003). When teacher educators start to see cohort groups
> in teacher education as such communities, and treat them as such, this in
> itself may have an important positive influence on their practices in
> schools. (pp. 101).

It is through this situated learning within a community of practice that includes

university and K-12 faculty, pre-service teachers and the learners, focused on learning

and teaching that pre-service teachers are able to build their understandings of teaching

practices and develop their beliefs about their impact on learners. Being a member of this

education-focused community of practice can provide the scaffolded support that

Vygotsky referred to as the Zone of Proximal Development (Vygotsky, 1978).

Zone of Proximal Teacher Development. The mentor teachers, university faculty

and even the pre-service teachers themselves provided scaffolded support for the

participants in this study. Vygotsky's work in developing the Zone of Proximal

Development has a significant role within practice based teacher education. Warford

(2011) has put forth the idea of the Zone of Proximal Teacher Development (ZPTD)

which incorporates Dewey's principle of reflection into Vygotsky's ZPD. In examining

teacher education it allows us to consider some very important tenets within. Warford

defines the ZPTD as "the distance between what teaching candidates can do on their own

without assistance and a proximal level they might attain through strategically mediated

assistance from more capable others (i.e. methods instructor or supervisor)" (Wartford,

2011, p. 253). The field experience is central to the Vygotskyan view of development as

the pre-service teacher constructs his or her understandings mediating between theory

and practice through situated learning. Preparing teachers in this way requires reflection

on the teacher candidates prior experiences including an acknowledgement and analysis

of the problems that arise from the "apprenticeship of observation" (Lortie, 1975). If

TEPP do not bring pre-service teachers back to their own experiences and include them

as part of the conversation moving forward, then this component of their understanding

of teaching can not be deconstructed and analyzed to build a more solid understanding of

teaching and learning. This practice acknowledges the significant experience they have

in the educational system as a student and allows them to better understand the sociocultural history they bring with them as they move forward in the profession (Campbell, 2012; Fani & Ghaemi, 2011). In this way TEPP begin at what they know and carefully scaffold their learning in their development as teachers through carefully selected situated and mediated learning contexts (partner schools). Aligned and strategically designed experiences build connections between theoretical ideas and allow for implementation of core principles with a focus on the practice of teaching and learning. Scaffolded experiences that are attuned to the necessity of coherence and integration within the TEPP occur as the teacher candidates are challenged to develop and strengthen their understandings with consideration of prolepsis and the benefits it has to offer for growth opportunities and future application (Warford, 2011).

What is Self-Efficacy?

Teacher efficacy (TE) beliefs (both high and low) are born and developed in teacher education preparation programs (TEPP) and should be considered essential to the creation of teachers due to significant impacts high TE has on teacher performance, student achievement and retention of teachers in the profession (Tschannen-Moran, 2007). TE developed from the work of Arthur Bandura's theory of sef-efficacy.

In 1977, Arthur Bandura defined self-efficacy in his seminal work, "Self-efficacy: Toward a unifying theory of behavioral change", as a "belief in one's capabilities to organize and execute the courses of action required to produce given attainments" (p. 3). This idea of self-efficacy grew out of his work in social cognitive

theory based on an agentic perspective (Bandura, 2006, 2008). This suggests that a person (or agent) can alter the course of events with intentional action through the interactions among intrapersonal influences, the behavior in which individuals engage, and the forces of the environment in which the event occurs. This is described in the literature as triadic reciprocal causation (Bandura, 1986). In other words, people have the ability to exercise some control over events in their lives based on their beliefs concerning their abilities to enact change or self-efficacy. Self-efficacy is a "future oriented belief about the level of competence a person expects he or she will display in a given situation" (McMaster, 2005, p. 2) based on past or current experiences.

This belief in one's ability to enact change by completing a task, or self-efficacy, positions it in the role of mediator. Self-efficacy then becomes what enables a person to move from having knowledge to putting it into action. The beliefs a person has about their ability to complete a task influence their actions, thus self-efficacy is a powerful predictor of behavior (Bandura, 1997). This does not mean that a person is able to complete a task without the required knowledge or capabilities, but if a person does not believe they are able to enact change due to low self-efficacy, they will not even try (Bandura, 1977). Efficacy beliefs influence how people feel, think and motivate themselves to believe" (Bandura, 1993, p. 118) thus making it a major factor in a person's ability to enact change. This efficacy expectation is an individual's belief that he or she can accomplish a task with a certain level of competence.

How is Self-Efficacy Developed?

Self-efficacy is developed through cognitive constructive processes involving

self-referent thought based on past experiences and future expectations (McMaster,

2005). This happens not in isolation, but instead social relationships play an important

role in the development of self-efficacy. Bandura (1986) argued that "perceived self-

efficacy results from diverse sources of information conveyed vicariously and through

social evaluation, as well as through direct experience" (p. 411). Bandura (1977, 1997)

organized these experiences for self-efficacy development into four categories: mastery

experiences, vicarious experiences, social persuasion, and physiological and emotional

states. Mastery experiences are the most powerful of the categories due to the direct

feedback received by the agent regarding capabilities (Tschannen-Moran, 1998). It is

important to note that the level of arousal during a mastery experience, either positive or

negative, effects the enhancement or reduction of self-efficacy. If success is viewed as

lucky, or only through the intervention of others then self-efficacy will not be developed;

but if success is believed to be based upon ability or effort then self-efficacy will be

enhanced (Bandura, 1993; Pintrich & Schunk, 1996). Vicarious experiences are those in

which someone else models a skill. It is the second strongest contributor to self-

efficacy. How closely the observer identifies with the modeler influences the impact on

the viewer (Bandura, 1977). The outcome of the modeled event also affects the influence

on efficacy expectations. If it is unsuccessful or the viewer does not value the outcome, it

could have no effect or even negatively impact self-efficacy development. Social

persuasion may not lead to enduring self-efficacy growth, but events involving social

persuasion often serve to encourage a person to attempt a new task or push through

challenges faced during an event. Again the perception of the persuader's credibility or

expertise may affect the impact of the social persuasion (Bandura, 1997). The final

category of self-efficacy sources is physiological and emotional states. Often input in

this category is intertwined with the other three categories as the other types of

experience bring about physical and emotional responses such as sweaty palms or upset

stomach (Fives, 2003).

What is Teacher Efficacy?

When the concept of efficacy is applied to the context of teaching it becomes

teacher efficacy. Tschannen-Moran, et al. (1998) defined teacher efficacy as the

construct that is the combination of teachers' perceptions of the teaching task and of their

personal capabilities. It is not their actual level of competence, but instead the self-

perception of competence based on prior experiences. Teacher efficacy is a subcategory

of self-efficacy that originated from two lines of research, Rotter's (1966) locus of

control theory and Bandura's (1977) social cognitive theory. Teacher efficacy was first

addressed in the research in the Rand study (Armor et al., 1976) where two items based

on Rotter's work were included in a survey. This gave rise to what is now referred to in

the literature as general teaching efficacy (GTE). GTE is the general sense a teacher has

that "the educational system is capable of fostering satisfactorily student achievement

despite negative influences external to the teacher" (Rich, Lev, & Fishcher, 1996, p.

1016). Gibson and Dembo (1984) referred to GTE as a teacher's "belief that any

teacher's ability to bring about change is significantly limited by factors external to the

teacher" (p. 574). Personal teacher efficacy (PTE) is qualitatively different than GTE in that it is based in the individual's beliefs about his or her own ability to perform and the performance's ability to impact learning. (Tschannen-Moran, et al.,1998). PTE is "a teacher's belief about his or her own ability to perform the actions needed to promote learning or manage student behavior successfully" (Soodak & Podell, 1996, p. 406). This definition more closely aligns to Bandura's (1977) original definition of self-efficacy based in social cognitive theory.

Multiple measures of self-efficacy have been developed since the original Rand survey included the two questions to measure self-efficacy (for a complete history see McKinney et al., 1999) but Tschannen-Moran and Woolfolk-Hoy (2001) developed a measure that has become the predominant measure of self-efficacy in the world. The Teachers' Sense of Efficacy Scale (TSES) addressed the need for a unified teaching efficacy model that interweaves the ideas that teachers can control the learning environment as well as the relationship between the teaching task and teaching ability. The model "clarifies that both self-perception of teaching competence and beliefs about the task requirements within a particular teaching situation contribute to the formation of teacher sense of efficacy and thus to the consequences of those efficacy beliefs." (McMaster, 2005, p. 25). This is important because it addresses the situational and developmental nature of teacher efficacy while also considering the constant cyclical feedback for teacher efficacy development. Through these two components the measure encapsulates the four categorical inputs outlined by Bandura's work for addressing influences of self-efficacy: mastery experiences, vicarious experiences, verbal

persuasion and physiological states. TSES is considered to be the most well developed measure currently because it addresses the need for a measurement that considers teaching tasks that are not too specific to limit its use across contexts, content areas, or levels of teaching and yet addresses important teaching tasks. The TSES has also been evaluated for validity and reliability with three consistent, but distinct factors for inservice teachers: efficacy in student engagement, efficacy in instructional practices, and efficacy in classroom management for inservice teachers (Fives & Buehl, 2010; Klassen et al., 2009; Tschannen-Moran & Woolfolk Hoy 2001; Tsigilis et al., 2010). The TSES assesses teacher efficacy through self-reporting likert scales. Based on these surveys teachers are then categorized into highly self -efficacious/confident, or low teacher efficacy/less confident.

The question then is how does this translate into the classroom? Pajares (1992) concluded, "beliefs are the best indicators of the decisions individuals make throughout their lives" (p. 307). This translates into the classroom in the teachers' beliefs about their ability to impact learning through their instructional actions and management of the learning environment. Efficacy has been shown throughout the research to have powerful predictive powers (Pajares, 1992). Lower efficacy leads to less effort and giving up easily, which leads to poor teaching outcomes, which then produce decreased efficacy" (Tschannen-Moran et al., 1998). The research of Raudenbush, et al. (1992) confirmed the connection between knowledge and action with teacher efficacy as the mediator. It is high teacher efficacy that serves as the catalyst for effective teaching through the implementation of skills and knowledge in new and challenging situations.

What Affects the Development of Teacher Efficacy? Teacher efficacy is

developed through the same four categorical inputs as self-efficacy but is context specific

to the classroom and school. Tschannen-Moran, et al. (1998) found that it is only in the

application of teaching that a teacher can really test his or her abilities to teach. These

mastery experiences work in conjunction with the physiological and emotional responses

to affect the teacher's self-efficacy. Vicarious experiences in teaching might come from

a peer observation or team teaching. If a teacher has the opportunity to observe another

teacher in action they are able to develop impressions of the teaching process and

determine how it affects the learners, and how it might be manageable. Obviously the

relationship with the person being observed as well as the success of the teaching

practices observed will determine the effect on self-efficacy development. Verbal

persuasion might occur in continuing education settings, professional development,

evaluations from a principal, or feedback from an instructional coach. Verbal persuasion

might also be of a more personal nature when teachers share ideas or resources in a

casual setting.

The context in which a person experiences the input for self-efficacy development

is an important contributor to the construction of self-efficacy beliefs. Tschannen-Moran

et al. (1998) proposed that in determining their beliefs about their capabilities teachers

consider two interrelated components: what a teaching task might require and his or her

level of personal teaching skill. In determining their beliefs teachers also consider the

context in which implementation will occur. The level of support perceived is important

and can have a significant impact on teachers' belief development. Sense of community

(Lee et al., 1991), school-wide academic achievement expectations (Hoy & Woolfolk, 1993) and positive school atmosphere (Moore & Esselman, 1992) are all significant factors in teacher efficacy beliefs. Teachers in schools with a strong collaborative focus tend to have higher levels of efficacy (Bandura, 1993).

Effects of High Teacher Efficacy on Teachers and Learners. "Researchers have found few consistent relationships between characteristics of teachers and the behaviors or learning of students. Teachers' sense of efficacy….is an exception to this general rule" (Woolfolk and Hoy, 1990, p. 81). The positive effects of high teacher self-efficacy can be organized into five categories: student outcomes, teacher actions, teacher decisions, teacher response to innovation and change, and teacher motivation.

Student Outcomes. The positive effects of high teacher efficacy have been found in both academic and non-academic areas involving students. Research has identified a link between levels of teacher efficacy and student achievement (Allinder, 1995; Anderson et al., 1988; Ashton & Webb, 1986; Moore & Esselman, 1992; Tracz & Gibson, 1986; Ross, 1992). This link has been found in specific content areas such as language arts (Podell & Soodak, 1993; Tschannen-Moran et al., 1998), math (Tracz & Gibson, 1986) and social studies (Anderson et al, 1988). It has also been established for students in rural and urban schools as well with both a majority black and majority white schools (Watson, 1991 as cited in Henson, 2001, p. 5). A teacher's high self-efficacy is associated with many non-academic factors as well including the development of students' own sense of self-efficacy related to achievement (Anderson et al, 1988),

motivation to learn (Midgely, et al., 1989), improved self-management (Rose & Medway, 1981, Woolfolk, et al., 1990), higher perceptions of self (Saklofask, et al., 1988, Ross, 1994) and levels of student self-esteem (Borton, 1991; Cheung & Cheung, 1997).

Teacher Actions. Allinder's research (1994) demonstrated the relationship between a strong sense of teacher efficacy and a teacher's efforts in the classroom including higher levels of planning and organization. Teachers with strong levels of teacher efficacy tend to have higher expectations for their students. (Allinder, 1994) They set higher goals for their students, have a stronger focus on academic instruction, demonstrate "withitness", and maintain on-task behaviors in students among other specific instructional behaviors believed to facilitate student achievement (Ashton & Webb, 1986; Dembo & Gibson, 1985). Teachers tend to spend more time teaching in the content areas where they have a greater sense of self-efficacy and conversely less time where they have a lower sense of self-efficacy (Riggs, 1995; Riggs & Enochs, 1990). A stronger sense of self-efficacy has been shown to lead teachers to persist in working with struggling students (Gibson & Dembo, 1984) and to be less critical of students when they make errors (Ashton & Webb, 1986).*Teacher Decisions*. Multiple studies have contributed to the understanding of teacher efficacy beliefs related to the decisions teachers make including use of instructional time, choice of classroom management strategies and implementation of pedagogical strategies (Emmer & Hickman, 1991; Gibson & Dembo, 1984; Saklofske et al., 1988; Woolfolk, et al., 1990). Teachers with a higher sense of efficacy are more likely to engage in challenging teaching pedagogies such as small group work (Tracz & Gibson, 1986) activity-based methods (Riggs &

Enochs, 1990) and cooperative learning opportunities (Wax & Dutton, 1991). A teacher with higher teacher efficacy is less likely to refer a difficult student to special education or students of lower socio-economic status (Meijer & Foster, 1988; Podell & Soodak, 1993).

Teacher Response to Innovation and Change. Teachers with high teacher efficacy judgements are more likely to be open to innovation and change. They are more likely to seek, explore and adopt innovative teaching practices that have the potential to best meet their students' needs (Berman et al., 1977; Cousins & Walker, 2000; Guskey, 1988; Stein & Wang, 1988.; Woolfolk, et al., 1990) High efficacy beliefs affect a teacher's ability to persist through times of change, especially when challenges present themselves as highly efficacious teachers are more likely to persist through the difficulties of enactment (Gibson & Dembo, 1984) during a challenging situation.

Teacher Motivation. Highly efficacious teachers exhibit greater excitement for the teaching profession which impacts their teaching practice (Allinder, 1994; Guskey, 1984; Hall, et al., 1992) and have higher levels of commitment to teaching (Coladarci, 1992). Research has demonstrated that teachers with higher levels of self-efficacy are more likely to stay in the teaching profession (Burley et al., 1991; Glickman & Tamashiro, 1982) due to job satisfaction (Parkay, et al., 1988; Trentham et al., 1985).

Development of Teacher Efficacy in
Teacher Education Preparation Programs?

How then should we consider what we know about the effects of strong teacher efficacy in schools within teacher education preparation programs (TEPP)? Tschannen-Moran et al. (1998, p. 233) states,

> Teacher education programs all over the world are charged with the task of preparing pre-service teachers to become highly effective educators. Along with the necessary pedagogical skills and content knowledge, educators need to be confident in their abilities to enact effective instructional practices that result in students' learning, motivation, and their positive outcomes. That is, the need for efficacy for teaching….

Teacher efficacy is a variable that is highly correlated to teacher effectiveness, thus the preparation of teachers must consider ways in which it can be strengthened throughout the TEPP. Bandura's original theory of self-efficacy is the basis for the imperative for inclusion of self-efficacy building opportunities within the TEPP because it suggests that self-efficacy, while not a fixed state, is the most malleable early on in learning and is the basis for further growth of teacher efficacy (Bandura, 1997). Woolfolk Hoy & Spero (2005) found in their longitudinal study that efficacy grew throughout the pre-service teachers time in their TEPP, but dropped by the end of their first year of classroom teaching. This finding has been confirmed in research by Hoy and Spero (2005) who determined a correlation of the drop in teacher efficacy to be related to the level of support provided for the first year teachers. Veenman (1984) referred to the first year of teaching as "reality shock". This has been substantiated in research in the United States by Weinstein (1988) who presented the label, "unrealistic optimism", as well as Friedman (2000) in Israel who described the "shattered dreams of

impeccable professional performance" (p. 595). Teacher efficacy beliefs are born within TEPP; it is the beginning of a teacher's trajectory for their professional practice, thus it is essential to consider how the work within the TEPP will help to establish and constructively develop high teacher efficacy. This brings to mind two very important considerations: how TEPP might consider building teacher efficacy to higher levels during these early malleable years and how might the transition between the training received in TEPP be more full of high quality, mastery and vicarious experiences that closely approximate the "real world" of the classroom a teacher will enter in his or her first year of teaching?

The existing research lacks specific suggestions for TEPP to include within their curriculum, but it does provide some insight into considerations for elements that have been shown to be effective in teacher efficacy development. The student teaching experience is considered to be an ongoing mastery experience that is highly influential to the development of teacher efficacy (Mulholland & Wallace, 2001; Poulou, 2007). Hoy and Spero's work (2005) also supports this finding, aligning with Bandura's theory espousing the importance of mastery experiences. Experience in real classrooms has been shown to be incredibly powerful and yet the research shows that it is primarily through vicarious experiences that teacher efficacy growth occurs in the pre-service teacher. Tschannen-Moran, Hoy and Hoy (1998) found that 49% of the variance in the development of teacher efficacy in new teachers can be attributed to vicarious experiences, verbal persuasion and emotional arousal compared to 19% in experienced teachers.

Vicarious experiences are an important component within the TEPP for the development of teacher efficacy. Poulou (2007) found that university preparation was an important component to teacher efficacy development with factors such as course frequency and type. The opportunity to observe teaching practices from their cooperating teachers and peers can be advantageous as well, but require more than just exposure. Important considerations include the relationship between the observer and observee, goals for observation, relevance of the event and the outcomes.

Verbal persuasion cannot be overlooked as an important component to the development of teacher efficacy within TEPP. Poulou (2007) reported that student enthusiasm and engagement to lessons taught by teacher candidates during the student teaching internship have a strong impact on the development of teacher efficacy. Feedback from the university supervisor and the cooperating teacher are two further examples of verbal persuasion.

Milner's examination of the role of experiences in developing teacher efficacy found that the successful completion of multiple years of teaching was the most significant factor in developing teacher efficacy (2002). Hoy and Spero (2005) further examined this finding and confirmed it with their research noting that during student teaching and the first year of teaching mastery experiences are the most influential sources of efficacy input, and yet it was not the largest contributor to teacher efficacy development. Could there be untapped potential within TEPP to provide scaffolded fieldwork aligned with required coursework that would enable the pre-service teacher to add mastery experiences with support from university and K-12 teachers?

The experiences pre-service teachers have in the TEPP are impacted by the development of their TE influencing the obtainment and interpretations of knowledge and experiences within (Pajares, 1992). These beliefs have a stronger impact on their teacher behaviors than levels of content knowledge and thus are better predictors for success in the profession (Pajares, 1992; Poulou, 2007). Hoy and Spero (2005) examined TE development through the progression in the student teaching experience and found a significant increase over time. They found mastery experience to be the most significant contributor to the development of TE during student teaching. This aligns with the findings of Darling-Hammond et al. (2002) causally linking classroom experiences to the development of high TE as associated with feelings of preparedness. Tschannen-Moran and Johnson (2011) also found that vicarious experiences and verbal persuasion embedded in university preparation are important elements for establishing and building TE. Multiple studies have established the relationship between explicit training and experiences received by both pre-service and inservice teachers and higher levels of TE as compared to their peers who did not receive such training (Minke et al., 1996; Reid et al., 1994; Parameswaran, 1998). What we know about the development of TE being most pliable and easily influenced in the early stages (Bandura, 1997) should be considered within TEPP for the development of high TE.

Practice teaching experience has a substantial impact on the development of teacher efficacy (Brousseau et al., 1988; Housego, 1990). In a study of over 3,000 novice teachers, a causal link was established between experience in the classroom during their TEPP and higher levels of teacher efficacy (Darling-Hammond et al., 2002). And yet a

caution must be given that more is not always better. Bandura's work (1997) speaks to the positive changes in teacher efficacy requiring feedback and scaffolded support, thus perhaps a link to the decline in teacher efficacy when first year teachers are not provided mentoring and support. Research has shown the positive impact on teacher efficacy development when pre-service and inservice teachers are provided guided trainings with specific tasks that are relevant to the context in which they are working (Minke, 1996; Parameswaran, 1998). This is very different from an experience where an instructor in a TEPP gives an assignment with little or no knowledge of the field experience. When the pre-service teacher asks the cooperating teacher if he or she may complete the assignment, the cooperating teacher says, "Just forget all that they are teaching you. They don't know what it is like in my classroom." Unfortunately this is an all-too-common event when the ideal images discussed in the college classroom are in conflict with the realities faced in the classrooms (Woolfolk-Hoy, 2000). Teacher educators cannot teach "teacher efficacy", but they can assist pre-service teachers in unpacking teaching and learning events which enable them to make sense of the events, "calibrating" (Linnenbrink & Pintrich, 2003) them and their perceived abilities through reflective practices. The structure within TEPP could allow for scaffolded learning events in real classrooms where university coursework is an integral part of fieldwork practice. This might also facilitate TEPP faculty's intimate involvement in K-12 classroom contexts and events to further develop understandings of practice as it relates to teacher preparation and pre-service teachers' needs to be prepared for their future classroom.

In Darling-Hammond et al.'s work (2002) she found that a novice teacher's sense of preparedness is the "strongest predictor of self efficacy" (p. 294). Teacher educators play a significant role in the preparation of teachers, thus making their role in the teacher efficacy development vital to the success of the future teachers. Two factors are important to consider in creating a TEPP that leads novice teachers to a sense of preparedness and thus high teacher efficacy: the influence of prior knowledge on teacher efficacy and scaffolded practice-based experiences. Palmer (2006) and Settlage (2000) demonstrated the need for teachers to have strong pedagogical and content knowledge if they are to believe they have the ability to enact teaching practices effectively. As first described by Bandura (1977), self-efficacy is the mediator that allows a person to move from knowledge (content) to action (teaching). If prior experience is a key to development of teacher efficacy careful consideration must be given to the effect of organizational socialization within the relationship between TEPP, their constituents and K-12 partners. Professional educators begin their socialization into the profession as K-12 students and participate through "apprenticeship of observation" (Hoy & Woolfolk, 1990) where norms are internalized largely unconsciously. During the college year pre-service teachers are introduced to the ideal images of the teaching profession, but it is generally understood that the most significant phase of socialization in the profession begins when they enter the "real world of teaching" and thus the reality shock mentioned earlier presents itself. This second element demands that we re-envision the relationships that exist between TEPP and the K-12 schools to more closely work together towards a mutual goal of K-12 learning through highly efficacious, well-prepared teachers.

Teacher efficacy must be given the attention within TEPP given the established connection between high teacher efficacy and teacher effectiveness, the potential for development with good clinical practice experiences within the TEPP, and the early malleability of teacher efficacy. It is essential for teacher educators and K-12 administrators to consider how they might support pre-service and novice teachers in their early years in the profession as they gain positive mastery experiences to develop their efficacy.

Summary

Chapter Two presented a review of the literature regarding social constructivism learning theory as a pertinent conceptual framework focusing on the work of Lev Vygotsky and John Dewey. It included the grounding of situated learning within communities of practice and the Zone of Proximal Teacher Development through which teacher preparation can be positioned in social constructivism. This was followed by a brief foundational history of teacher education that focused on the need and structures for aligned field and coursework within teacher preparation. The role of teacher efficacy for teachers, learners and the education profession was shared. Finally, considerations for the importance of coherence and integration of field and coursework for the development of teacher efficacy within teacher preparation was presented. In the next chapter the methodology used in the study is described. This includes both methods and data and the appropriate topics within.

CHAPTER III

METHODOLOGY

Overview

Chapter 3 contains a description of the methodology used to conduct a qualitative

case study of a semester long project in which two methods courses and a practicum

experience were integrated and embedded in an elementary school. This experience is

referred to as the collaborative cohort. Specifically, the purpose of this study was to

examine the effects of participation in the integrated methods courses fully embedded in

the school context with carefully aligned field experiences as they related to growth in

teacher efficacy. The study sought to identify the key strategies, constructs, events and

experiences within the semester long case that were influential in the growth of teacher

efficacy in order to consider how this might influence decisions in curricular planning

within teacher education programs. The two major components of this chapter include

the Methods and Data, which are further subdivided to address the following

components: research questions, assumptions and rationale for a qualitative case study,

data collection, gaining entrance and role as a researcher, program and participants, data

sources, methods of data analysis, the criteria for establishing trustworthiness, and a brief

summary.

Context

The county in which this study occurred has a population of 94,720 as of 2013

(United States Census Bureau) and is located in the Rocky Mountain West of the United

States of America. The average income is $53,000 with a population of 14.8% living in

poverty.   The land grant institution which sits within the community had an enrollment

of 15,688 as of fall 2015 (University website). The teacher education program within the

university graduates approximately 200 teachers each year in seventeen licensure areas.

Approximately 40% of the pre-service teachers are pursuing elementary education as

their area of licensure. There are multiple field experiences throughout the program in

which the pre-service teachers are placed in the local school districts in the afterschool

programs and classrooms for a variety of field experiences. The university has

partnerships with over 25 elementary schools within a fifty-mile radius for the

placements within the program.

University Teacher Preparation Program

The collaborative cohort was a part of the teacher education program at the

University. The teacher education program is a traditional university based program

where students earn a bachelor's of science degree in elementary education by completing

core content classes and a combination of methods and practicum experiences which

culminate in a semester long student teaching experience. The cohort was available as an

option for all students accepted in the teacher education program. In the elementary

education teacher preparation program at the University all students participate in a series

of field experiences that are outlined below in Table 1:

Table 1. Description of field experiences within the teacher education program.

Course Associated with Field Experience	Type of Field Experience	Typical Level in Program	Other Courses at University
Lit and Literacy for Children	1 hour/week for 6 weeks in after school program w/ partner	sophomore	core classes
Integrating Technology into Education	1 hour/week for 6 weeks in after school program w/ partner	sophomore	core classes
Practicum K-8 I	8 hours/week for 10 weeks	junior/senior	associated methods courses
Practicum K-8 II	9 hours/week for 10 weeks	senior	associated methods courses
Student Teaching Internship	40 hours/week for 14 weeks	senior	none

<u>The Elementary School</u>

Harper Elementary School, the location of the collaborative cohort, is a P-5

school that served a population of 467 students in the 2015-2016 school year (GEMS,

2015). According to the principal 36.8% of the student population was designated as

Title I, 2.1% was identified to be of limited English proficiency and 14.6% qualified for

special education services (written interview, 2015). The state guidelines for class size

are followed which breaks the school population down into one pre-kindergarten class,

three kindergarten classes, four first grades, three second grades, one third grade, one

third/fourth grade combination, one fourth grade, and two fifth grade classes. There were

two self–contained special education classrooms, two special education teachers who

work within classrooms and also pulls students out of the classrooms for intervention,

and a reading specialist. A behavior specialist was on staff and worked to meet the needs

of the students as a guidance counselor and behavior interventionist for all students at the

school. There were two health enhancement teachers, two part time librarians and one

music teacher.

Within Harper Elementary School, there was a classroom designated as the

"Collaborative Classroom" that was used for instruction of courses referred to in this

research. The pre-service teachers refered to this room as "our classroom". This setting

was that of a traditional elementary classroom with movable tables, two white boards,

bulletin boards, a storage closet for materials and an iPad cart. The size of the tables and

chairs were comfortable for adults and appropriate for students in the intermediate

grades. This classroom was also used as the home-base for the Food Corp representative

at the school which means the cooking supplies and tools were housed in the cupboards

within the room.

The Collaborative Cohort

For the collaborative cohort in the fall of 2015, fifteen pre-service teachers

participated. This was the maximum number due to the size and capacity of the school

for field placements. If students enrolled in the collaborative cohort, they were required

to take all seven credits offered as part of the program. These included the required

English Language Arts Methods for K-8 teachers and the Practicum Seminar, as well as

the one credit Advanced Digital Internship that was not part of the required coursework

for the elementary education program. All of the students in the cohort were also

enrolled in coursework on campus for at least five additional credits making them all full

time students. The cohort was of a traditional fifteen week fall semester, with the field

experience being ten of the weeks. Table 4 provides the structure for the weekly

schedule students had during the cohort experience. The blank squares indicate where a

variety of other coursework taken at the University was completed, but the students were

in their assigned field experiences four days a week for at least 2-2.5 hours per day.

Many of the students spent additional time in the classroom per week and for longer than

the assigned ten weeks by choice.

Table 2. Collaborative cohort weekly schedule.

	Monday	Tuesday	Wednesday	Thursday	Friday
Mornings 8 a.m.-noon			ELA Methods/ Advanced Digital Technology		
Afternoons Noon-3:30 p.m.	Field placement 2-2.5 hrs.	Field placement 2-2.5 hrs.	Field placement 2-2.5 hrs.	Field placement 2-2.5 hrs.	
Late Afternoons/ Evenings 3:30-6 p.m.			Practicum Seminar/ Professional Development		

An integrated syllabus was created for the three courses with the goal of helping

the students see the interrelatedness of the courses and assignments. This syllabus may

be found in Appendix A. During the weekly class meeting on Wednesday mornings,

8:00 a.m.-11:30 a.m. I provided the instruction for the ELA Methods class with the faculty member in charge of the Advanced Digital Technology Internship providing instruction four times throughout the semester for approximately one hour each time. On Wednesday afternoons, the pre-service teachers had class from 3:00 p.m.-4:30 p.m. Each week the field supervisor and I met with the students from 3:00 p.m.-3:30 p.m. as a whole group. On alternate weeks one of two things would occur for the last hour of class. The class would be split into practicum levels (I&II) to receive scaffolded instruction in the teacher work sample in the practicum experience by field supervisor and myself, or the students would meet with the inservice teachers in the library for professional development.

The professional development was designed to provide an opportunity for the inservice teachers to learn about lesson study as a mechanism to drive their professional growth within grade level teams as well as to involve the pre-service teachers in the opportunity to participate in side-by-side learning in the work of professional teachers. This structure grew from the request of the principal to align professional goal setting and teacher evaluation. It was funded through a grant that allowed the teachers to earn graduate credit for their work. All teachers in the school were invited to participate, but fourteen elected to do so including eleven classroom teachers, one reading specialist, a district new teacher mentor and one health enhancement teacher. The professional development was led collaboratively by the principal, myself, and the University faculty member who provided instruction for the Digital Technology Internship and was the PI for the grant.

It should be noted that the pre-service teachers worked in the same grade level as the cooperating teacher they were assigned to for their field experience, but the make-up of the grade level teams were not exclusive to those teachers who had a pre-service teacher in their classroom. For example the fifth grade team was made up of the two fifth grade teachers, the health enhancement teacher and the four pre-service teachers completing their field experience in the fifth grade classrooms. The first grade group was made up of the three pre-service teachers and all four of the first grade teachers in the school. Within the professional development, the pre-service and inservice teachers worked in grade level teams to choose two or more goals for professional growth development and engage in research and action steps to drive growth specific to the goals. The purpose of the final presentation was to share the outcomes of the process with the other participant groups. University faculty involved in the cohort presented instruction in the lesson study structure to the participants. Resources and support were offered as needed throughout the process, but in the end, the grade level teams largely drove the professional development.

The First Day

Upon arrival at the collaborative cohort on the first day, all instructors and the field supervisor were present to greet the pre-service teachers, introduce them to the receptionists and assist them in signing into the system for the first time. The inservice teachers were working in their classrooms, as it was their first official day back to school. Once everyone had arrived we collectively welcomed the pre-service teachers and asked them to help us begin to build a learning community web. This was done by standing in

a circle and passing a ball of yarn across the circle. As a person caught the ball of yarn s/he introduced him/herself and shared why s/he wanted to be a teacher, before holding onto the yarn and tossing it to another person. Once everyone had participated, we looked at the web that had been created and how it represented the idea of interdependency upon one another as we moved forward into the semester.

At this time the principal joined us and he welcomed everyone to the school. We then shared the principles of a circle of trust based on the work of Parker Palmer (2007) before beginning consensus building in our vision for the semester together. This involved a process where each participant recorded their worst outcomes and shared them, best outcomes and then finally set personal and collective goals for the semester. These were recorded by the field supervisor and shared with all participants. I recorded in my field notes from this experience that, "The energy in the room was electric. Pre-service teachers appear to be really excited about the cohort and the possibilities ahead of us this semester." The principal invited us all to attend the first staff meeting in the afternoon. He left and we then examined the syllabus for the courses before setting expectations for the next few weeks of class specific to readings and assignments. At this time, I explained the nature of my research and invited the students to participate. All of the students elected to do so and completed the necessary consent forms and TSES pre-survey before leaving.

In the afternoon, pre-service teachers and I arrived at the school and were welcomed as participants in the first staff meeting of the new school year in the gymnasium where there was an enormous circle of chairs. The principal asked everyone

to find a seat next to someone they did not yet know. The superintendent of schools was in attendance as well as all teachers and support staff at the school. The principal led us in a game of "Which way does the wind blow?" which had us up and moving across the gym as we learned things about people. The superintendent spoke about the long-range strategic plan and district goals before moving on to another school. All classroom teachers were then given a balloon that they had to keep in the air as the pre-service teachers and support staff circle around them. The outer circle was instructed to offer assistance to the teachers before stopping a few minutes later to read the words on the balloons that were factors that teachers attend to during the school year. After a series of filtering activities, only nine balloons were left which represented the key ideas that impact long term student learning. The remaining nine balloons were then used to assign a puzzle piece where the main goal for the year was unveiled. This was connected back to work that was completed over the summer with consensus building and the strategic plan for the year at Hyalite. The pre-service teachers are then introduced to their assigned teachers and they return to the classrooms with them for the rest of the time.

Classroom Contexts:
<u>First and Fifth Grades</u>

The first grade team at Harper Elementary School consisted of four female teachers in four classrooms. Pre-service teachers completed their field experiences in three of the classrooms, each being assigned to a different teacher. The remaining first grade teacher participated in the professional development and thus the pre-service teachers were able to spend time in her classroom and get to know her through the

experience. Each first grade teacher worked independently of one another, but also worked collaboratively to varying degrees. For example the first grade team sometimes planned learning opportunities collaboratively, but did not share children through leveled reading instruction. Two of the first grade teachers are Nationally Board Certified and have consistently taken a pre-service teacher every semester of the collaborative cohort. The remaining teacher who mentored a pre-service teacher does so once a year. The one teacher who did not have a pre-service teacher assigned to her stated that she simply is not quite ready yet to do so. She did however open up her classroom to us for purposeful observations.

The fifth grade team consisted of two teachers, one male and one female. The female teacher had mentored several practicum students, but for the male teachers it was his first time. During the collaborative cohort in the fall of 2015, four pre-service teachers were placed with the fifth grade teachers. Zander, a Practicum II level pre-service teacher was assigned to Mr. W and the three remaining Practicum I students worked with both of the teachers. In the fifth grade Mr. W taught English language arts and social studies while Mrs. L taught math, science and art. The students in the fifth grade moved between the two classrooms for the blocks of instruction. Both of the fifth grade teachers participated in the professional development.

Summary of Context

A detailed description of the context of the study and the events within the semester were provided for the reader to have a strong understanding of the context of the research. This includes the description of the setting and the integrated nature of the

course and fieldwork within. The first day of classes was described to provide the reader with a deeper understanding of the setting of the cohort. The above was intended to provide the reader with a better understanding of the context of the collaborative cohort in which the research took place.

<div align="center">Research Methods</div>

Research Questions

This study's guiding research questions were designed to explore how an embedded model of teacher preparation, and specifically what events and structures within, could provide the most meaningful and significant impact on teacher efficacy development in teacher preparation. More specifically, the following three questions guided this study:

1. Did pre-service teachers experience positive growth in their teacher efficacy during the semester long embedded experience?

2. What student identified structures in the integrated, embedded model strengthened TE for pre-service teachers? How did they influence their teacher efficacy?

3. What student identified strategies intentionally employed in an integrated field and coursework strengthened teacher efficacy for pre-service teachers? How did they influence their teacher efficacy?

These research questions and the conceptualization of learning as socially constructed guide the choice of research methods in this study.

Assumptions and Rationale
for a Qualitative Design

Type of Design. This study was based on the assumption that learning is situated

in social constructivism where individuals interact within their social worlds. Learning to

teach is as complex as teaching, requiring pre-service teachers to navigate multiple social

spheres including various classrooms in which they take on different roles as teachers and

learners. Qualitative research methods allowed the exploration of the impact of

participation in this case on teacher efficacy because of the epistemological (nature of

knowledge) and ontological (nature of being) assumptions within the constructivist

paradigm (Mertens, 2009). In this research the underlying beliefs about learning being a

process of development within a social structure permeates the work. Participants within

the research developed their own learning based upon their own experiences and

understandings of the events.

Denzin and Lincoln explain that qualitative research stresses the "...the socially

constructed nature of reality, the intimate relationship between the researcher and what it

studied, and the situational constraints that shape inquiry." (2000, p. 10). The paradigm

of qualitative research acknowledges that there is no single objective reality, but that the

understandings that emerge are co-constructed by researchers and participants and reflect

positions, experiences, values and beliefs of all involved. These are interconnected with

one another, influencing the others iteratively (Mertens, 2009). The methodology of this

study was based on the belief that "meaning is embedded in people's experiences and that

this meaning is mediated through the investigator's own perceptions" (Merriam, 1998, p.

6). Qualitative research seeks to explore the emerging themes and patterns from multiple data sources with a sensitivity to the context and participants involved in the study, including the researcher as a "key instrument" (Creswell, 2013, p.45) within the research.

The purpose of this research was to explore the experiences of the participants throughout the semester specific to the development of their teacher efficacy. It was not designed to compare two experiences, but instead to investigate the various strategies, events and structures within the case that were effective for the participants' teacher efficacy development. Qualitative research methodology was therefore chosen as the appropriate means to investigate the impact of participation in the embedded, integrated semester of teacher preparation as it allowed me to examine the participant experiences within. (Yin, 2009).

Case Study. A case study approach was chosen based on its appropriateness for this particular study. Trainor and Graue (2013) cite the multiple definitions and key terms for case study pointing out the lack of singular definition for the methodology; they then note the common emphasis among them all to be the "boundedness of the object of study" (p. 55) to be what differentiates case study. Merriam (1988) suggests that a bounded phenomenon in education can be "...a program, an event, a person, a process, an institution, or a social group" (p.13). In this research the semester long experience in the embedded collaborative cohort was the case which was examined. The intent of this case study was to examine the effects of participation in the cohort had on teacher efficacy, with the goal of determining the key elements which could be used in consideration of

teacher education program content and structures; thus making this a single case study (Yin, 2009).

Trainor and Graue (2013) speak to several qualitative touchstones of case studies including complexity, evolutionary nature, and contextualization. As mentioned earlier, this investigation focused on the complex work of teacher preparation and considered the influences of numerous sources of input for the case. In order to investigate such a complex topic, multiple sources of data are used to triangulate and address ethical obligations (Stake, 1995). This triangulation, or use of multiple and different data sources, allow the researcher to "provide corroborating evidence" (Creswell, 2013, p. 251). Case studies evolve, and as such, the researcher must be responsive to the changes. In this particular case, the exact events could not be designated prior to the beginning of the case as there were opportunities that arose throughout the semester that shaped the experiences for the participants. This evolving nature was impacted by the third case study touchstone of context. This research was entirely reliant upon the context.

Positionality and Reflexivity. During the research, I was the Director of Field Placement and Licensure for the teacher education program, instructor of courses outside the cohort and the instructor for two of the three classes of the cohort. This role of the embedded researcher was influential within the context of the study. I was not a stranger to the pre-service teachers in this study, but instead developed a strong relationship with them over the course of the semester. This relationship allowed me to have deeper understandings of the context in which the research took place, but also the individuals

studied. I believe my embedded position was a strength. The participants knew I was interested in them and had a strong desire to learn more about what was working in helping them develop their teaching abilities. Anselm Strauss stated that a researcher should "Mine your experience, there is potential gold there!" (1987, p. 11). While this was the case, I also worked to maintain my reflexivity in consideration of how my identity, beliefs, and relationships with participants might influence the research (Trainor & Graue, 2013).

Data Collection. This research drew upon the experiences of the pre-service teachers during their participation in the collaborative cohort in the Fall of 2015. In order to investigate the strategies, events and structures that led to development of teacher efficacy for the participants, I collected and analyzed multiple sources of data using a variety of ethnographic methods. The multiple sources of data I collected included classroom observations, course assignments, a focus group at the end of the semester, video of side-by-side professional presentations in grade level teams, a professional development exit slip completed by pre-service teachers, and interviews of the participants. Teacher Sense of Efficacy Surveys, developed by Dr. Anita Woolfolk Hoy, were given to the participants as well, both on the first and last days of the semester. In the next section I detail my entry into the research context and then describe how this impacted my role as a researcher. Then, I briefly describe the setting of the research context before providing detailed descriptions of the data sources collected.

Gaining Entrance and Role as a Researcher. I began my doctoral program as an

adjunct instructor of the English Language Arts Methods for K-8 Teachers course on

campus in the winter of 2012. I was afforded the opportunity to revise the course

syllabus purposefully integrating meaningful uses of technology in the fall of

2012. Administration in a local school district and the university teacher education

program engaged in conversations about potential partnership to embed teacher

preparation in a K-12 school setting. A principal in the district agreed to have a

university class taught at the school and in Fall and Spring semesters of 2013/2014 a

section of the EDU 370, Integrating Technology into Education, was offered at the school

site. In the Fall of 2014 I was invited to participate in the next steps of development of

the collaborative classroom project where an increase of courses utilizing the space and

context were considered. In the Fall of 2014 and Spring of 2015 the English Language

Arts and Science Methods for K-8 teachers with an Advanced Digital Technology

Internship were embedded on site. The pre-service teachers were required to be enrolled

in all of the aforementioned courses as well as the traditional Practicum II course

delivered on campus for the semester. All of the fieldwork associated with the Practicum

II class would be completed in the classroom at the K-5 school. During the summer of

2015, developments occurred whereby the science methods course needed to return to

campus for the Fall 2015 semester. In order to maintain the number of credits provided

in the embedded model and to allow greater flexibility in the cohort, a combined section

of Practicum I and II was added to the collaborative cohort. I was the instructor of record

for the English Language Arts Methods and Practicum I and II courses, with a field

supervisor to complete classroom observations and grade assignments for the practicum course. A faculty member and original member of the development of the collaborative classroom led instruction in the Digital Technology Internship. A combined syllabus was developed for the three courses and the instructors collaborated for deliberate integration of assignments within the courses. In the Fall 2015 semester we also had grant funding which allowed us to integrate professional development for the teachers of the school into the project. The purpose of this professional development was two fold. First, it was our goal to introduce and develop lesson study to encourage collaborative study of teaching practice. Second, we wanted to facilitate opportunities for the pre-service teachers completing their fall semester in the collaborative cohort to be an integral part of the professional development in a side-by-side model as part of their experience in the practicum seminar.

In considering reflexivity as an essential component to the integrity of this study, it must be acknowledged that as the instructor for the courses and with my presence in the school as the Director of Field Placement and Licensure, I was immersed in the creation of day-to-day operations of the context of this study from its inception. Reflexivity is defined by Hatch (2002) as the researcher's ability "to keep track of one's influence on a setting, to bracket one's biases, and to monitor one's emotional responses" (p. 10). My relationship to the context of the research brought both limitations and opportunities as an embedded researcher. As the instructor for two of the courses and Director of Field Placement and Licensure for the teacher education program, I had a marked stake in the success of this program. Having assisted in developing the model, I had positive feelings

about the structure and the context. During the course of the semester, I knew it was important to separate the evaluation of the pre-service teachers' work from data collection. The field supervisor was responsible for grading all assignments specific to data collection for this research study. No individual student data were formally collected or analyzed for the purpose of this research prior to final submission of grades. A period of one month lapsed prior to former collection of individual student data for research purposes.

Informed Consent and Confidentiality Procedures. Before beginning the study, I reviewed the procedures and ethics for conducting research Patton presents in his 1990 book. I followed all procedures and adhered to all regulations required by the University's Institutional Review Board (IRB). Creswell's (2013) model for gaining consent approval was used to develop an informed consent form presented to potential participants. This document may be found in Appendix B. Full disclosure was given to participants during the entire study. At the interviews after the experience, the participants were again reminded of their right to opt out at any time with no negative ramifications.

I took every precaution to safeguard the identity of participants. All written data sources were immediately assigned a pseudonym. Interviews were audiotaped in a private setting and transcribed verbatim; any names mentioned in interviews were immediately assigned a pseudonym to protect the identity of participants.

Participants. All students participating in the cohort in the fall of 2015 were of white ethnicity. There were thirteen females and two males. One student was of nontraditional college age (greater than 30) and had significant experience as a paraprofessional in the school prior to returning to the university. For the focus of this case study, the data for seven pre-service teachers was analyzed. The focus group included all 15 participants, but seven pre-service teachers were selected to complete interviews as representative of the larger population. Pre-service teachers in two grade level teams were chosen, one in primary and one in intermediate. This provided representation in both grade bands as well as experience levels from both Practicum I and II pre-service teachers. See Table 3 for demographic information. This selection of multiple pre-service teachers within grade level teams also provided corroboration for events during the semester.

Table 3. Participant and placement details.

Name	Practicum Level	Gender	Age	Assigned Teacher	Grade Level of Field Experience	Additional Notes or Characteristics
Anne	1	F	22	Mr. W	5th	
Betsy	2	F	21	Mrs. O	1st	
Francis	1	F	24	Mrs. D	5th	
Kelly	1	F	25	Mrs. D	5th	Homeschooled until entry of college, almost no context for school or classroom culture prior to cohort experience
Sara	2	F	23	Mrs. H	1st	Returning to teacher ed after 18 month absence due to personal issues
Tina	2	F	22	Mrs. L	1st	
Zander	2	M	23	Mr. W	5th	Student athlete

Data Sources

      Data were collected throughout the entire fifteen-week semester, and followed by individual interviews one month after the semester's end. Data from all sources except interviews was collected from all participants, but all pre-service teacher participants from two grade level teams were invited and chose to participate in the research group. Due to the nature of the case study methodology, the consideration of multiple data sources was critical to develop the depth of understanding of the case.

      Evidence of Classroom Practice. The field supervisor and I observed the pre-service teachers multiple times during the ten-week field experience. These observations happened in two different ways. The field supervisor completed one formal lesson observation in which the pre-service teacher delivered instruction to either a small group of students or the whole class. This formal observation also included submission of a lesson plan, a pre-conference between the pre-service teacher and field supervisor, the observation itself, and a post observation conference with the pre-service teacher and field supervisor. Evidence of teaching practice was collected throughout the events and entered into the observation tool prior to the post conference where the field supervisor facilitated the conversation about the evidence collected with the pre-service teacher. Informal observations were also completed during the field experience. The informal observations were unannounced walkthroughs where either the field supervisor or the instructor would record observations of interactions with children and observe teaching practices for 5-15 minutes. The notes from these observations were entered into a document shared by myself and the field supervisor as well as used to collect evidence

of teaching practice in the observational tool. Each time either observation structure was

used, the pre-service teacher would receive an email capturing the evidence of practice

observed so they were aware of our notes. The pre-service teachers also had electronic

access to their observation tools in a shared drive.

Course Assignments. The first type of course assignment collected as a data

source, was the Professional Growth Project. The project required the pre-service

teachers to develop two professional goals for themselves for the semester related to their

time in the field experience. The goals were established, with specific action steps to

reach the goal and consideration of evidence for goal attainment. These goals were

visited throughout the semester through observations, and reflective practices. At the end

of the semester each pre-service teacher gave a presentation and wrote a paper about their

growth specific to their professional goals and discussed their vision for next steps in

professional growth goals.

The next type of course assignment used as a data source was the structured

reflective practices. For each week of the ten-week field placement, the pre-service

teachers were required to complete a structured reflective practice. Seven of these were

reflective journals, two were reflections specific to transcribed audio recordings of

themselves providing instruction in their field experience, and one was a reflection based

on a peer observation. The students were also required to submit a final reflection paper

specific to their beliefs about their abilities for technology integration within a technology

integration framework.

Focus Group. A focus group is similar to an interview but occurs with a group of people for the purpose of obtaining perspectives on a topic in a relatively short amount of time (Patton, 1990). A focus group allows the researcher to hear multiple voices at one time and benefit from multiple voices that are created through interactions among participants, but can also be challenging to keep the group focused on the topic and provide equity in hearing everyone's voice (Patton, 1990). The focus group in this study mirrored the focus group protocol that is implemented at the end of each semester in the Practicum II course as part of the teacher education program. The purpose of this focus group was to learn more about the role of the cooperating teacher, feedback received by pre-service teachers and potential course and fieldwork connections that are occurring within the overall teacher education program.   I developed the focus group questions initially in the Fall of 2014 and have revised them based on use in subsequent semesters. They may be found in Appendix C.

Side-by-Side Professional Development Artifacts. The professional development component of the Fall 2015 semester was structured in such a way that every other week all participants, including the university instructors, principal, field supervisor, pre-service and inservice teachers met for 1.5 hours after school. During this time the principal and university instructors provided scaffolded instruction and support to facilitate grade level team professional goal setting and subsequent lesson study as a means to develop teaching practices. Each grade level team, including both pre-service and inservice teachers, developed goals and strategies to study their practice through lesson study. This was culminated in the 15th week of the semester when each grade

level team shared their processes and findings from the experience. Video recordings of

the presentations were made and transcribed. An exit slip was also completed by the pre-

service teachers asking them to reflect upon the experience midway through the

semester. A sample of the exit slip may be found in C.

Interviews. Due to the exploratory nature of this research, it was important to

investigate how the individual participants experienced the strategies, events and

structures of the collaborative cohort. In the spring of 2015 open-ended interview

questions were developed and sent to an expert for review. The goal of creating open-

ended questions was "not to put things in someone's mind, but to access the perspectives

of the person being interviewed" (Patton, 1990, p. 278). Revisions were made based on

the feedback received. Pilot interviews were then conducted with several of the pre-

service teachers in the Spring 2015 cohort. Further refinements were made based on the

interview outcomes and a second expert review with an additional question added in the

fall of 2015 to reflect the inclusion of professional development as part of the

cohort. One month after the semester ended, I interviewed the participants individually at

her office. The interviews were structured and lasted approximately 45-55 minutes, with

one exception of 35 minutes. Interview questions may be found in Appendix C.

Methods for Data Analysis

Ravitch and Carl (2016) call for a three-pronged data analysis approach that

includes the following: data organization and management, immersive engagement, and

writing and representation. The task of a qualitative researcher is to make sense of the

large amounts of data, by organizing it by patterns and themes and communicating the

essence of what the data reveals (Patton, 1990). Below I address the methods used to

accomplish the data analysis for this research.

Data Organization and Management

In this case study, data were collected throughout the experience, but not formally

analyzed until the completion of the experience. It was important to me that the

participants not feel any conflict about the assignments they submitted and the research

that was being conducted, thus the field supervisor bore the responsibility of grading

those assignments and I did not look at them until the semester was complete. Table 4

contains the details of the data source, method and time of collection, and additional

processing prior to analysis.

Table 4. Data sources, collection method and processing.

Data Source	Method of collection	Processing and subsequent storage
Course assignments (classroom observation form, structured reflective practices, professional growth project)	Downloaded from course shell on D2L after the end of the semester.	Organized into type of assignment; stored electronically
Focus Group	Audio recording on iPad on the last day of class	Transcribed by researcher
Exit Survey for Class Assignments	Paper copies distributed during last class	Collected and analyzed, table created and stored electronically.
Side-by-side professional development presentations	Video recording on iPad on the last day of PD	Transcribed by researcher in order to capture thoughts on visual and aural aspects of the presentations.

Table 4. Data sources, collection method and processing, continued.

Data Source	Method of collection	Processing and subsequent storage
Side-by-side professional development survey	Paper copies distributed on the last day of PD	Collected on same day as distribution, scanned and stored electronically.
Side-by-side professional development exit slips	Distributed and collected on the last day of professional development	Collected on same day as distribution, scanned and stored electronically
Interviews	Audio recording on iPad and iPhone	Sent for professional transcription
Field Notes	Collected each week in an electronic folder	No further processing
Observation notes	Collected each time in an electronic folder either a walkthrough or formal observation was completed	No further processing

Once the data were collected and processed, it was organized into electronic folders by

data source. A plan and timeline were determined for data analysis.

Immersive Engagement

The initial approach to data analysis was to read through each type of data source

to develop a general understanding of the content of the data. The purpose of this initial

read through of the data was to precode, which Ravitch and Mittenfellner-Carl (2016)

describe as the "process of reading, questioning, and engaging with your data" (p.

243). Precoding is a form of open coding and serves to familiarize the researcher with

the big picture of the data. I examined the notes after each data source had been analyzed

separately, and examined resulting themes for similarities.

After all data sources had been reviewed by type, I then read them by participant within grade level teams. With each data source, an analytic process of constant comparison was iteratively employed to identify codes (Strauss & Corbin, 1990) and reduce the codes to themes (Creswell, 2013). To facilitate coding, notes were taken as the materials were read, and reread. Considerations were given to each individual case from the multiple sources of data analysis as well as across-case inductive analysis (Patton, 1990; Yin 2009). Drawing on these multiple data sources to triangulate the categorical themes they were interpreted as naturalistic generalizations (Creswell, 2013). The approach to coding was both inductive and deductive. This allowed for categories "...to emerge from patterns found in the case under study." (Patton, 1990, p. 44) as well as be organized by categorical inputs to the existing theories. The purpose of this was to allow patterns to emerge through the inductive approach so as to not be limited by the existing theoretical frameworks, but to then consider the findings within the seminal literature.

Writing and Representation

Throughout the immersive engagement with the data, memos were written as I engaged with the data analysis. This allowed me to record my thinking and captured the analysis journey as a "dynamic and evolving process" (Corbin & Strauss, 2015, p. 58). The representation and reporting of results is the final component of data analysis. The purpose of this final stage is to share the findings of the research with the reader. (Patton,1990). A narrative format was used to share the detailed descriptions,

including direct quotations from the participants and tables to provide the reader with a report that was accessible and understandable.

Criteria for Establishing Validity and Trustworthiness

I made concerted efforts to establish validity or "trustworthiness" (Lincoln & Guba, 1985). Validity in qualitative research is sometimes referred to as trustworthiness and speaks to the quality and rigor of a study (Ravitch & Mittenfelner-Carl, 2016). Guba (1980) argued that qualitative research must adhere to standards in four categories to address validity: credibility, transferability, dependability and confirmability. Below, I briefly address these four categories as they relate to this research study.

Credibility. The key component of this category is that the research findings represent the participants' perceptions of events. In order to assure credibility I asked the participants to review the findings as I neared the end of the write-up of the study to gain feedback on the accuracy of my interpretation of their experiences in the collaborative cohort.

I also drew upon multiple sources and types of data. The goal of these multiple sources and types of data was to develop a rich set of data to use in consideration of triangulating themes and patterns within the data. The triangulation of data and multiple sources and types built credibility for the study and supported trustworthiness.

Transferability. This category addresses generalization; in qualitative research this does not happen between sample and population. Instead, as Stake (2010) argues, qualitative research is bound in personal experience and is a naturalistic

generalization. Naturalistic generalization is dependent on situated context and requires that a researcher provides rich enough detail of the context that a reader is able to recognize similarities of objects, issues and situations in their own context. In order to build this detailed description, I provided the readers with historical context, narrative descriptions and direct quotations from the semester long experience. It was my goal in providing such detail that the reader is able to consider what they learn from the study and integrate it within their personal context for growth.

Dependability. I was transparent in my research as it pertains to data collection and analysis in order to provide opportunity for the reader to examine the structure and relationship to the research questions. I met with a committee member to confirm my initial codes and themes with a professional with strong understanding of the theoretical frameworks of this research. I could have employed additional coders to examine the data. In this study I attempted to help the reader understand the research design, and data collection and analysis.

Confirmability. Although I was unable to claim objectivity within this research, I have been clear about my bias as an instructor in the courses and the Director of Field Placement and Licensure for the teacher education program. In order to provide evidence of confirmability, I kept detailed records of all of the data collected as well as recorded my trail in data analysis including memos, tables, codes and themes, and drawings.

<u>Summary</u>

In this chapter, I discussed the methodology for examining the semester long experience of pre-service teachers in the collaborative cohort. A qualitative single-case study within the social constructivist paradigm was put forth as the appropriate methodology to investigate the experiences as they relate to the development of teacher efficacy. I presented the data sources, my relationship to the research, the methods of data analysis and addressed criteria for establishing trustworthiness. In the next chapter, I provide a detailed description of the context of the research, the results of the data analysis and address the findings as they relate to the research questions.

CHAPTER IV

RESULTS

<u>Overview</u>

The purpose of this qualitative study was to better understand the structures and strategies used in teacher education coursework that took place in a K-5 school context that provided and encouraged opportunities for growth of TE for pre-service teachers. Four research questions investigated the growth of teacher efficacy, as well as the key constructs and strategies within the semester long case that the students identified as influential to the growth of teacher efficacy for themselves. Data were gathered in the form of TSES survey administered pre and post, focus group interview, ten reflective practice assignments, a professional growth paper, an exit ticket, a professional development exit survey, video of professional development presentations, and interviews. The participants were invited to review the transcriptions of the focus group, interviews and videos for accuracy. The seven participants for this case study were chosen to represent the larger population of participants in the collaborative cohort. They represent both levels of practicum (I&II) and assignment to a primary and intermediate grade level. By choosing students who were assigned within grade levels (first and fifth grades), data were available for corroboration of events.

A presentation of the findings is organized by research questions. Data from the aforementioned sources is included where applicable in the results. The summary concludes the report of findings and offers a preview of Chapter V.

Review of the Data Collection Process

The pre-service teachers were invited to participate in the research on the first day

of class. I explained that as per our syllabus, I would not be evaluating their work in the

field or any assignment associated with the research project in order to keep it separate

from the research. I also explained that I would not even look at their reflective practice

assignments or professional growth papers until grades had been submitted for the

semester. All of the students agreed to do so, completed the consent form and took the

TSES survey. Table 5 provides the reader with each of the data sources, methods of

collection, and the specifics for when the information was collected and analyzed.

Table 5. Data sources, collection methods and time line for collection and analysis.

Data Source	Method of Collection	Time Line For Collection and Analysis
Course assignments (classroom observation form, structured reflective practices, professional growth paper)	Downloaded from course shell on D2L after the end of the semester.	Collected after final grades for courses submitted
Focus Group	Audio recording on iPad	Conducted during last class meeting; transcribed and analyzed one month after recording
Exit survey for class assignments	Paper copies distributed and collected	Collected on the last day of class; analyzed one month after final grades were submitted
Side-by-side professional development presentations	Video recording on iPad	Recorded on the last day of professional development; analyzed one month after recording

Table 5. Data sources, collection methods and time line for collection and analysis, continued.

Data Source	Method of Collection	Time Line For Collection and Analysis
Side-by-side professional development exit slip	Distributed and collected midway through semester	Collected and read to be able to address feedback in second half of professional development; not read again or analyzed until one month after semester ended
Side-by-side professional development survey	Paper copies distributed and collected	Collected on the last day of professional development; analyzed one month after final grade submitted
Interviews	Students invited to come to my office for tea or meet at a coffee shop to complete the interview, audio recording on iPad and iPhone	Completed one month after final grades submitted; sent for professional transcription and then analyzed
TSES	Paper copies distributed and collected	Completed on first and last days of class; analyzed prior to interviews
Field notes	Kept in electronic folder throughout the semester	Reviewed and analyzed one month after final grades were submitted
Observation notes	Kept in electronic folders accessible by field supervisor, individual student and researcher through field experience	Reviewed and analyzed one month after final grades were submitted

<u>Data Analysis Strategies Summary</u>

Before starting data analysis the research plan was reviewed to determine the best approach to the multiple sources of data. In beginning of the data analysis process, I examined the results of the pre and post TSES to determine if teacher efficacy had indeed grown during the 15 week period for the participants. This was important to examine prior to the interviews in order to be able to bring any discrepancies forward in the conversation within the interviews. The interviews were then conducted with each individual student over the period of ten days before being sent out for professional verbatim transcription. Upon receipt of transcripts, they were sent to the participants for a member check for accuracy. Then, all interview transcriptions and professional growth papers were read in their entirety in the precoding process (Ravitch & Mittenfellner-Carl, 2016). I read the two material sources of each participant individually, before returning to the interview transcripts to begin recording my noticings and developing codes. The interview transcripts were then read through highlighting key words and phrases as well as making notes. These were recorded onto post it notes which I then organized into categories. I returned to the professional growth paper following the same process of highlighting key words and phrases and recording them on post it notes. I organized these into categories and began to see like categories developing. This process was followed for each data source, triangulating my findings as I went (Creswell, 2013). After organizing the data into categories, I was able to group the data into themes (Strauss & Corbin, 1990). I returned to my literature review to review the content in order to inform my coding so it could be both inductive and deductive (Creswell, 2013).

I then re-examined the data sources for additional information with the existing research in the forefront of my reading (Patton, 1990). I was able to find additional information to support the themes that I had developed. Throughout this process, I made memos to record my thinking as it evolved (Corbin & Strauss, 2015). I also shared my codes and themes with a committee member to validate my thinking. I then reread the first chapters of my dissertation before considering how to interpret the meanings of the findings as they related to each research question.

Research Questions and Key Findings

It is important to consider how practice can be central to the development of learning to teach; we must consider how the knowledge for teaching and the knowledge from teaching can be examined as equals to eliminate the theory-to-practice gap between universities and schools (Ball & Forzani, 2009; Zeichner, 2012). Situating teacher preparation into the context of practice requires new ways of thinking about learning to teach and it should be done thoughtfully and consider what we know and what we need to know. Research indicates that opportunities to enact learning from coursework is beneficial in teacher efficacy development within teacher preparation (Tschannen-Moran, et al. , 2007), but what we do not know is what strategies and constructs can be identified as influential in developing teacher efficacy for pre-service teachers (Campbell, 2012). This research sought to explore these influences, and the following section outlines the interpretions of those findings as related to each research question.

Question 1: Did Pre-Service Teachers
Experience Positive Growth in
Their Teacher Efficacy During the
<u>Semester Long Embedded Experience?</u>

<u>Theme 1: Pre-Service Teachers Demonstrated Overall Growth in Teacher</u>

<u>Efficacy.</u> An examination of the pre and post surveys completed by the pre-service

teachers showed growth in six of the seven participants in their overall teacher efficacy

during their experience in the cohort. Table 6 contains the pre and post scores as well as

the differences between the overall pre and post scores from the Teacher sense of

Efficacy Survey. A paired sample t-test was conducted to determine if any statistical

significant differences existed between the pre-service teachers' pre and post-tests.

Results indicated no statistical differences. Further, a power analysis was conducted to

confirm that a much larger sample size would be needed to adequately conduct any

inferential statistics. Therefore, the following section outlines only the descriptive

statistic analysis of the teacher efficacy measurements, including an interpretation of

those results.

Table 6. Pre and post TSES scores.

Participant	Pre TSES	Post TSES	Difference
Kelly	6.71	4.5	-2.21
Sara	5.33	5.63	.30
Betsy	6.42	7.25	.83
Francis	5.83	6.79	.93
Anne	5.63	6.58	.95
Zander	6.71	7.71	1.0
Tina	5.71	6.88	1.17

One participant, Kelly, was an outlier and in examining her scores a 2.21drop can be seen. In the interview with Kelly this data was shared with her and further investigated. I knew she had been homeschooled, but until the interview did not realize the minute amount of time spent in a classroom in a K-12 prior to this experience. When asked about her background experiences in a school setting she explained that she had spent approximately 20 total hours in a classroom when she shadowed her cousin at a local high school several years prior. In essence, this was the very first time she had spent in an elementary school. When asked if she felt like her participation in the cohort had impacted her belief in her ability to be a teacher, she chuckled and said,

> I think so. I definitely feel like I didn't have a lot of experience being a teacher, so I guess this being my first-well not fully my first, but first actual reality of what it looks like, I think it did affect my belief. I think I have more understanding of where my abilities lie now.

She went on to say,

> I think it will take a long time to be able to be a good teacher. I believe that I can be eventually, but it will take a lot of work….One thing I realized in the cohort is that you never stop working and growing in your capabilities as a teacher.

As shared, a paired samples T-test was completed in order to fully explore the data set, but from the numerical data, no statistical significance in the overall teacher efficacy growth was found. The results from the paired samples T-test are shared simply for the sake of transparency.

Table 7. Paired T test results.

Score	Pre-Assessment Mean	Post- Assessment Mean	ρ
Overall Score	6.05	6.5	.93
Efficacy for Engagement	5.99	6.56	.21
Efficacy for Strategies	5.51	6.36	.57
Efficacy for Management	6.22	6.77	.67

Although examination of the three major efficacy factors for the TSES, student engagement, instructional strategies and classroom management, is not recommended for use with pre-service teachers, these factors emerged from the data collected. The participants came to understand how their relationships with students impacted their abilities to manage behavior and implement differentiated instructional practices for higher levels of engagement. Zander recognized that "good teaching is all about relationships first and then content" (focus group). He stated, "You have to get to know your students to find out what's going to work and what doesn't." In her Professional Growth Paper, Francis made the connection between building student teacher relationships with her ability to differentiate instruction. Through her observations of the students and her cooperating teacher Anne built her understanding of the role of relationships for instruction to meet the students' needs (Professional Growth Paper). Kelly described the story of the first time she was put in charge of a group of students.

> It was hard going from observing my cooperating teacher to having to be in charge the first time. She asked us to work with a group of students. I had no clue. When it was over I went back to her and said, 'They didn't listen to me at all and I know it is my fault.' Now I know I wasn't setting expectations. She had them write me letters of apology. After that I knew I had to set expectations before we instructed."

Later Kelly said, "I felt like I got more practice in management and more confidence as it went on" (Interview). She stated the more she got to know the students the easier it was for her to manage them. The participants indicated this came from a variety of sources including modeling, teaching opportunities and feedback that they received from students, peers and their cooperating teachers (Reflective practices, Professional Growth Paper, Interview).

Six of the seven participants indicated the experience raised their level of confidence in their abilities to teach. Each of the six used the word "confident" when talking about how the experience had impacted them. Data to support this can be found in Table 8.

Table 8. Evidence of confidence development.

Participant	Quote	Source
Anne	• I am definitely more confident and miles ahead of where I thought I was going to be.	Interview
	• I learned what it means to manage the classroom and have built up the idea that I can do this.	
		Interview
Francis	• I feel confident in being able to meet students' needs.	Reflective practice
	• It has elevated my mindset into that of a confident teacher.	
	• Even though math was not my strongest subject, I felt relaxed, confident and ready to use alternate forms of instruction to help the students.	Exit question
		Reflective practice
Zander	• Using everything I've learned and taking it away; it built that confidence that I'm going to take into student teaching.	Interview
Sara	• Although it was challenging, now I feel calm and confident when responding to misbehaviors.	Professional growth paper
Kelly	• Constructive feedback from my teacher and field supervisor helped me believe I can do this.	Interview
Betsy	• I became more confident.	Interview

Question 2: What Student Identified Structures in
the Integrated, Embedded Model Strengthened
Teacher Efficacy for Pre-Service Teachers? How
<u>Did They Influence Their Teacher Efficacy?</u>

<u>Theme 2: Location, Location, Location</u>. The pre-service teachers indicated that being at the school for both their coursework and their field experience was an advantage. In her interview Kelly stated, "It felt like I was a part of the school because we spent so much time there". Tina confirmed this by saying it "felt like we were a part of the school because we were there." Anne noted that it was "powerful being on the Harper campus because we were indoctrinated by what it means to be a teacher" (Interview). Francis remarked that being "put in the school setting from the very beginning at the first staff meeting…obviously initiated us as staff and we were treated as such" (Interview). Four additional participants remarked on the influence of participation in the initial staff meeting on the first day. Sara spoke to how it built her confidence in her role within the school and Zander talked about how it was the beginning of feeling like a part of the school community.

The openness of the community and feeling of being welcomed at the school was identified by all seven of the pre-service teachers as being influential on their beliefs to teach. They used a variety of descriptors for this including *inclusive*, *included*, *welcoming*, *support*, and *encouraging*. Other phrases indicating a sense of belonging can be found in Table 9.

Table 9. Sense of belonging phrases.

Data	Source (Participant if Possible)
The community built my confidence and security.	Interview (Sara)
Welcomed into every classroom I visited which boosted my confidence.	Professional Growth Paper (Zander)
I am enjoying everything going here, because everyone is friendly and treats me with respect, just like a teacher.	Professional Growth Exit Ticket
We are a part of the Harper staff and I feel like the other teachers respect us as practicing teachers.	Professional Growth Exit Ticket
It helped me gain confidence in seeing I'm not even really a teacher, but I'm still being treated like a teacher.	Interview (Betsy)
It felt like a family	Interview (Kelly)
They're people. We're people. We're all people.	Interview (Francis)
Harper has a welcoming environment. I'm wanted. I'm needed.	Focus Group
We're all so one-staff, classmates, students.	Interview (Sara)
All teachers helped us.	Interview (Betsy)
I felt a part of my class and the school community.	Professional Growth Paper (Zander)

With this feeling came also a sense of the level of resources available to the participants throughout the school. In the focus group a pre-service teacher spoke to the accessibility to the principal, describing how we stopped her in the hall way and took the time to ask how the experience was going for her. She laughed in remembering this because when she replied, "Fine", he went on to say, "No really how are things going for

you?" Zander remarked, "We just felt like an actual part of the school cause he (the principal) always let us do things" (Interview). Other participants spoke of their positive interactions with staff in the teachers' lounge, being invited into professional and personal conversations. These occurred with and without their cooperating teachers and included para professionals, the behavior specialist, and office staff (Focus Group, Interviews). Anne and Betsy both spoke to feeling like they were welcome anywhere in the school, in any classroom (Interviews). Participants pointed out the librarian specifically as resource (Professional Development Presentation Video, Betsy Interview).

Within the larger welcoming community was the relationship that developed between the pre-service teachers and their cooperating teachers. Of their cooperating teacher they spoke of being *valued*, *trusted*, *supported*, and *encouraged*. In their time in the classrooms with their cooperating teachers they felt safe to not be perfect as evidenced by Kelly when she shared, "There were times when I was discouraged and I didn't know how to teach something to a child, but I came back and they let me try again." (Focus Group). Tina's cooperating teacher had a very different personality than she (self described to be more quiet than her very animated cooperating teacher), but she felt respected when her cooperating teacher told her, "Don't change. You should bring yourself to teaching" (Interview). They shared opportunities during their field experience that spoke to the relationships they had with their cooperating teachers including the examples in Table 10.

Table 10. Relationships with cooperating teacher.

Data	Source (Participant if Possible)
Cooperating teacher asked me to step in when the para was absent. I was very excited that my teacher was confident with my skills.	Reflective practice (Sara)
She gave me many opportunities to practice these tactics and by putting me in charge she helped me gain confidence in myself and my teaching.	Professional Growth Paper (Betsy)
My teacher expressed excitement about my professional goal of using formative assessment to drive learning and offered resources.	Professional Growth Paper (Zander)
My teacher asked me to take the lead and provided resources. I was nervous, but it was good that she threw me into it. The feedback from it was positive and constructive for future growth.	Reflective Practice (Betsy)
Mr. W was like, "Anne, you could do this, right?" It was scary, but he trusted me.	Interview (Anne)
I love how when I bring an idea to my teacher he thinks about it and says go for it.	Focus Group
I would walk in that day not knowing if I was going to teach or not. He'd be like, "You've got 30 minutes to get ready". After I taught he's like, "Well you did this, this and this. This is awesome, but you need to work on this."	Interview (Zander)
My teacher made sure I was an equal part of almost all of her behavioral decisions.	Professional Growth Paper (Betsy)
My teacher asked me for some of the materials I used in the lesson.	Reflective Practice (Betsy)
I had opportunities to take the lead in instruction. My teacher provided support as needed.	Reflective Practice (Anne)
My teacher was open to my ideas.	Focus Group
My teacher and I worked together to figure out ways to keep a student on task.	Reflective Practice (Betsy)
My teacher asked me to assist struggling students. I felt proud to be a resource.	Reflective Practice (Sara)

While the pre-service teachers indicated their feeling of being a part of Harper School Community, each of the seven shared their challenge of not being able to spend more time in the elementary school classrooms (Interviews, Exit Tickets, Professional Development Exit Questionnaires). Anne explained that it was, "Hard not being there all day, it affected my involvement" (Interview). Anne spoke of how her university coursework outside of the cohort prevented her from being in her field experience more by saying, I have "so many classes outside of 'school' that didn't let me be a teacher, but they are training me to be a teacher; so that was a challenge" (Interview). She explained in her exit survey that, "It was challenging only being there part time, because I was not fully aware of everything." Kelly wished "to spend days in the classroom, being a part of it and getting to know what the entire day looks like" (Interview).

Theme 3: Organization of the Day. Each Wednesday the collaborative cohort met for 3-3.5 hours, working together in our classroom before taking a lunch break and heading into the individual classrooms the pre-service teachers had been assigned. We then reconvened for an hour and a half. Primarily the focus in the morning was on English Language Arts and purposeful technology integration and the afternoon meeting time focused on the seminar components of the field experience, primarily the teacher work sample. As outlined in Table 2 the pre-service teachers also spent 3 additional days in the classrooms in 2-2.5 hour blocks. The pre-service teachers spoke to the positive influence of the class-field-class structure. Betsy stated that, "By having class in the morning and then going right into my classroom I was thinking about all of it" (Interview). She went on to say that she was able to dig deeper into what we had learned

in our classroom in her field experience (Interview). This idea was also present on an exit

ticket when the participant stated, "I like that we can learn something in class and then go

directly to our practicum placement and do it." Tina spoke to this structure being

advantageous when she said she "could always see a reason for why we were learning

something" by going right into her field experience (Interview). Kelly spoke of how

"There's a lot of hypothetical in the methods classes on campus, but by being in a

methods class here (Harper Elementary School) in the morning and then going into the

classrooms it made it more realistic. It made it seem more applicable" (Interview).

Theme 4: Block of Classes. As previously stated, the participants in the

collaborative cohort were required to take the entire seven-credit block. All seven of the

pre-service teachers spoke to the strong relationships formed within the cohort. Table 11

captures this data.

Table 11. Collaborative cohort community.

Data	Source (Participant if possible)
We were a little family group, always working on things together.	Interview (Tina)
The aspect of community in the cohort is really, really special.	Interview (Anne)
I was really comfortable in the cohort, there was no judgement, and everyone was very respectful.	Interview (Francis)
We shared challenges and helped each other because of the closeness of the cohort.	Interview (Anne)
We contributed to and took learning from our group.	Interview (Zander)
We were able to have conversations with our peers, solving problems and working together when there were concerns.	Professional Growth Paper (Kelly)

Table 11 Collaborative cohort community, continued

Data	Source (Participant if possible)
We could come in and talk to peers and break down our experiences.	Interview (Sara)
We learned different views from our peers and opened us up to various ideas.	Interview (Betsy)
It was helpful to learn from one another, working in class.	Interview (Tina)

The data also provided evidence of the presence of the instructor and field supervisor at the school for considerable time periods being influential in the connections the pre-service teachers were able to make between their coursework and field experiences. Francis spoke to the instructor always instigating conversations with prompts such as, "Did you see anything?" or "Tell me about your experience…." (Interview). Anne stated, "Because you were always there. Kim (field supervisor) was also there. You guys were always open, always available for us to ask questions" (Interview). The participants spoke about the knowledge that Kim and I had of the courses and the school community members helping them navigate the requirements of the courses and the expectations within the classrooms (Focus group, Exit Survey). The feedback they received from us after walkthroughs and from Kim after observed lessons was "productive" (Sara, Interview) and "constructive" (Exit Ticket). Having all of the information in one document (observation tool for each pre-service teacher in their Google folder that was added to throughout the 10-week field experience) was helpful (Sara, Interview).

Theme 5: Side-by-Side Learning in Professional Development. The data

indicated that the side-by-side learning structure in the professional development was

influential for the pre-service teachers in several ways. First, it demonstrated to them that

teaching requires teamwork. Francis commented, "It was really fun to work as a team,

because a lot of people take teaching as, oh, it's an individual thing" (Interview). She

went on to say, "It's like you have to find that common ground. It gave me an insight

into how to interact with others and find a way to work with each other on some level

ground." Tina echoed this when she spoke to how she got to see "how the grade level

team planned and work through their differences" (Interview). Sara commented "to

grow, I feel like you can't just be a teacher by yourself" (Interview). They were able to

experience the power of collaboration through their integral participation in the lesson

study process (Interview, Tina, Betsy, Francis; Exit Ticket, Francis, Sara). This was

evidenced in the first grade team when a pre-service teacher was put in charge of video

taping one of the lessons which all of the first grade pre-service and inservice teachers

watched together and discussed changes to make moving forward into the next phase

(Interview, Betsy and Tina). Sara was able to see how the lesson developed as the first

grade team members built the lessons and modified them along the way (Interview). In

the fifth grade team, the fifth grade teachers were absent during one of the professional

development sessions, but the pre-service teachers and health enhancement teacher

moved forward with the work. Francis remarked that when they came back to the next

session the teachers said, "These are awesome ideas! This is stuff we never even thought

about. We never thought we could implement it this way." Anne echoed this when she

shared in the professional development presentation "They didn't change anything we did!" During the presentations both pre-service and inservice teachers shared their observations, insights and experiences in the process (Professional Development Presentation Video).

The pre-service teachers indicated the influence working with the teachers impacted them with all seven of the participants commenting on how they were included and "worked alongside teachers during the development phase" (Interview, Francis), "contributing to the work, pulling things into it we had learned in class (Interview, Tina). The pre-service teachers spoke to being "thrown into it" (Interview, Betsy), "encouraged to participate" (Interview, Sara), and "included in the work of the teachers" (Interview, Betsy). These learning outcomes for the pre-service teachers can be seen in Table 12.

Table 12. Professional development learning outcomes.

Data	Source (Participant if Possible)
I have a better understanding of the role of reflection to alter lesson plans to meet student learning goals.	Professional Development Exit Questionnaire (Zander)
PD allowed us to be a part of the process behind the scenes in helping students be successful.	Interview (Francis)
I can better use evidence to drive lesson planning.	Professional Development Exit Questionnaire (Zander)
The professional development made me think in a more professional, school-centered way instead of just an assignment.	Professional Development Exit Questionnaire (Betsy)
Professional development helped me understand the focus on student learning.	Professional Development Exit Questionnaire (Anne)
Professional development allowed me to learn from all of the teachers.	Professional Development Exit Questionnaire (Betsy)
Professional development helped me grow in the factor of not just thinking about myself, because I was more confident and had a support system.	Interview (Sara)

Third, the pre-service teachers realized that teachers do not stop learning to teach. Six of the seven participants indicated this to be a substantial realization for them. This was a profound shift in their perception of professional teachers, including their mentor teachers they were working with each day. Table 13 includes the data specific to this finding.

Table 13. Teachers never stop learning.

Data	Source (Participant if Possible)
At first I thought, why would they need to change how they're teaching? They are all great teachers.	Interview (Betsy)
The realization of continued growth in teaching practice …	Reflective Practice (Francis)
It was weird, knowing our cooperating teachers wanted to better themselves.	Interview (Zach)
These teachers have been teaching for years and they're working with each other to improve their teaching skills still.	Interview (Sara)
I didn't realize they (teachers) actually have goals. It's not just we learn this and that and then we're done. My mind was blown apart from doing this part (PD).	Interview (Francis)
Working on professional goals and in the professional development has shown me the tremendous dedication that is required in improving my teaching.	Professional Growth Paper (Tina)

Question 3: What Student Identified
Strategies Intentionally Employed in the
Integrated Field and Coursework
Strengthened Teacher Efficacy
for Pre-Service Teachers? How Did
They Influence Their Teacher Efficacy?

Theme 6: Modeled Instructional Strategies in the Cohort Classroom. The Pre-service indicated the influence of activities they participated in within the collaborative cohort classroom and what they were able to see and experience in their field experience classrooms. Francis stated, "We were able to implement things that we were participating in as activities and then putting them into the classroom. I was like, It's working!" (Interview). Kelly shared, "I felt like I kept seeing demonstrations of what we should be doing. I think we were a part of a lot of instructional strategies that we could actually use. I felt like we were doing, like we were actually practicing what we will be getting, what we will be doing as teachers." (Interview). This was echoed by several other participants from the interviews including: Zander-"Everything we did in class was directly related to what teachers really do." Francis-"I constantly saw stuff that related to each other," and Betsy-"I used a lot of things from our classroom in my classroom". Zander stated that, "Everything we did in class was directly related to what teachers really do" (Interview). He went on to speak to the use of the strategy of flipping the classroom that we did for our instructional time and he saw his teacher use with the fifth graders.

Theme 7: Situated Learning Projects. The pre-service teachers spoke to the activities in their coursework that were influential in their development of teacher

efficacy. On an exit ticket a participant stated, "I love how integrated it is with our classes and the actual experience overall." Sara remarked, "Our assignments were all pretty much happening in the classroom. We didn't have to 'make it happen', it was already happening." (Interview). Kelly said, "It's easier to apply the things you're learning in class when it's directly related and it's right there" (Interview). Francis spoke about the opportunity to put learning into action. Tina confirmed this when she said, "Everything we learned in ELA my cooperating teacher knew and we could talk about it as we used it with the children" (Interview). Tina explained that, "We learned about it, tried it, thought about it, and wrote about it. It was all pretty connected" (Interview). Kelly affirmed this by saying, "I don't know if I knew I was making so many connections, but I definitely would say I'm more capable in applying these things" (Interview).

Seven activities were identified by the majority of the participants as effective or highly effective in analysis of the results of the Exit Survey for Class Assignments. These include the following: workshop model (7/7), transcription based reflection (6/7), peer observation reflections (7/7), vocabulary (6/7), multimodal poetry (7/7), professional goals (7/7), and questioning (7/7). The other activities which received the majority of ratings of not effective or slightly effective included: interviewing teacher about writing instruction (7/7), analyzing students writing (7/7), theory-to-practice project (7/7), technology integration rationales (7/7), reflective journals (6/7) and the teacher work sample (7/7). Below is a series of charts for each of the activities that describes the purpose and sequence of events for each. Those activities that received effective or

highly effective ratings are then followed by the data that was found in the other sources
of data.

Six of the pre-service teachers spoke about the workshop model in the interview.
Kelly said, "After learning about the workshop model, I recognized it. I'd been seeing it
all semester and didn't know what she was doing. That was really good, seeing that and
making the connection." Anne spoke to the idea of seeing theory into practice from a
different point of view in the way we approached learning about the workshop model.
She said she was able to, "See the connections when we researched first, purposefully
observed and then unpacked it." In one of her reflective practices Betsy talked about the
activity helping her "confirming her understandings and beliefs about the structure." The
participants also spoke to the advantages of being able to observe the workshop model
with a different teacher and in a different grade level. Sara spoke to how it allowed her to
see "different strategies and ways to implement the workshop model" (Interview) even
though she had witnessed the model in her own assigned classroom. Francis spoke to the
observation component providing her with "perspective" which allowed her to better see
that "differences in teachers do not affect effectiveness with children" (Interview). In the
focus group this was reinforced when the participant stated, "I will be a good teacher,
because it's okay to be different and to bring who you are to teaching because I saw lots
of teachers." Anne also agreed that observing in a different classroom allowed her to see
how "Similar strategies could be used a different levels" (Interview).

Table 14. Workshop model description.

Purpose	Sequence of Events
To fully understand the workshop model including the structure and key components for successful implementation in reading and writing.	1. Read assigned research article (prior to class) 2. Watched video of the reading workshop (prior to class) 3. Class lecture on the learning theory upon which the workshop model is based (ZPD, gradual release of responsibility) and connections to previous readings in class 4. Discussion pulling together ideas from the previous three sources 5. Structured observation of workshop model implementation in a grade level not assigned to for field experience with workshop graphic organizer for recording notes. 6. Returned to class for discussion unpacking observations. 7. Listing of possible pros and cons, brainstorming as a model of shared writing. 8. Pre-service teacher utilize the writing process to create a persuasive letter to a hypothetical principal convincing him/her to let them implement the workshop model.

Four of the seven pre-service teachers spoke about the experience of observing a peer and reflecting on the event. In their interviews both Sara and Betsy indicated it was positive by using the descriptors *helpful* and *powerful*. Sara went on to say she was able to see a new technique for classroom management during her observation. Francis spoke specifically to the event allowing her to see a different teaching style from her cooperating teacher and also how Betsy's (peer being observed) interest in individual students had allowed her to build a relationship with then and thus engage them in

learning effectively (Peer Observation Reflection). Kelly noted this as well when she commented, "I got to see a peer who had strong relationships with students and how she was able to differentiate because of this". Table 15 contains specific data to this finding.

Table 15. Peer observation reflection description.

Purpose	Sequence of Events
To provide a purposeful opportunity for the pre-service teachers to observe one another within a classroom setting, considering differences in learning environments and developmental levels of students	1. Pre-service teachers make an arrangement to observe a peer teaching in his/her assigned classroom. 2. Pre-conferences are encouraged and the pre-service teacher being observed is encouraged to ask the observer to assist them in data collection for the Professional Goals Assignment, but this is not required. 3. The observer then leads a post observation conversation with the observed before completing a written reflection of the event including addressing the similarities and differences between classrooms and students.

All seven of the pre-service teachers mentioned the work with vocabulary as being influential on their beliefs about teaching. Tina said, "We learned about vocabulary, tried it out and felt like okay, now I can do this in my own classroom. That was good" (Interview). Zach stated, "The biggest impact on my belief on my ability to teach, learn something in class, go right into the classroom and see it for yourself. Try it. Reflect"(Interview). He was able to connect this to the modeling his cooperating teacher did as well, "I remember first watching it in read aloud, then I started and it was such an easy thing after watching how he did it and the work we had done in class" (Interview). Both Tina and Kelly spoke to the interview component of this series of activities. Kelly

stated, "When you asked us to interview our teacher with specificity it was important, it meant something" (Interview). The pre-service teachers were able to make connections to the modeling of vocabulary activities we had done in class throughout the semester. These connections did not happen until they began seeking out ideas to try out in class. (Kelly & Betsy Interviews).

Table 16. Vocabulary description.

Purpose	Sequence of Events
To understand the role of vocabulary development for academic language development as well as content learning.	1. Journal prompt as bell work for students to consider how they learned words as students in school and what they have noticed about vocabulary instruction in their field experience thus far. 2. Class discussion about personal experiences with vocabulary development. 3. Brief lecture about the role of vocabulary in learning in all content areas as well as the Marzano six-step process. Watch two brief videos looking for the components of Marzano's six steps. Discuss. 4. Pre-service teachers asked to find a game or strategy they might be able to use in their field placement and share it with the class. 5. Homework: Interview cooperating teacher about the role of vocabulary within his/her classroom, thinking about what we learned in class. Step two, take time to notice vocabulary development in your classroom. How is it happening? Report back in the discussion post telling us what you learned from this process. Then respond to a peer making connections between yours and his/hers. Finally, find an opportunity to teach vocabulary in your placement. Share with us what you planned, how it went and considerations for the particular strategy. Take the time to reed a peer's reflection and provide thoughtful connections to your own experience.

Anne spoke to the power of simply finding joy in poetry for the first time through this project (Interview) and feeling empowered to write poetry. Tina was able to see how she could implement it in a classroom. Betsy brought forth her poetry project to her cooperating teacher and was able to use it in her classroom. No students spoke specifically to how it impacted their beliefs in their ability to teach.

Table 17. Multimedia poetry description.

Purpose	Sequence of Events
To develop understandings of the use of digitally mediated literacies within the poetry genre.	1. Pre-service teachers explore poetry, choosing two poems to bring to class to share. 2. Journal prompt as bell work: The pre-service teachers are asked to think about their own experiences with poetry and school. How it was used, what they know about poetry, how they feel about it as a genre, and how they think it might be used in a classroom setting. Discussion follows. 3. In class, poems are shared and a list is generated of various structures of poetry. Pre-service teachers then choose one to teach the others about, creating a slide in a class Google slide share that includes the "rules" and an example. 4. The pre-service teachers then choose a structure to use in writing a poem and the writing process begins. They are encouraged to consider their classroom placement and how they might write the poem to be used within. 5. Homework: Assigned peer reviewed research article about using poetry in the classroom, including articles about new literacies and multimedia. 6. The writing process continues at the next class with peer reviews. 7. The pre-service teachers find their article partners, discuss what they learned and create an anchor chart from the article and share out with the class. 8. Short lecture on the role of layering sound, imagery and text to build comprehension is presented. 9. Pre-service teachers are then charged with creating a multimedia presentation of the poem they are writing. 10. After completion the students must submit a paper explaining how they might use this project within a classroom aligned to the CCSS.

Six of the seven pre-service teachers spoke to the positive influence of establishing professional goals and working on them throughout their field experience. Anne spoke to the daunting nature of the assignment at the beginning, but also to how beneficial it was for her (Interview). Francis stated that, "The professional goals helped me be more effective and focused in teaching and observed lessons. They are all interlinked with one another" (Interview). Betsy, Sara, Tina also believed that the professional goals helped them focus. Tina said, "Simply remaining aware of my desire to implement questioning techniques allowed me to continually practice it." Both Sara and Kelly spoke to the reflection component of this process. Sara said, "Focusing on this goal really became a focus of self-reflection, which challenged me to always be better" (Professional Growth Paper). She went on to explain that by "using varied methods of instruction to meet the needs of students through this experience of setting and working on goals I gained confidence and am more prepared for what students bring".

The pre-service teachers used information from their cooperating teachers, field supervisors, what they learned in class and research they completed (Professional Growth Papers from Sara, Tina, Francis). Tina said the "best advice came from her cooperating teacher, led to research and trying it out" (Professional Growth Paper). Sara stated that the Professional Goals Growth Project helped her "focus to improve practice through research, observation, practice and reflection". Several of the pre-service teachers spoke to the affect of working on one goal leading to future planning of next steps of goals in their current field experience and ones in the future (Tina and Kelly).

Throughout their discussion of the professional goals, the pre-service teachers spoke to the power of reflection. Anne mentioned how "reflection helps make connections between problems in the field and our research". (Professional Growth Paper). She went on to say it helped her see, "I'm not a terrible teacher, it just helps me know where to improve" (Interview). Sara shared that she had "never thought about the process of reflection and growth and how teaching can evolve" (Interview).

Table 18. Professional goals growth project description.

Purpose	Sequence of Events
To encourage the pre-service teachers to focus on specific, attainable goals for their teaching practice during their field experience.	1. Multiple lessons are implemented with the pre-service teachers specific to the Danielson Framework for Teaching in the cohort classroom that is the basis for the observation tool used in the teacher education program. 2. Pre-service teachers complete a self-assessment for Domains 2 and 3 of the Danielson Framework for Teaching. 3. From the self-assessment they choose one element from each Domain 2 and 3 to find and read several peer reviewed articles. 4. Pre-service teachers have a conversation with their cooperating teacher about what goals they are thinking about developing and then begin to formulate a plan which has three components: goal, action steps and evidence of progress, for each of their two goals. 5. Pre-service teachers meet with their field supervisor to review the professional goals. 6. The developed goals are then a driving focus during the field experience during observations and reflections.

Seven of the pre-service teachers spoke to influence of the questioning activities on their development as teachers. Francis said, "It wasn't random. It showed us how they were interrelated, our classwork and field experience". (Interview). Zander shared that, "unpacking my personal experience, interviewing my teacher, trying it out, reflecting and sharing" made this impact my belief about teaching" (Interview). He went on to say, "I felt like questioning was something that wasn't too difficult, anyone could do it. After watching my cooperating teacher, I knew I had no idea what I was doing, so I asked him" (Interview). Several other participants had similar remarks about how learning about questioning brought forward an awareness of questions (Kelly in Professional Growth Paper and Anne in Interview). By recording the instructional questions asked in the classroom, Sara started thinking about the questions she was asking (Interview). Tina said that the activities helped her see what questions she was asking and she learned to plan ahead (Interview). Anne noted that the transcription was powerful because she was able to see, "My language and the students' language" (Interview). She was able to make a connection with the article about questioning she had read for class, her transcription and one of her professional goals (Professional Growth Paper). Pre-service teachers were able to modify their question and answer patterns (Reflective Practice, Sara) and types of questions (Reflective Practice, Betsy) they used to drive learning. Betsy brought the idea of questioning to her cooperating teacher's attention and they collaborated on it (Interview).

Table 19. Questioning description.

Purpose	Sequence of Events
To consider a variety of ways questions relate to learning outcomes.	1. Using the text scrolling strategy pre-service teachers closely read an assigned peer reviewed research article on questioning prior to class. 2. Journal prompt as part of bell work: Students are asked to consider what they remember about questions from their experience as a student and what they know about questions as they relate to learning in the classroom. Discussion follows. 3. Pre-service teachers find out that pairs of students read the same article and get together to discuss their understandings and key takeaways from the article. Each pair then prepares a slide in the class Google slide share with the important ideas from the article. Each pair presents as class listens for connections among the articles. At the end of the presentations, themes are drawn across articles and groups are formed for the purpose of creating a short (less than 5 minutes) infomercial about the content within the similar articles to share out as part of the professional development. (Finished outside of class) 4. Students are then asked to record 25 questions asked in their classrooms for next week's class. 5. Next week's class, questions are sorted according to Bloom's taxonomy and Webb's Depth of Knowledge framework. 6. Homework: Students are assigned to audio record themselves in an instructional opportunity, transcribe 5 minutes of the event and reflect on the experience using what they have learned about questions.

Tables 20-25 contain the purpose and sequence of events for each of the situated learning events which were not indicated by the students as having a positive effect on the development of their teacher efficacy. These tables are reported simply for transparency of all strategies employed within the case and are not discussed further.

Table 20. Interviewing teacher about writing instruction description.

Purpose	Sequence of Events
To provide a structure for the pre-service teacher to learn more about how writing instruction is implemented in his/her assigned classroom.	1. Instruction about the writing process and the writing traits occurs in the cohort classroom. 2. Discussion occurs about writing and how it is implemented in the elementary classrooms. 3. Students brainstorm questions to ask their cooperating teachers 4. Homework: Conduct interview with cooperating teacher to share in next week's class.

Table 21. Analyzing student writing description.

Purpose	Sequence of Events
To engage in the process of writing evaluation for the purpose of addressing instructional needs.	1. Instruction specific to the role of assessment in writing instruction is presented. 2. Writing samples are passed out to pre-service teachers to examine. All students have the identical writing sample. They are instructed to take notes of what they see. Discussion. Rubric appropriate to the grade level and type of writing is distributed. Pre-service teachers assign scores based on the rubric. Pre-service teachers are asked to consider next instructional steps for the writer. Class discussion facilitated by instructor. 3. Three passages of text are distributed to small groups so each group has a different text. The same procedure as above is followed within the small groups working collaboratively. When evaluation is completed, the groups share out their findings. Questions and answers occur throughout. 4. Homework: A passage of a different text structure is distributed for pre-service teachers to evaluate on their own as a formative assessment to be reviewed in class the following week. Pre-service teachers are asked to decide next instructional steps for the writer of the text.

Table 22. Theory to practice project description.

Purpose	Sequence of Events
To provide the opportunity for students to synthesize their understandings of ELA course learning.	1. Students completed this assignment on their own demonstrating their synthesis of learning in ELA. 2. Essential components of this assignment include: philosophy of language arts instruction that is research based, but also includes self-analysis of personal learning experiences in the areas of language arts (daily journal from class) and their relationship to your as a professional educator. Practice design-this is what your philosophy looks like when implemented in the classroom. The important structures and expectations you have as a teacher that will shape the learning environment specific to language arts. All areas of language arts should be addressed with specific structures and strategies provided as well as the relation to ELA CCSS and integration of content disciplines.

Table 23. Technology integration rationales description.

Purpose	Sequence of Events
The intent of the rationale was to provide an argument in which they justified pedagogically why they chose the specific technology to integrate.	1. For **TWO** of the lesson/unit plans pre-service teachers created in the ELA methods course and delivered in the classroom, an accompanying technology integration rationale was submitted. 2. Specifically, the rationales responded to the following prompts: 3. How would the technology you have selected address your desired learning outcomes? That means, how are you using the technology to address what it is you want your students to know or be able to do after the activity? 4. How does your use of the digital tool align with your selected pedagogical strategies? How does it compliment, or align, with the content of the lesson or unit? 5. What relative advantage does the use of the technology bring to teaching and learning? 6. How have you designed the lesson so that the technology seamlessly integrates with the content you are teaching? 7. What does your use of the technology say about how you think the content should be taught? 8. How does the technology increase opportunities for student interaction with ideas and content?

Table 24. Reflective journals description.

Purpose	Sequence of Events
To facilitate the use of the reflective cycle in an effort to develop reflective practice.	1. Instruction was provided specific to the stages of the reflective cycle as part of Kolb's experiential learning theory was introduced and modeled for the pre-service teachers. 2. Pre-service teachers completed a reflective journal entry for seven of the 10 weeks of the field experience. Feedback and responses were provided by the field supervisor after each submission.

Table 25. Teacher work sample description

Purpose	Sequence of Events
To provide evidence of the pre-service teacher's ability to plan and implement standards based instruction adapted for the context and students in the classroom, revise instruction based on formative assessment, utilize data to evaluate learning and plan for future instruction and development as a professional.	1. The development of the TWS was an ongoing project the pre-service teachers developed and implemented over the course of the 10 week field placement. The guides for this assignment may be found here: http://www.montana.edu/fieldplacement/practicum/index.html 2. First drafts of each of the five sections were submitted and the pre-service teachers received feedback before final submission at the end of the semester. 3. Practicum I students completed the TWS in pairs based on their field placement. Practicum II students completed the assignment as individuals.

Theme 8: Spillover from Professional

Development into Teaching Experiences. Through the professional development

work in the side-by-side model the pre-service teachers had learned about lesson study

and worked on it within the realm of the collaborate project they had undertaken with

their cooperating teachers. The Practicum I pre-service teachers in the fifth grade

(Anne, Francis, and Kelly) were able to see the

connections to lesson study outside of their professional development work. In

preparation for their observed lesson they learned they would be teaching the same lesson

to two groups of students on sequential days. They co-wrote their lesson and taught it the

first day. In their words, it was a disaster, but thankfully their observed lesson was not

until the next day. They each shared their a-ha with me separately in their interviews that

they made the connection to the lesson study work within the professional development.

Anne explained that they had their "own mini lesson study with our observation. We

changed our language, activity, pretty much everything!" (Interview). Kelly shared

energetically that she realized that "you need to revise a lesson just from trying it.

Thought to actual practice!" (Interview). Francis said, "Next time we taught the lesson,

we were like on, it was so much smoother. We knew exactly what we needed to do, how

to word it" (Interview).   In her reflective journal she said she "felt more confident

because we had 'lesson studied' it and made improvements". Anne shared that when she

was able to put lesson study into practice, she thought, "Oh this is good, I am using what

I am learning in class" (Interview). She then began to see how her cooperating teachers

do it constantly with their block classes, adjusting between morning and afternoon

lessons based on the outcomes from the morning classes (Interview). In the Professional

Development Presentation video, her cooperating teacher confirmed this.

Theme 9: Disconnect Between University Classes and Field. The majority of

participants spoke about their frustrations with other university courses they took during

the time frame. In the focus group a participant stated, "I wish we had more connections

between methods courses on campus and field experience". A male said, he experienced

a "big disconnect between coursework on campus and what's going on in the field". Another participant said, "I'm restless in my classes on campus now because once you have a taste of this (cohort) you're like, let me in. They don't seem applicable". Zander said, "I used to think when taking classes at the university, it was just so unrelated to how things work in the school. After being in the cohort, when you take what you learn and apply it, you know this is how it should work." (Interview). Francis shared, "I think it's one thing when you talk about being a teacher, than being put into the position and practicing it. As a student we are constantly being prepared for what to expect. Until we're put in the classroom where it's going to be like this (cohort). It gave us at least a general idea of what we need to know" (Interview). In the focus group a participant shared that in taking methods classes at the university "you create lesson plans, get a grade an move on." Francis went on to say that, "As a life long learner and teacher it's good to make mistakes, but learn from them? Improve? You just can't really do much of that at the college when you are in a classroom with other people your age" (Interview). Zander echoed this sentiment by saying, "Sometimes in classes you feel like your assignments are supposed to be real life, but you don't know the children" (Interview). When you are in your classes, you're in your methods and you are coming up with these hypothetical lessons you don't know about the little details that make such a difference when you're actually working with little humans" (Interview, Kelly). These statements align with the participants' beliefs about context and the secondary importance of content after the primary focus of students as learners (Zach Professional Growth Paper, Focus group multiple times).

Summary

This chapter presented the research methods and data collected from the research study. The themes that developed from the data analysis demonstrate the development of teacher efficacy within the cohort experience. The opportunity to be embedded within the school context allowed participants to develop relationships with the professional educators as well as with the children. Through these relationships they had multiple opportunities to build their teacher efficacy in all four categorical inputs. Organized by themes within research questions, the data presented in this chapter will be discussed within the context of existing literature before implications for practice and recommendation for future research are asserted in Chapter 5.

CHAPTER 5

SUMMARY, DISCUSSIONS, AND IMPLICATIONS

Introduction

T the purpose of this qualitative study was to better understand the structures and

strategies used in teacher education coursework that took place in a K-5 school context

that provided and encouraged opportunities for growth of TE for pre-service teachers.

The results of this study provided insights into considerations for structures and strategies

for developing teacher efficacy within an integrated, embedded model of teacher

preparation.

The following research questions provided a framework for this investigation:

1. Did pre-service teachers experience positive growth in their teacher efficacy
    during the semester long embedded experience?

2. What student identified structures in the integrated, embedded model
    strengthened teacher efficacy for pre-service teachers? How did they influence
    their teacher efficacy?

3. What student identified strategies intentionally employed in an integrated field
    and coursework strengthened teacher efficacy for pre-service teachers? How
    did they influence their teacher efficacy?

This chapter presents an overview of the research design and a summary of the study's findings by research question. Implications for practice and recommendations for research conclude the chapter.

Research Design

A case study approach was used for this research investigating the structures and strategies used in the integrated, embedded model because it was not possible to answer the research questions simply. Instead, the research was highly contextualized, requiring careful description of the settings, participants and multiple events throughout the study, and complex requiring multiple data sources (Creswell, 2013; Stake, 1995).   Data were collected throughout the semester-long case as I sought to collect a rich data set in order to carefully examine the highly contextualized research (Creswell, 2013). Data sources including field notes, reflective practices, and professional growth papers were collected throughout the semester, but not examined or analyzed until the after the interviews were completed one month after the end of the semester. The only data examined prior to the interviews was the exit ticket from the mid point of the professional development in order to make adjustments as necessary for the remaining sessions, and the pre-and post TSES which were analyzed in order to bring the outcomes to the interview if there was interesting data within.

As the instructor of record and with my presence in the school as the Director of Field Placement and Licensure, I was immersed in this project from the very beginning. Hatch speaks to the importance of awareness of and the importance of the researcher's

ability to "monitor one's emotional responses" (2010, p. 10). My role in the context brought both limitations and opportunities as an embedded researcher. I had a marked stake in the work within this model and had positive feelings for the structure and context, thus I attempted to limit my influence on the data by postponing examination and subsequent analysis for one month after the completion of the case. Following the receipt of the transcribed interviews, I asked participants to review for accuracy before using the constant comparative method (Trainor & Graue, 2013) to identify and code data and establish themes emerging from the findings. This process was followed with all data sources in order to triangulate the findings (Creswell, 2013). Throughout this process, researcher's memos were kept to record my thinking as it developed (Corbin & Strauss, 2015). The participants were then asked to review the findings for accuracy of representation.

Permission to conduct this research was secured from the University's Institutional Review Board. All fifteen participants from the fall 2015 cohort were invited to participate and agreed to do so. Seven of the fifteen were selected to be the focus of this case study. These seven pre-service teachers represented Practicum I and II levels, as well as a set of pre-service teachers from a primary and an intermediate grade level. This selection of multiple pre-service teachers within grade level teams also provided corroboration for events within the case.

Review of Emergent Themes and Discussion

From the analysis of the data within the case study the following themes emerged within the research questions:

Question 1: Did pre-service teachers experience positive growth in their teacher efficacy during the semester long embedded experience?

- Theme 1: Pre-service teachers experienced positive growth in their teacher efficacy.

Question 2: What student identified structures in the integrated, embedded model strengthened efficacy for pre-service teachers? How did they influence their teacher efficacy?

- Theme 2: Location, location, location

- Theme 3: Organization of the day

- Theme 4: Block of classes

- Theme 5: Side-by-side learning in professional development

Question 3: What student identified strategies intentionally employed in the integrated field and coursework strengthened teacher efficacy for the pre-service teachers? How did they influence their teacher efficacy?

- Theme 6: Modeled instructional strategies in the cohort classroom

- Theme 7: Situated learning projects

- Theme 8: Spillover from professional development into teaching experiences

- Theme 9: Disconnect between University classes and field

The purpose of this section is to discuss the major findings of the study within the context of the existing literature reported in Chapter Two. As a case study, the findings of this research were situated within the context of the case in which it occurred and generalizability is not suggested nor is it prudent to make broad assumptions from the findings to be applied across other populations. Each section of the discussion contains a theme and its connection to the existing literature.

Theme 1: Pre-Service Teachers Experienced
Positive Growth in Their Teacher Efficacy

Despite the small sample size (n=7) and lack of statistical significance of the pre and post TSES, there was further evidence from other data sources to indicate the growth of teacher efficacy through the participation in the collaborative cohort. The participants indicated development of "confidence" which aligns with Tschannen-Moran, et al.'s definition of teacher efficacy as being based on the individual's beliefs about his or her own ability to perform and the performance's ability to impact learning (1998). Specifically addressing classroom management, Anne stated, "I learned what it means to manage the classroom and have built up the idea that I can do this." Sara said, "Although it was challenging, now I feel calm and confident when responding to misbehaviors." They also indicated their growth in confidence with instructional strategies. Francis stated that, "Even though math was not my strongest subject, I felt relaxed, confident and ready to use alternate forms of instruction to help the students."

Kelly, an outlier in the pre and post data with a drop in her TSES score seems to

represent the "reality shock" that Veenman's (1984) research identified for first year

teachers. Kelly spoke to the positive affect of her participation in the cohort on her beliefs

about her ability to teach, but acknowledged that she had little experience with the reality.

This aligns with the research of Woolfolk Hoy & Spero where their longitudinal study

found that teacher efficacy grew for pre-service teachers throughout their teacher

preparation program, but dropped by the end of the first year of teaching (2005) because

of the discrepancy between preparation and reality. Kelly acknowledged,

> I think I have more understanding of where my abilities lie now. I think it
> will take a long time to be a good teacher. I believe that I can be
> eventually, but it will take a lot of work….One thing I realized in the
> cohort is that you never stop working and growing in your capabilities as a
> teacher.

Bandura indicated that self-efficacy is the basis for further development of teacher

efficacy and is the most malleable early on in learning (Bandura, 1997). This bodes well

for Kelly in both her experience and her mindset that she will keep growing and

developing her teaching practice.

Theme 2: Location, Location, Location

The pre-service teachers indicated their belief that being at Harper Elementary

School strongly impacted their development of teacher efficacy. Within social

constructivist theory, there lies the belief that context is a key factor to learning

(Vygotsky, 1997; Bredo, 2000), thus in order to learn to teach, one must be in a school.

Key to social constructivism is this acknowledgement that learning occurs within a socio-

cultural context (Adams, 2006) and not in isolation. Francis' statement about being "in

the school setting from the very beginning at the first staff meeting…obviously initiated us as staff and we were treated as such" is evidence of this. The pre-service teachers indicated that being a part of the school community impacted their level of confidence. They felt a part of the school community-*welcomed*, *included*, and *supported*. They felt as though they were "a part of the Harper staff and …like the other teachers respect us practicing teachers".

The relationships the pre-service teachers had with their cooperating teachers was also impactful on their beliefs about their teaching abilities. They indicated that they were *valued*, *trusted*, *supported* and *encouraged*. Betsy indicated that her cooperating teacher gave her "many opportunities to practice these tactics and by putting me in charge she helped me gain confidence in myself and my teaching".

These experiences align with the importance of learning within a community of practice where learning is grounded in the social participation in the school community (Korthagen, 2010). Poulou's work (2007) indicated that it is far more than observing teaching practices, but that the relationship between the pre-service teacher and person being observed is critical to the development of teacher efficacy. The pre-service teachers had opportunities within this community of practice to experience inputs from teacher efficacy sources as described by Bandura (1997) including mastery (where they could try out different strategies with scaffolded support from the cooperating teachers and instructors), vicarious (where they were able to purposefully observe their cooperating teachers and instructors), social persuasion (where they were encouraged to try jump in and work with students by their peers, cooperating teachers and instructors)

and emotional states (where they were nervous, but felt exhilaration when what they tried was successful) because they were a part of the school community, thus experiencing teacher efficacy development.

Theme 3: Organization of the Day

The pre-service teachers spoke to the structure of class-field-class design within the cohort. They shared that this design asserted a positive influence on their ability to more deeply understand the connections between what they were learning in class and how it fit into actual practice within the classroom setting. They indicated that this structure allowed them to see the reasons for why we learned what we did in the methods classes, using terms such as "realistic" and "applicable" to speak to the advantages of learning about a concept and then doing it in their field placement. This aligns with perspectives on social constructivism in that the learners are actively engaged in the construction of understandings through the process of doing in a social context rather than simply knowing (Vygotsky, 1926). This structure allowed for an "organic relation of theory and practice" (Dewey, 1990, p. 85) that was responsive to the learner and the context. This finding also aligns with purposeful learning where the pre-service teachers were able to make connections to the future use of the learning within our classroom when they made connections in their field experiences (Bereiter, 2001). This structure provided opportunities for mastery experiences for the pre-service teachers as they engaged in teaching practice that allowed them to develop beliefs about their capabilities (Bandura, 1986).

Theme 4: Block of Classes

The number of courses within the cohort was another factor the pre-service teachers indicated as impacting their sense of community within the cohort experience. The pre-service teachers referred to their group as "family" where they were able to both contribute and learn from the community within. They valued the opportunities within the group where relationships were strong because they spent so much time with one another. Korthagen argued for the value of communities of practice there is a need for "many opportunities of peer supported learning in teacher education…When teacher educators start to see cohort groups in teacher education as such communities and treat them as such, this in itself may have an important positive influence on their practices in schools " (2010, p. 101).

They also indicated the embedded natured of the instructor and field supervisor within the block of classes allowed for conversations where they were asked to unpack their experiences and ask questions. The relationships both the field supervisor and myself had at the school provided for deeper contextual knowledge and understandings both of the school community and the course assignments. This finding aligns with the Vygotskian view of the significant other (instructor and field supervisor in this case) within the Zone of Proximal Teacher Development where the pre-service teachers receive assistance from more capable others (Warford, 2011) prompting the pre-service teacher to respond to experiences in a productive manner (Dewey, 1964).

The strong relationships they were able to build with the seven credits of coursework and field experiences within the cohort with the consistent peer group, as

well as an instructor and field supervisor who were knowledgeable about the context,

provided a foundation of trust and reliability for input from all four sources of the

efficacy development. Bandura noted that the perception of the persuader and the

relationship the observer has with the modeler are important to efficacy development,

specifically through vicarious input (1997).

Theme 5: Side-by-Side
Learning in Professional Development

The structure of the side-by-side professional development impacted the pre-

services beliefs in their abilities to do the work of teachers through a focus on the

interrelatedness of student learning and developing teaching practices. This was evident

in three sub-findings within this theme: teachers never stop learning, the interrelatedness

between teaching practices and student learning, and the pre-service teachers were

contributors to the collaborative process within professional development.

It was shocking to the pre-service teachers that the cooperating teachers, who they

considered to be experts, wanted to continue to develop their teaching practices. Betsy

indicated this when she said, "At first I thought, why would they need to change how

they're teaching? They are all great teachers." This realization was important for the

mindset of the pre-service teachers in developing their understanding that they would not

be done learning once they finished the teacher education program. Francis stated, "I

didn't realize they (teachers) actually have goals. It's not just we learn this and that and

then we're done. My mind was blown apart from doing this part" (professional

development). Within the structure of social constructivism, this idea of learners at the

center of learning allows for the "organic relation of theory and practice" (Dewey, 1990, p.85) where growth and a continuation of learning "are the fundamental basis of pedagogical work" (Vygotsky, 1997, p. 47). This experience allowed the pre-service teachers to realize that they would continually study and learn from their own practice just like Dewey espoused when he referred to the teacher as "an active experimenter who constructs the educative experiences on the grounds of continuous reflective inquiry" (Shepel, 1999, p. 73).

The pre-service teachers indicated their development of being able to see the connections between working to develop teaching practices and student learning. This transition happened for them when they were able to focus on the grade level team efforts of goal setting and attainment instead of what Betsy described as "completing an assignment". Francis described this as an opportunity to see "behind the scenes" which assisted them in focusing on the use of evidence to make decisions about student learning. Sara explained that it allowed her to shift her thinking from herself, to the work of teachers in helping children learn. It was through this experiential engagement within the social context (Vygotsky, 1978) that the pre-service teachers were able to build their understandings of how teaching practices impact student learning.

The pre-service teachers were part of a grade level team of educators working together to develop their teaching practice. By actively engaging with the collaborative efforts, they did not just read about the work of teachers, but instead learned through doing (Menand, 2001). The pre-service teachers were at the center of the learning (Johnson, 2003) engaging in advancement of teaching practices within the grade level

classrooms. Throughout this experience of side-by-side learning they were contributors as evidenced by the fifth grade pre-service teachers moving forward in the absence of their cooperating teachers and the first grade team participating in the discussion of the recorded lessons. This resonated with Dewey's ideas that "people are held together because they are working along common lines, in a common spirit and with reference to common aims, the common needs and aims demand a growing interchange of thought and growing unity of sympathetic feeling" (Dewey, 1990, p. 14).

The side-by-side professional development component of the cohort provided an opportunity for the pre-service teachers to engage with the cooperating teachers in a different format then the required hours of field experience in the classroom. By participating in the professional development, they had the opportunity to contribute in a different way, perhaps even altering the learning through what Wenger claimed can only happen in a community of practice where there is a "realignment of experience and competence, the ability to negotiate new meanings, and the transformation of identity" (1998, p. 226-227). It was through this community of practice that the pre-service teachers again experienced all four categorical inputs for efficacy development because they were active participants within the social context, building new understandings (Lave & Wenger, 1991) of what it means to be a professional educator focused on student learning and not the completion of an assignment within a course.

Theme 6: Modeled Instruction
in the Collaborative Classroom

The pre-service teachers indicated the connections they were able to make

between the modeled strategies within the collaborative cohort classroom and their

experiences in their assigned field experiences. As the instructor it was my intention to

provide learning opportunities using best practice strategies including a variety of ways to

learn vocabulary, purposeful technology integration, differentiated learning and

assessment techniques, project based learning, pre-reading strategies, building

background knowledge and questioning strategies. It was my hope through the use of

these best practices the students would be able to experience them as learners while also

considering how they might use them as teachers in their own classrooms. From the data

collected it was evident that this effort was effective. The pre-service teachers'

comments indicated that they were able to "see demonstrations" and they were "a part of

a lot of instructional strategies that we could actually use." This allowed the

development of teacher efficacy through the vicarious inputs as they were exposed to the

strategies through modeled behavior in the classroom. This is important, as vicarious

experiences have been found to be the second largest contributor to teacher efficacy

development (Bandura, 1997). The pre-service teachers were able to make connections

between the modeled strategies and what they were experiencing in the field as evidenced

by Zander's comment that "everything we did in class was directly related to what

teachers do" and Betsy's comment that, "I used a lot of things from our classroom in my

classroom." Because of this positive outcome of connections between the coursework

and fieldwork, it had a positive effect on the efficacy development of the pre-service

teachers. If the outcome was not valued by the observers, in this case the pre-service teachers, the observations would have had no effect or even negatively effected efficacy development (Bandura, 1997).

Theme 7: Situated Learning Projects

The thirteen situated learning projects were varied in nature, but attempted to assist the pre-service teachers in making connections between course and fieldwork. Of the thirteen, the pre-service teachers identified seven as being effective in impacting their beliefs about their abilities to teach.

Within the seven projects, there were some commonalities relevant this research. All seven of the activities evidenced a component of reflection. Although this reflection was encouraged for a purpose specific to the assignment, it emerged within all of the seven projects being identified as effective. In speaking about the workshop model project, Betsy stated that reflection helped her in "confirming her understandings and beliefs about the structure." As indicated in Dewey's work reflection is the "reconstruction of experience" (Johnson, 2003, p. 111). It was through the reflection exercises that the pre-service teachers were encouraged to consider their experiences and provided self-direction for their learning (Johnson, 2003). In structuring the reflective components of the projects it was my goal to assist the pre-service teachers by helping them be able to begin to assess what they know and where they want to go in their learning (Shepel, 1999).

The pre-service teachers indicated that these projects were "purposeful" and "focused" which helped them see the connections between the coursework and field

experiences. Kelly stated that, "It's easier to apply the things you're learning in class when it's directly related and right there." Bereiter (2001) maintains that purposeful learning is more highly transferable. Purposeful learning is key within social constructivism and especially with consideration to background experiences that shape learning as well as the ability to see oneself using it in the future (Adams, 2006).

There were other components of the project identified by the pre-service teachers as being effective: workshop model, vocabulary, questioning and multimodal poetry. Each of these activities began with an unpacking writing prompt, where the pre-service teacher were asked to consider their own participation as students in school with the topic. This allowed the pre-service teachers to look back to their own learning as students as a source of understanding for how their thinking was impacted by past experiences. We then spent time learning about the content of the project through research in peer reviewed articles, videos, our class texts, a lecture or interviewing an expert (i.e. cooperating teacher). The pre-service teachers then applied their learning in their assigned classrooms and they reflected on the events before responding to individual reflections electronically or through a discussion in class. Zander stated, "The biggest impact on my belief on my ability to teacher was, to learn something in class, go right into the classroom and see it for yourself. Try it. Reflect." Tina echoed this when she shared, "We learned about vocabulary, tried it out and I felt like okay, now I can do this in my own classroom." Anne said specifically about the workshop model she was able to, "See the connections when we researched first, purposefully observed and then unpacked it." These projects contained elements that strongly align with social

constructivism where there was a "connection between education and personal experience" (Dewey, 1938, p. 25) through consideration of their own learning (Lortie, 1975) before moving forward. The learners were actively engaged in their construction of understandings and on actively implementing their learning (Vygotsky, 1926; Bredo, 2000) in authentic contexts. This was done so with scaffolded support through the instruction, implementation and reflective components of the assignments providing for "strategically mediated assistance" (Warford, 2011, p. 253) as needed for the pre-service teachers.

Within these situated learning projects, the pre-service teachers had opportunities to work within their cohort community with facilitation of instruction by myself. This enabled the pre-service teachers to have input for their efficacy development from all four categories. This was experienced in both the cohort classroom as well as in their assigned classrooms in trying out the various strategies. The pre-service teachers spoke to the connections they were able to make between what they learned and what they felt capable of doing as a result. This strongly aligns with the pre-service teacher constructing understandings by mediating between theory and practice in situated learning (Korthagen, 2010). This positive impact on teacher efficacy development was facilitated through these guided projects with specific, purposeful tasks that were relevant to the context (Minke, 1996; Parameswaran, 1998; Poulou, 2007). These experiences allowed the pre-service teachers to develop their beliefs with consideration of prolepsis and the benefits it has to offer for growth and future application in their teaching practices (Bandura, 1997; Warford, 2011). With my involvement in the coursework and

field experiences within the context I was able to help them unpack their learning experiences within the projects, calibrating them (Linnenbrink & Pintrich, 2003) and their perceived abilities through reflective practices.

Theme 8: Spillover From Professional
Development Into Teaching Experiences

The fifth grade pre-service teachers made connections between the work they were doing in professional development and their teaching practices for an observed lesson. In their application of the lesson study model for the implemented lessons, they were able to clearly demonstrate their learning from one context to another. This finding aligns with the principle within the social constructivist theory where "instruction is based on the idea that knowledge is a by-product of activity (in this case the professional development); people doing things in the world, and doing results in learning something that if deemed useful, gets carried along to the next activity (Menand, 2001, p. 322). The fifth grade teachers indicated that through this experience they "felt more confident because we had 'lesson studied' it and made improvements." Anne was then able to see that her teacher, who taught in blocks and so repeated lessons twice daily, did this every single school day. This experience had efficacy contributions from all four categories through their experiences with observations, implementing lesson study in preparation for the observed lesson, feedback from their field supervisor and emotional through their realization that their first attempt did not go as planned. This experience is an example of "organic relation of theory and practice" (Dewey, 1990, p. 85) that emerged from the focus on integrated experiences for teaching and learning.

Theme 9: Disconnect
Between University and Field

The pre-service teachers in the cohort struggled with their other courses taken at

the University during the semester. They felt there was a gap, or misalignment, between

what they were learning in the classes and what they were seeing in their field

experiences. While they spoke of the connectedness and applicability of the courses

within the cohort, this was not so for their other classes. A focus group participant stated,

"I wish we had more connections between methods courses on campus and field

experience." Zander's realization of connection between course and fieldwork was

exemplified when he shared, "I used to think when taking classes at the University, it was

just so unrelated to how thing work in the school. After being in the cohort, when you

learn and apply it, you know this is how it should work."

The pre-service teachers grew to value the ability to work within the context and

make connections to learning for real students in their experiences at Harper. It was no

longer about completing an assignment, but meeting the needs of a child or children.

One focus group participant described how in university classes you do the assignment

for a grade and move on to the next assignment. As Kelly shared,

> When you are in your classes, you're in your methods, and you are
> coming up with these hypothetical lessons you don't know about the little
> details that made such as difference when you're actually working with
> little humans.

Tshannen-Moran, et al. (1998) found that it is only in the application of teaching

that a teacher can really test his or her abilities to teach. Francis' thinking aligned with

this very perspective. She states,, "At least (the cohort) gave us a general idea of what we

need to know". This further aligns with Darling Hammond et al.'s (2002) research that found that meaningful classroom experiences contribute to teacher efficacy development through feelings of preparedness. The unrest they were feeling in their other courses due to misalignment between the courses and the field is present in the literature (Hoy, 2000) when examining her findings that images presented at the University are in conflict with the realities faced in the classrooms.

Limitations of the Study

The limitations in this study include the volunteer nature of participation and the pre-service teachers who chose to enroll in the cohort of classes. The enrollment in the cohort was influenced by need for specific schedules, courses involved as related the participant progress in the TEPP, and interest. Participants in the cohort were required to enroll in all of the courses involved at the school site, but were not restricted from taking additional courses during the semester. The delimitations in this study include pre-service teachers and the place of progress they are in the TEPP as well as the focus on investigation of effective practices within the case study without examining how it might compare to the traditional model employed within the teacher education program. Seven of the fifteen pre-service teachers enrolled in the semester were chosen to represent the larger group. Two grade level teams (First grade, n=3; and Fifth grade, n=4) were chosen to represent a primary and intermediate grade level. These two grade level teams were chosen to provide a breadth of experience while also allowing

comparison within the grade level participants of the events such as the professional development presentation.

The findings from this case study are highly contextualized to the case in which it occurred. Generalizability is not suggested, nor is it prudent to make broad assumptions from the findings to be applied across other populations. The findings from this research could be applicable to other teacher education programs with similar opportunities for clinically based practice within their teacher education program who are considering how they might strengthen the structures and strategies within coursework and field experiences.

<div align="center">Implications for Practice</div>

This case study investigated the structures and strategies implemented in a semester of teacher education embedded in the context of a school where the pre-service teachers could experience learning about teaching, in teaching practice, within a community of supportive educators. The intent of the research was to better understand what structures and strategies employed helped the pre-service teachers develop their teacher efficacy. This research study holds implications for consideration by professionals within teacher education preparation programs. As Tschannen-Moran (1998, p. 233) stated,

> Teacher education programs all over the world are charged with the task of preparing pre-service teachers to become highly effective educators. Along with the necessary pedagogical skills and content knowledge, educators need to be confident in their abilities to enact effective instructional practices that result in students' learning, motivation and their positive outcomes. That is, the need for teacher efficacy…

In examining the findings of this research, several primary implications emerged that are pertinent for teacher educators and their clinical partners. Each of these focused on the development of teacher efficacy for future teachers. These implications include:

- School community matters

- Purposeful, aligned situated learning experiences bridge the course and field work

- A mindset of continual professional growth within practice develops confidence

A discussion of each of these follows below.

<u>School Community Matters</u>

Sense of community (Lee et al., 1991) is a significant factor in teacher efficacy beliefs. The relationships the pre-service teachers had with one another, the school staff and their teacher educators was important to their development of teacher efficacy, including both the community within the cohort and within the school. First, within the cohort, the pre-service teachers supported one another. Several of the participants discussed that as a result of spending so much time together in the cohort at the school led to developing relationships with one another that facilitated contributions to shared understandings and novel perspectives. The trusting relationships they were able to develop with one another offered opportunities for efficacy development through observations of one another and encouragement with assignments and teaching experiences. As Korthagen (2010) stated, there is a need, "for many opportunities for

peer supported learning in teacher education, which prepares teachers for the kind of professional development that is much more grounded in collaboration and exchange with colleagues."

The desire by the administration and staff of Harper Elementary School to have the pre-service teachers at the school was the foundation for the entire experience. Their willingness to open their school and classrooms to the pre-service teachers and invite them to be a part of the school set the climate for being a part of the school and not just a visitor. From the very first day including the pre-service teachers as part of the staff was intentional. The pre-service teachers felt a part of the school with access to not just their assigned teacher, but to all staff and resources at the school. The pre-service teachers identified their relationships with their teachers as key to developing their teacher efficacy, using words like *valued*, *trusted*, *supported* and *encouraged*. Their assigned classrooms felt like safe places to be true to themselves and take risks in their teaching practices. The feeling of school community was further supported within the professional development where they were active members of grade level teams working collaboratively to accomplish the goal of lesson study. This allowed the pre-service teachers to see themselves as not just someone who came and went in one classroom, but contributed to the efforts of a professional community studying their practice. Teachers in schools with a strong collaborative focus tend to have higher levels of efficacy (Bandura, 1993).

The embedded nature of the instructor and field supervisor was also an important factor within the overall role of community. If I had taught identical coursework at the

university with no consideration of the field placements the pre-service teachers had been assigned, the outcomes would have been different. Because I had a strong knowledge of the school community and the contexts within the various classrooms, I was able to structure learning opportunities for the pre-service teachers specific to the learners in the context. It was much easier for me to structure assignments and facilitate discussions because of the understandings I had about the context. The field supervisor had also been at the school for several years and developed an understanding of the context. Our roles in the school allowed us to not only be present in the school, but be a part of the school community with knowledge that assisted in providing opportunities for the pre-service teachers which included mastery experiences in the field work, modeling within the cohort classroom, feedback from observations and support for negative arousal states as well as acknowledgement of successes.

This effect of community within the peer group of pre-service teachers, between the pre-service teachers and their mentor teachers, and within the school is an important factor for teacher education programs to consider. Dewey referred to the school context as an "embryonic community" (Cremin, 1961, p. 177) where life within the larger society is reflected. Harper Elementary School filled this role as the pre-service teachers got a taste of how a real school environment functions. The knowledge of the teacher educators cannot be overlooked either. As members of the school community we were able to better support the learning of the pre-service teachers through our embedded roles. This harkens back to the Dewian spiral staircase where we, as active participants, could offer guidance and support as the students directed their learning within the community,

using our knowledge of the context and the possibilities ahead.(Johnson, 2003). The

inservice teachers were also impacted by the pre-service teachers in their classrooms.

The pre-service teachers contributed to their knowledge and practice through the

professional development.

There are three major items this finding brings to teacher educations programs to

consider: the development of cohorts to allow for peer community development, how

partnerships are developed and maintained with schools specifically related to the role of

the community for the pre-service teachers placed within the schools, and the role of

faculty and field supervisors within the school setting.

Bridging Course and Field Work with Purposeful,
Aligned, Situated Learning Experiences

Providing opportunities for the pre-service teachers to make connections between

their learning in the cohort classroom and their experiences in the field provided deeper

learning between theory and practice. It also allowed the pre-service teachers to develop

their learning in practice. Tschannen-Moran, et al. (1998) found that it is only in the

application of teaching that teacher can really test their abilities to teach. The

opportunities for them to learn about a teaching practice, try it out and reflect upon the

experience was very impactful in their efficacy development. When they were able to

purposefully learn about teaching and then actually do it, they felt capable of engaging in

teaching practices successfully. Pre-service teachers were better able to implement what

they learned into practice when campus coursework was carefully coordinated with

intentionally constructed fieldwork that aligned with one another (Darling-Hammond,

2006; Tatto, 1996). The strategies that the pre-service teachers identified as effective in building their teacher efficacy all contained elements of unpacking their own experiences as students related to the topic, building their own knowledge about the topic both on their own and collaboratively, trying it out in the classroom and finally participating in a structured reflective practice about the experience. This progression allowed them to experience multiple efficacy inputs along the way depending on the experience, while also allowing flexibility to their specific context. This responsiveness and reflexivity to the context is key for the application components of the pre-service teachers' learning.

Contrary to the cohort, they felt the disconnect between the other courses at the university, even going so far as to say, I have "so many classes outside of 'school' that didn't let me be a teacher, but they are training me to be a teacher." They struggled to see the applicability of what they were learning, to what they were experiencing in the classrooms. In describing their coursework at the university they spoke of completing assignments, but in the cohort they spoke of teaching children. Research shows the positive impact on teacher efficacy when pre-service teachers are given guidance and tasks that are relevant to the context in which they are working (Minke, 1996; Parameswaran, 1998).

When examining the structure of teacher preparation programming and the structures and strategies employed within, these varied experiences for the cohort participants should be considered by teacher educators. Assignments and requirements within coursework in the teacher education program should be done so with a mindset of responsiveness to the context and consideration for learning in practice. Ball and Forzani

speak to concrete understandings of teaching practices are built through, "repeated

opportunities for novices to practice carrying out the interactive work of teaching and not

just talk about that work" (2009, p. 503).

A Mindset of Continual Professional
Growth within Practice Develops Confidence

The pre-service teachers asserted that setting professional goals and their

participation in the professional development helped them understand that growth in

teaching practice is a continual process. The professional goals the pre-service teachers

set for themselves gave them a focus for their work in the classroom and helped them tie

different components of the cohort experience together, including peer observations,

research, reflective journals and observed lessons. They spoke to the power of the

reflective practices within their action steps in accomplishing their goals. Sara explained

that the professional goals helped her see, "I'm not a terrible teacher; it just helps me

know where to improve." Sara shared the professional goals helped her "focus to

improve practice through research, observation, practice and reflection." The pre-service

teachers were able to see how this process drove growth and led to future goal setting and

growth.

The professional development project took the goal setting to the next level as the

pre-service teachers participated as a member of the grade level team in determining a

goal and the action steps necessary to achieve the goal. In this experience the pre-service

teachers were actively involved in the real work of teachers, contributing to the practice

of studying the relationship between teaching and learning. Through this process, they

came to understand that the work of teachers does not end with the completion of a teacher education program, but that teachers set goals and study their practice through the reflective cycle in order to develop and refine their practice.

Dewey viewed the teacher as an "active experimenter who constructs the educative experiences on the grounds of continuous reflective inquiry" (Shepel, 1999, p. 73). His work birthed the idea of teachers as reflective practitioners who are able to examine their work critically with a mindset for growth through practice (Shulman, 1998). Through this process of reflection there is a "reconstruction or reorganization of experience which adds to the meaning of experience, and which increases ability to direct the course of subsequent experience" (Dewey, 1966, p.76) or as Dewey defined it, education.

Teacher preparation programs should consider how they might incorporate professional goal setting for pre-service teachers as they move through the preparation program. Including the mentor teachers, field supervisors and faculty in working with the pre-service teachers to develop their practice through a cyclical process of goal setting, action steps and evaluation with ongoing reflective work to drive the growth throughout their experience in the teacher education program.

Recommendations for Further Research

This research uncovered some structures and strategies that were effective in developing teacher efficacy for pre-service teachers in a practice-based model where

course and field work were purposefully integrated. It also uncovered several areas of research that should be considered in the future.

In order to more fully understand the development of teacher efficacy within TEPP, efforts to quantitatively measure the growth of teacher efficacy should be pursued. This would require a larger n to be attained to explore this using the TSES.

There is a need to learn more about building communities of practice that include pre-service teachers within school contexts. This could include the role of mentor teachers and university faculty as well as the structures of field supervision within practice-based teacher education.

The side-by-side learning structure warrants further investigation to learn more about the benefits for pre-service and inservice teachers, as well as university faculty within learning structures like this. An investigation of what worked well within the professional development could provide new understandings for professional development in the future.

Many of the situated learning experiences were brought forward as effective in developing teacher efficacy, but further investigation of the specific components that were beneficial could lead to a refinement of and perhaps even a framework for the situated learning experiences that could be used in various contexts and for different purposes.

Concluding Thoughts

Tschannen-Moran & Woolfolk Hoy (2000) argue that

if the significant effects of teachers' beliefs in their capabilities were taken seriously, it could provoke significant changes in the way teachers [are] prepared and supported in their early years in the profession. Teacher preparation programs could come to look more like apprenticeships, with a gradual shift from the vicarious experience and verbal persuasion in the university classroom to more mastery teaching experiences throughout the program, with steadily increasing levels of complexity and responsibility. There would be a gradual withdrawing of scaffolding and supports rather than the sink-or-swim practicum experiences many novice teachers now experience (p. 803).

If the research shows us that teachers are more successful when they participate in clinically based practices that are strongly aligned to university coursework, it is imperative for us to implement structures and strategies that will contribute to the development of high teacher efficacy (Woolfolk Hoy & Spero, 2005). Within teacher education we must consider providing opportunities within classroom for pre-service teachers to develop their teaching practices within a community of educators who can support their growth. It is only within actual teaching practice, with children, that pre-service teachers can experience the mastery inputs needed for teacher efficacy development as the strong foundation for future strengthening of TE. Research indicates that high TE is a strong predictor of success in the teaching profession (Pajares, 1992; Poulou, 2007) and this is of critical importance within teacher preparation. It is vital that we consider this development of realistic TE early in the development of teachers so that it can continue to grow stronger throughout their experiences as an educator.

This research found that the development of relationships within communities of learners, situated learning experiences, and purposeful, authentic, integrated field and coursework positively influence the development of teacher efficacy. This aligns with findings from previous research that indicates that through the development of

communities of practice collaboratively working together, pre-service teachers can be supported in their development of teacher efficacy (Wenger, 1998). TEPP should consider how they can examine their current models and modify their structures and curriculum to incorporate these. As Darling-Hammond (2006) found, this is challenging within the current structures of higher education where course and field are separate entities. It is vital for programs to consider how they might significantly shift the models of teacher education, elevating learning that occurs in practice, and considering how both course work and field experiences can be interconnected for meaningful aligned experiences. They should also consider the role of university faculty and field supervisors within teacher preparation to allow for the development of strong communities of practice where all participants are working towards the goal of furthering student learning (Korthagen, 2010). This aligns with what we know about the scaffolded learning in the ZPTD, where without the knowledge of the context, more experienced "others" are not able to best support the learning of the pre-service teachers. Faculty and field supervisors need to be embedded within coursework and field experiences to be able to fully support the development of pre-service teachers. This will require a restructuring and a re-visioning of current practices within teacher education, perhaps even with consideration for financing and inclusion of clinical partners in the schools. Through alignment and integration of coursework and field experiences, with consideration for the mutually beneficial goal of improving the education profession through collaborative work which includes all participant, teacher education would be better able to prepare future educators.

I believe that it is our responsibility within teacher preparation to lessen the divide between theory and practice for our pre-service teachers as we work to build communities of practice which include and value the contributions of inservice teachers, pre-service teachers, faculty, and administration which focus on developing teaching practices to improve learning outcomes for children. This belief steered my research to examine the structures and practices within our program in an attempt to develop future educators who believe they can use my findings to positively impact student learning.

REFERENCES CITED

Adams, P. (2006). Exploring social constructivism: Theories and practicalities. *Education 3-13*, 34(3), 243-257.

Allinder, R. M. (1994). The relationship between efficacy and the instructional practices of special education teachers and consultants. *Teacher Education and Special Education*, *17*, 86–95.

Allinder, R. M. (1995). An examination of the relationship between teacher efficacy and curriculum-based measurement and student achievement. *Remedial & Special Education*, *27*, 141-152.

Anderson, R., Greene, M., & Loewen, P. (1988). Relationships among teachers' and students' thinking skills, sense of efficacy, and student achievement. *Alberta Journal of Educational Research, 34(2)*, 148-165.

Ashton, P. T., & Webb, R. B. (1986). *Making a difference: Teachers' sense of efficacy and student achievement*. New York, NY: Longman.

Ball, D., & Forzani F. M. (2009) The work of teaching and the challenge of teacher education. *Journal of Teacher Education, 60,* 497-511.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84(2)*, 191-215.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117-148.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: W. H. Freeman.

Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological science, 1(2)*, 164-180.

Bandura, A. (2008). Toward an agentic theory of the self. In H.W. Marsh, R.G. Craven, & D.M. McInerey (Eds.). *Self-processes, learning, and enabling human potential: International advances in self research.* (pp. 15-49) Greenwich, CT: Information Age Publishing.

Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report, 13,* 544-559. http://nova.edu/ssss/QR/QR13-4/baxter.pdf

Bentley, M. (1998). Constructivism as a referent for reforming science. In M. Larochelle, N. Bednarz, & J. Garrison (Eds.), *Constructivism and education.* (pp 233-249). Cambridge, MA: Cambridge University Press.

Bereiter, C. (2002). *Education and mind in the knowledge age.* Mahwah, NJ: Lawrence Erlbaum Associates.

Borton, W.M. (1991). *Empowering teachers and students in a restructuring school: A teacher efficacy interaction model and the effect on reading outcomes.* Paper presented at the annual meeting of the American Educational Research Association. Chicago, IL.

Boyd, D., Grossman, P., Lankford, H., Loeb, S., & Wyckhoff, J. (2006). How changes in entry requirements alter the teacher workforce and affect student achievement. *Education Finance and Policy, 1(2),* 178-216.

Bredo, E. (2000). Reconsidering social constructivism: The relevance of George Herbart Mead's interactionism. In D.C. Phillips (Ed.), *Constructivism in education, opinions and second opinions on controversial issues. National Society for the Study of Education Ninety-Ninth Yearbook, Part I.* (127-157). Chicago, IL: The University of Chicago Press.

Brooks, J.G. & Brooks, M.G. (1993) *The case for constructivist classrooms.* Alexandria, VA: ASCD.

Brousseau, B., Book, C., & Byers, J. (1988). Teacher beliefs and the cultures of teaching. *Journal of Teacher Education, 39(6),* 33-39.

Burley, W., Hall, B., Villeme, M., & Brockmeier, L. (1991). *A path analysis of the mediating role of efficacy in first-year teachers' experiences, reactions, and plans.* Paper presented at the annual meeting of the American Educational Research Association. Chicago, IL.

Campbell, S. S. (2012). *Taking them into the field: Mathematics teacher candidate learning about equity-oriented teaching practices in a mediated field experience* (unpublished doctoral dissertation). University of Washington, Seattle, WA.

Cheung, W. M., & Cheng, Y. C. (1997). *A multi-level analysis of teachers self-belief and behavior, and student educational outcomes.* Paper presented at the annual meeting of the American Educational Research Association. Chicago, IL.

Coladarci, T. (1992). Teachers' sense of efficacy and commitment to teaching. *Journal of Experimental Education. 60*, 323–337.

Corbin, J., & Strauss, A. (2015). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (4th ed.). Thousand Oaks, CA: Sage.

Cousins, J. B., & Walker, C. A. (2000). Predictors of educators' valuing of systemic inquiry in schools. *Canadian Journal of Program Evaluation, (Special Issue),* 25–53.

Cremin, L. (1961). *The transformation of the school: Progressivism in American education, 1876-1957.* New York: Vintage Books.

Creswell, J.W. (2013) *Qualitative inquiry and research design: Choosing among five approaches.* Thousand Oaks, CA: Sage Publications.

Daniels, H. (2001). *Vygotsky and pedagogy*. London: Routledge Farmer.

Darling-Hammond, L. (1999). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives. 8(1),* 1-44. doi:http://dx.doi.org/10.14507/epaa.v8n1.2000.

Darling-Hammond, L. (2000). How teacher education matters. *Journal of Teacher Education*, *51(3),* 166-173.

Darling-Hammond, L. (2006). *Powerful teacher education: Lessons from exemplary programs.* San Francisco, CA: Jossey-Bass Publishers.

Darling-Hammond, L. (2014). Strengthening clinical preparation: The holy grail of teacher education. *Peabody Journal of Education, 89,* 547-561.

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

Darling-Hammond, L., Chung, R., & Frelow, F. (2002). Variation in teacher preparation: How well do different pathways prepare teachers to teach. *Journal of Teacher Education, 53,* 286-302.

Dembo, M.H., & Gibson, S. (1985). Teachers' sense of efficacy: An important factor in school improvement. *Elementary School Journal, 86(2),* 173-184.

Denzin, N. K. & Lincoln, Y. S. (2000). *The Sage Handbook of Qualitative Research (5th ed.).* Thousand Oaks, CA: Sage.

Dewey, J. (1916, 1966). *Democracy and education.* New York, NY: The Free Press.

_____. (1938, 1963). *Experience and education.* New York, NY: Collier Books.

_____. (1990). *The school and society and the child and the curriculum*. (Rev. ed.). Chicago, IL: University of Chicago.

Dewey, J., & Archambault, R. D. (1964). *John Dewey on education; Selected writings*. New York, NY: Modern Library.

Duffin, L. C., French, B. F., & Patrick, H. (2012). The teachers' sense of efficacy scale: Confirming the factor structure with beginning pre-service teachers. *Teaching and Teacher Education, 28,* 827-834.

Duncan, A. (2009). Teacher preparation: Reforming the uncertain profession (Speech). Teachers College, Columbia University. Accessed: http://www.ed.gov/news/speeches/teacher-preparation-reforming-uncertain-profession November 30, 2015.

Emmer, E.T., & Hickman, J. (1991). Teacher efficacy in classroom management and discipline. *Educational & Psychological Measurement, 51,* 755-765.

Ferguson, R. (1991). Paying for public education: New evidence of how and why money matters. *Harvard Journal on Legislation, 28,* 465-498.

Fani, T., & Ghaemi, F. (2011). Implications of Vygotsky's zone of proximal development(ZPD) in teacher education: ZPTD and self-scaffolding. *Procedia - Social and Behavioral Sciences, 29,* 1549–1554.

Fernandez, C., & Chokshi, S. (2002). A practical guide to translating lesson study for a US setting. *Phi Delta Kappan, 84,* 128–134.

Fives, H. (2003). *What is teacher efficacy and how does it relate to teachers' knowledge? A theoretical review.* Paper presented at the American Educational Research Association Annual Conference. Chicago, IL.

Fives, H., & Buehl, M. M. (2010). Examining the factor structure of the teachers' sense of efficacy scale. *The Journal of Experimental Education, 78*, 118-134.

Fraser, J.W. (2007). *Preparing America's teachers: A history.* New York, NY: Teachers College Press.

Friedman, I. (2000). Burnout in teachers: Shattered dreams of impeccable professional performance. *Clinical Psychology, 56,* 595-606.

Gibson, S., & Dembo, M. H. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology, 76,* 569-582.

Glickman, C., & Tamashiro, R. (1982). A comparison of first-year, fifth-year, and former teachers on efficacy, ego development, and problem solving. *Psychology in Schools, 19,* 558–562.

Goodlad, J. I. (1991). Why we need a complete redesign of teacher education. *Educational Leadership*, 49(3), 4-10.

Grossman, P., Hammerness, K., & McDonald, M. (2009). Redefining teacher: Re-imagining teacher education. *Teachers and Teaching: Theory and Practice, 15,* 273-290.

Guba, E.G. (1980). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Resources Information Center Annual Review Paper*, *29(2),* 75-91.

Guskey, T. R. (1988). Teacher efficacy, self-concept, and attitudes toward the implementation of instructional innovation. *Teaching and Teacher Education, 4(1),* 63–69.

Hatch, J.A. (2002). *Doing qualitative research in education settings*. Albany, NY: State University of New York Press.

Hall, B., Burley, W., Villeme, M., & Brockmeier, L. (1992). *An attempt to explicate teacher efficacy beliefs among first year teachers.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Henson, R. K. (2001). *Teacher self-efficacy: Substantive implications and measurement dilemmas*. Keynote address given at the annual meeting of the Educational Research Exchange, College Station, TX.

Hess, F.M. (2002). Tear down this wall: The case for a radical overhaul of teacher certification. *Educational Horizons, 80(4),* 169-183.

Hollins, E. R. (2011). Teacher preparation for quality teaching. *Journal of Teacher Education, 62,* 395–407.

Housego, B. (1990). A comparative study of student teachers' feelings of preparedness to teach. *Alberta Journal of Educational Research, 36(3)*, 223-240.

Hoy, A. W., & Spero, R. B. (2005). Changes in teacher efficacy during the early years of teaching: A comparison of four measures. *Teaching and Teacher Education, 21,* 43-356.

Hoy, W. K., & Woolfolk, A. E. (1990). Socialization of student teachers. *American Educational Research Journal, 27,* 279-300.

_____. (1993). Teachers' sense of efficacy and the organizational health of schools. *The Elementary School Journal, 93,* 356–372.

Johnson, J. R. (2003). *Dewey and Vygotsky: A comparison of their views on social constructivism in education* (unpublished doctoral dissertation). Rutgers University, New Brunswick, NJ.

Klassen, R. M., Bong, M., Usher, E. L., Chong, W. H., Huan, V. S., Wong, I. Y. F., & Tasos, G. (2009). Exploring the validity of a teachers' self-efficacy scale in five countries. *Contemporary Educational Psychology, 34(1)*, 67-76.

Korthagen, F. (2010). Situated learning theory and the pedagogy of teacher education: Towards an integrative view of teacher behavior and learning. *Teaching and Teacher Education. 26,* 98-106.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: University of Cambridge Press.

Lee, V., Dedick, R., & Smith, J. (1991). The effect of the social organization of schools on teachers' efficacy and satisfaction. *Sociology of Education, 64,* 190–208.

Levine, A. (2006). Educating school teachers. Retrieved from. http://wwwedschools.org/teacher_report.htm

Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: Sage Publications.

Linnenbrink, E., & Pintrich, P. (2003). The role of self-efficacy beliefs in student engagement and learning in the classroom. *Reading and Writing Quarterly, 19,* 119–137.

Lortie, D. (1975). *Schoolteacher: A sociological study*. Chicago, IL: University of Chicago Press.

McKinney, M., Sexton, T., & Meyerson, M. J. (1999). Validating the Efficacy-Based Change Model. *Teaching and Teacher Education, 15,* 471-485.

McMahon, M. (1997). Social Constructivism and the World Wide Web - A Paradigm for Learning. Paper presented at the ASCILITE conference. Perth, Australia.

McMaster, P. B. (2005). *The development of self-efficacy in the teaching of reading* (Doctoral dissertation). ProQuest Information and Learning Company. (3164247)

Meijer, C., & Foster, S. (1988). The effect of teacher self-efficacy on referral chance. *Journal of Special Education, 22,* 378–385.

Menand, L. (2001). *The metaphysical club.* New York, NY: Farrar, Strauss, and Giroux.

Merriam, S.B. (1998). *Case study research in education: A qualitative approach.* San Francisco, CA: Jossey Bass.

Mertens, D. (2009). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (Third ed.). Thousand Oaks, CA: Sage Publications, Inc.

Midgley, C., Feldlaufer, H., & Eccles, J. S., (1989). Change in teacher efficacy and student self-and task-related beliefs in mathematics during the transition to junior high school. *Journal of Educational Psychology, 81(2),* 247-258.

Minke, K. M., Bear, G. G., Deemer, S. A., & Griffin, S. M. (1996). Teachers' experiences with inclusive classrooms: Implications for special education reform. *Journal of Special Education, 30,* 152-186.

Milner, R. H. (2002). A case study of an experienced English teacher's self-efficacy and persistence through "crisis" situations: Theoretical and practical considerations. *The High School Journal, 86(1),* 28-35.

Moll, L.C. (Ed.). (1990). *Vygotsky and education.* Cambridge, MA: Cambridge University Press.

Monk, D., (1994). Subject matter preparation of secondary mathematics and science teachers and student achievement. *Economics of Education Review, 13(2),* 125-145.

Moore, W., & Esselman, M. (1992). *Teacher efficacy, power, school climate and achievement: A desegregating district's experience.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA

Mulholland, J., & Wallace, J. (2001). Teacher induction and elementary science teaching: enhancing self-efficacy. *Teaching and Teacher Education, 17,* 243–261.

National Council of Accreditation for Teacher Education (November 2010). *Transforming teacher education through clinical practice: A national strategy to prepare effective teachers.* Washington, DC.

National Research Council (April 2010). *Preparing teachers: Building evidence for sound policy.* Washington, DC: National Academic Press.

Paige, R. (2002). *Meeting the highly qualified teachers challenge: The secretary's annual report on teacher quality.* Washington, DC: U.S. Department of Education.

Pajares, F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research, 62,* 307-332.

Palmer, D. (2006). Sources of self-efficacy in a science methods course for primary teacher education students. *Research in Science Education, 36,* 337-353.

Palmer, P. (2004). *A hidden wholeness: The journey toward and undivided life*. San Franciso, CA: Jossey-Bass.

Parameswaran, G. (1998). Incorporating multicultural issues in educational psychology classes using field experiences. *Journal of Instructional Psychology, 25(1),* 9-13.

Parkay, F. W., Greenwood, G., Olejnik, S., & Proller, N. (1988). A study of the relationships among teacher efficacy, locus of control, and stress. *Journal of Research and Development in Education, 21(4),* 13-22.

Patton, M. (1990). *Qualitative evaluation and research methods.* (2nd ed.) Newbury Park, CA: Sage.

Phillips, D.D. (Ed.). (2000). *Constructivism in education, opinions and second opinions on controversial issues. National Society for the Study of Education Ninety-Ninth Yearbook, Part I.* Chicago, IL: The University of Chicago Press.

Pintrich, PR., & Schunk, D. H. (1996). *Motivation in education: Theory, research, and applications.* Englewood Cliffs, NJ: Merrill/Prentice-Hall.

Podell, D., & Soodak, L. (1993). Teacher efficacy and bias in special education referrals. *Journal of Educational Research, 86,* 247-253.

Poulou, M. (2007). Personal teaching efficacy and its sources: Student teachers' perceptions, *Educational Psychology: An International Journal of Experimental Educational Psychology, 27,* 191-218.

Rand. (1976). *Analysis of the school preferred reading programs in selected Los Angeles minority schools.* Santa Monica, CA: Armor, D., Conroy-Oseguera, P., Cox, M., King, N., McDonnell, L., Pascal, … Zellman, G.

Radenbush, S., Rowan, B., & Cheong, Y. (1992). Contextual effects on the self-perceived efficacy of high schoolers. *Sociology of Education. 65(2),* 150-167.

Ravitch, S.M., & Mittenfelner-Carl, N. (2016). *Qualitative research: Bridging the conceptual, theoretical, and methodological.* Thousand Oaks, CA: Sage Publications.

Reid, R., Vasa, S. F., Maag, J. W., & Wright, G. (1994). An analysis of teachers' perceptions of attention deficit-hyperactivity disorder. *Journal of Research & Development in Education, 27,* 195-202.

Rich, Y., Lev, S., & Fischer, S. (1996). Extending the concept and assessment of teacher efficacy. *Educational & Psychological Measurement, 56,* 1015-1025.

Riggs, I. (1995). *The characteristics of high and low efficacy elementary teachers.* Paper presented at the Annual Meeting of the National Association of Research in Science Teaching, San Francisco, CA.

Riggs, I., & Enochs, L. (1990). Toward the development of an elementary teacher's science teaching efficacy belief instrument. *Science Education, 74,* 625-638.

Rosaen, C., & Florio-Ruane, S. (2008). The metaphors by which we teach: Experience, metaphor and culture in teacher education. In M. Cochran-Smith, S. Nemser, & D. J. McIntyre (Eds.). *Handbook of research on teacher education* (3rd ed., pp. 706-731). New York: Routledge.

Rose, J. S., & Medway, F. J. (1981). Measurement of teachers' beliefs in their control over student outcome. *Journal of Educational Research, 74,* 185-190.

Ross, J. A. (1994). The impact of an inservice to promote cooperative learning on the stability of teacher efficacy. *Teaching & Teacher Education, 10,* 381-394.

_____. (1992). Teacher efficacy and the effect of coaching on student achievement. *Canadian Journal of Education, 17(1),* 51-65.

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs, 80(1),* 1-28.

Saklofske, D. H., Michayluk, J. O, & Randhawa, B. S. (1988). Teachers' efficacy and teaching behaviors. *Psychological Reports, 63,* 407-414.

Silcock, P. (2003). Accelerated learning: A revolution in teaching method? *International Journal of Primary, Elementary, and Early Years Education, 31(1),* 48-52.

Settlage, J. (2000). Understanding the learning cycle: Influences on abilities to embrace the approach by preservice elementary school teachers. *Science Teacher Education, 84,* 43-50.

Shkedi, A. 2005. *Multiple case narrative: A qualitative approach to studying multiple populations.* Amsterdam/Philadelphia, PA: John Benjamins Publishing Company.

Shepel, E. (1999). Reflective thinking in educational praxis: Analysis of multiple perspectives. *The Journal of Educational Foundations, 13(3),* 69-88.

Shulman, L. S. (1998). Theory, practice, and the education of professionals. *The Elementary School Journal, 98*, 511-526.

Soodak, L., & Podell, D. (1996). Teacher efficacy: toward the understanding of a multi-faceted construct. *Teaching and Teacher Education, 12,* 401-411.

Stake, R. E. (1995). *The art of case study research.* Thousand Oaks, CA: Sage.

Stein, M. K., & Wang, M. C. (1988). Teacher development and school improvement: The process of teacher change. *Teaching and Teacher Education, 4,* 171–187.

Steiner, D., & Rozen, S. (2004). Preparing tomorrow's teachers: An analysis of syllabi from a sample of America's schools of education. In F. Hess, A. Rotherham & K. Walsh (Eds.).*A qualified teacher in every classroom?* (pp. 119-148). Cambridge, MA: HarvardEducation Press.

Strauss, A. (1987). *Qualitative analysis for social scientists.* Cambridge, England: Cambridge University Press.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques.* Newbury Park, CA: Sage.

Tatto, T. (1996). Examining the values and beliefs about teaching diverse students: Understanding the challenges for teacher education. *Educational Evaluation and Policy Analysis, 18,* 155-180.

Tracz, S. M. and Gibson, S. (1986). *Effects of efficacy on academic achievement.* Paper presented at the California Education Research Association. Los Angeles, CA.

Trainor, A. & Graue, E. (2013). *Reviewing qualitative research in the social sciences.* New York, NY: Routledge.

Trentham, L. L., Silvern, S., & Brogdon, R. (1985). Teacher efficacy and teacher competency ratings. *Psychology in the Schools, 22,* 343-352.

Tschannen-Moran, M., & Johnson, D. (2011). Exploring literacy teachers' self-efficacy beliefs: Potential sources at play. *Teaching and Teacher Education, 27,* 751-761.

Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. T*eaching and Teacher Education, 17,* 783-805.

_____. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education, 23,* 944-956.

Tschannen-Moran, M., Woolfolk Hoy, A., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research, 68,* 202-248.

Tsigilis, N., Koustelios, A., & Grammatikopoulos, V. (2010). Psychometric properties of the teachers' sense of efficacy scale within the Greek educational context. *Journal of Psychoeducational Assessment, 28,* 153-162.

Veenman, S. (1984). Perceived problems of beginning teachers. *Review of Educational Research, 54,* 143-178.

Vygotsky, L. (1978). *Mind in Society.* M.Cole, V. John-Steiner, S. Scribner, & E. Souberman, (Eds.). Cambridge, MA: Harvard University Press.

_____. (1997) *Educational psychology, Problems of general psychology, Volume I.* (R. Silverman, Trans.). Boca Raton, FL: CRC Press LLC. (Original work published 1926).

Warford, M. K. (2011). The zone of proximal teacher development. *Teaching and Teacher Education, 27,* 252-258.

Walsh, K. (2001). Teacher education: Coming up empty. *Fwd: Teacher Education, Thomas B. Forham Foundation*, 3(1), 1-6.

Wax, A., & Dutton, M. (1991). *The relationship between teacher use of cooperative learning and teacher efficacy.* Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Weinstein, C. (1988). Preservice teachers' expectations about the first year of teaching. *Teaching and Teacher Education, 4(1)*, 31-40.

Wenger, E. (1998). *Communities of practice: Learning, meaning and identity*. New York, NY: Cambridge University Press.

Whitford, B. L., & Kidd Villaume, S. (2014). Clinical teacher preparation: A retrospective. *Peabody Journal of Education, 89,* 423-435.

Woolfolk-Hoy, A. (2000). *Changes in teacher efficacy during the early years of teaching.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Woolfolk Hoy, A., & Burke Spero, R. (2005). Changes in teacher efficacy during the early years of teaching: A comparison of four measures. *Teaching and Teacher Education, 21,* 343–356.

Woolfolk, A., & Hoy, W. K. (1990). Prospective teachers' sense of efficacy and beliefs about control. *Journal of Educational Psychology, 82,* 81-91.

Woolfolk, A., Rosoff, B., & Hoy, W. K. (1990). Teachers' sense of efficacy and their beliefs about managing students. *Teaching & Teacher Education, 6,* 137-148.

Yin, R. (2009). *Case study research: Design and methods.* Thousand Oaks, CA: Sage Publications, Inc.

Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college-and university-based teacher education. *Journal of Teacher Education, 61(1-2),* 89–99.

Zeichner, K. (1996). Designing educative practicum experiences for prospective teachers. In K. Zeichner, S. Melnick, & M.Gomez (Eds.). *Currents of reform in preservice teacher education programs* (pp. 215-234). New York, NY: Teachers College Press.

APPENDICES

APPENDIX A

SYLLABUS

**Integrated Syllabus for the Harper Elementary School Collaborative Cohort
Fall 2015**

The purpose of this collaborative cohort is to provide opportunities for integrated course and fieldwork which leads to a strong understanding of the content specific pedagogy, and teacher development in practice. Through this experience the learning outcomes remain the same as they would for the individual courses, but the way in which these are achieved is different.

Professional Expectations:
As a practicum student in the Teacher Education Program, you are expected to hold yourself to the high behavioral and ethical standards of the teaching profession. You are responsible for reviewing the on Professional Expectations for Prospective Teachers. If you present unprofessional behavior to your instructor, Field Supervisor, or Cooperating Teacher, the instructor will complete a Student Concern Form documenting the behavior. This form will be reviewed by the faculty and placed in your permanent file. Unprofessional behavior may result in removal from the Teacher Education Program.
The expectations to behave and dress in a professional manner are especially critical in your field experience. Remember that you are a guest in the classroom and are there to learn from a veteran teacher. Act professionally and respectfully at all times.

Attendance & Communication
This course requires **active participation**—physical and mental —from all class members. Each person has a valuable perspective and set of experiences related to education in K-8 classroom. Please treat this course as if it were a professional teaching job.
* Come to every class on time, prepared and ready to participate. You are expected to attend all seminars. These sessions provide a foundation for successful completion of course requirements.
* In order to create a classroom environment conducive to learning, all use of electronic devices must be relevant to the activities and topics in class. In the event of an emergency that requires you to use your phone, please leave the classroom.
* It is your responsibility to check your MSU email account(s) and the D2L announcement page regularly for course updates, questions about your work, etc. You are expected to respond to messages from classmates and/or instructors in a timely manner (no more than 1 day).
*** Any changes to your field experience schedule, including absences, must be approved by your FS and CT.**
*You will not receive a grade for these courses unless you complete the requirements of your field experience.

Guidelines for Written Assignments:
Teachers are considered to be the academic leaders of their communities. Colleagues, administrators, community members, and students closely scrutinize every document teachers produce—from reports that are sent home to flyers hanging on the school walls. As such, the same standard is applied in this course. Unless otherwise noted, written assignments must:
● be typewritten, double spaced, and submitted on or before the due date. Any late assignments will lose the equivalent of a letter grade. After one week, no credit will be given.
● include your name, course #, assignment, and date in the upper left hand corner of the first page (no cover sheet should be attached).
● be spell-checked, edited, & proofread for errors in punctuation, grammar, etc.
● present ideas coherently & with evidence from resources, examples, &/or experiences (not primarily your preferences or opinions).
● exhibit your understanding of the assigned resources, course topics, and discussions.
* Students who are found plagiarizing will be held accountable and disciplinary actions will be taken. See MSU Code of Conduct.

Letter grade assignment
100% - 93% A
92% - 90%   A-
89% - 87%   B+
86% - 84%   B
83% - 80%   B-
79% - 77%   C+
76% - 74%   C
73% – Below Fail
Any grade below a C is not considered passing in the Teacher Ed Program.

Course descriptions
<u>Language Arts Methods for Elementary Teachers</u>: This course provides instruction in best practices for teacher candidates, which links current theory and practice of literacy instruction in grades K-8. Through experiential learning, students will explore methods and approaches to teaching the English Language Arts.
<u>Practicum:</u> Pre-service teachers will have a foundational understanding of teaching practice through the exploration and implementation of strategies in the field. Students will understand the impact of context, standards based instruction, data driven decision making in instruction and reflection on their teaching practice and student learning.

<u>Technology Internship</u>: The Digital Learning Internship is a course focused on supporting preservice teachers' conceptualization, design, and implementation of digital learning. A primary intent of the course is to situate technology integration in the authentic tasks of teaching and learning content. As a result, learning outcomes will emphasize the process of using digital tools to support learning, including the many considerations that must be made in order to appropriately integrate technology. Students

will develop useful projects that enhance student learning and will build responses to the following questions regarding digital learning: "How can I use this to enhance student learning in my classes?" and "What relative advantage does this digital tool bring to teaching and learning?"

Learning Outcomes:
Students will:
1.   Demonstrate awareness of literacy education as a complex, dynamic and evolving field that centers upon the interactions of the learner in various settings.
2.   Recognize that reading and other forms of literacy interpretation are strategic and active processes that rely upon learner engagement, self-monitoring and reflection.
3.   Gain awareness of the importance of balanced and comprehensive literacy development as a positive and meaningful communication tool for the learners of the 21st century.
4.   Gain an understanding and appreciation of the theories and principles for teaching the language arts in the classroom.
5.   Develop their philosophy of instruction of language arts based on your understanding of the diverse approaches, pedagogical structures and strategies.
6.   Recognize and value the integrated nature of effective language arts instruction and identify resources and practices to implement this in the classroom of the 21st century.
7.   Understand standards-based instruction in developing content area instruction supported by the ELA standards.
8.   Create standards-based aligned instruction demonstrating the use of formative assessment to inform instructional practices.
9.   Analyze assessment results from lesson sequence to determine effectiveness of instruction implementation and consider reasons and implications for future instruction.
10. Demonstrate understanding of the InTasc Standards and how they represent effective teaching practices.
11. Develop their understanding of the Danielson Framework in driving professional growth through professional conversations.
12. Students will evaluate different integration strategies to determine those that most facilitate teaching and learning
13. Students will develop effective and practical strategies for the integration of digital learning tools to support the instructional process
14. Students will integrate technology into lessons in a manner that supports the Montana Common Core Standards.

Required textbooks and readings
Calkins, L., Ehrenworth, & M., Lehman, C. (2012). *Pathways to the Common Core: Accelerating achievement.* (1st edition).

Danielson, C. (2007). *Enhancing Professional Practice: A Framework for Teaching. (2nd edition*).
Danielson, C. (2013) *The Framework for Teaching Evaluation Instrument*. This may be downloaded for free at the following website: https://danielsongroup.org/framework/

You must either print a hard copy or have access to it in electronic form in class.

Harvey, S., And Goudvis, A. (2007). *Strategies that work: Teaching comprehension for understanding and engagement.* (2ⁿᵈ edition).

Laminack, L. & Wadsworth, R. (2015). *Writers are Readers: Flipping Reading Instruction Into Writing Opportunities.*

Mindsets in the Classroom: Building a Culture of Success and Student Achievement in Schools, by Mary Cay Ricci (Practicum 2 only)

Supplemental readings, videos, and resources will be provided via D2L as needed.

Assignments specific to your practicum course:
Structured Reflective Practice (10 @ 10 points each) Evaluated by X
Each day you spend in the classroom setting, you should take notes about your observations and professionally reflect on successful or unsuccessful strategies used, events that occurred in the classroom, or other relevant events throughout the day and week. This is not the place to collect great bulletin board ideas, but instead is the place to put the theory of reflective teaching into action. This will be a combination of written and audio reflective journal entries, peer observation reflections and reflection on audiotaped instruction.
Assignments (7 @10 points each) Evaluated by X
Each of these assignments will require you read an article, visit a website or watch a video before completing a task. The content of these assignments will be essential to discussions our seminar.

TWS (162 points including first draft(s) and final submission) Evaluated by X
The Teacher Work Sample (TWS) is a key component of your student teaching semester and the capstone project for the Teacher Education Program. The purpose of the TWS is for you to demonstrate your ability to create and implement standards based instruction for a specific learning context, to use formative assessment to modify instruction as necessary, analyze pre and summative data to determine learning outcomes and reflect upon the events as well as the plan for the next steps for instruction. You will be using the guide and rubric appropriate to the level of practicum in which you are enrolled.

You must a receive a C or better on this assignment in order to successfully complete the practicum and move on to the next field experience level.
Presentation of Topic (50 points) Evaluated by X
Practicum 1 will be connected to IEFA
Practicum 2 will be based on participation in and the sharing of your work in the professional book club
Professional Growth Progress and Presentation (75 points) Evaluated by X
In this course you will be asked to complete a self-evaluation of where you feel you are in your growth as an educator. This will be done at the beginning of the field

experience. You will set goals for yourself based on two elements from Domains 2&3 of the DF. You will then look collectively upon the entire experience with consideration to all of the assignments, interactions with your FS and CT, and other resources to synthesize your learning with respect to your goals for the semester. Throughout the semester you will keep a record of the work in a google doc you do to reach your goals, a professional diary of sorts where you can record evidence and analysis of the journey.   You will prepare a presentation of your self-selected professional goals that will be shared within our community of practice. These presentations will be of professional quality of no more than 5-7 minutes in length. The use of technology and interactive strategies will be utilized to engage the audience as we expand our understandings of topics that are applicable to the education profession.

Classroom Practice (200 points) Evaluation completed by Field Supervisor
Your teaching will be formally evaluated by your field supervisor on one occasion during your clinical field experience. It is your responsibility to make arrangements with your Cooperating Teacher and Field Supervisor to select a time that is convenient for all parties involved so that you may be observed teaching. You must submit a copy of your lesson plan at least 24 hours in advance of the observation to your Field Supervisor. An additional formal observation may be requested by any of the parties involved if needed. The score of the additional observation may then be averaged with the observation of concern. Walk-throughs will be employed to collect further evidence of your teaching practice (Domains 2&3). These walk-throughs will be completed by both Karen and Kathryn. This grade includes the following components: planning, pre-observation conferences, observation, post-observation conferences and reflections.
You must a receive a C or better on this assignment in order to successfully complete the practicum and move on to the next field experience level.

Assignments specific to your ELA Methods Course (All assignments evaluated by X):
Integrated unit of study (100 points)
This assignment requires that you select and develop a mini unit of study that is unified by a common theme of study which is designed for a specific grade level. The purpose of this assignment is to develop your understanding of how ELA can support learning in all content areas. Components of this assignment include a multigenre text and resource set, a concept map providing an overview of the unit, word bank, and 5 ideas for integrated activities that demonstrate consideration for learning in a minimum of 3 content areas that are supported by ELA.

Classroom based projects (4 @ 20 points each)
These projects will be developed as our class progresses and our work with the classroom teachers provides opportunities, but are intended to provide context based practice for meaningful implementation of the concepts we are learning about in class.

Writing projects (2@20 points each)
These projects will engage you in the writing process and provide opportunities for you to develop your abilities specific to professional writing as an educator.

Quizzes and class assignments (8@5 points each)
Throughout the semester, assignments will be given both in and out of class. These will be specific to the needs of the class as it progresses.

Theory to practice project (100 points)
This assignment is your opportunity to synthesize your learning in this class with your experiences in the field. In completing this assignment you are demonstrating your ability to align your beliefs about learning with the role of ELA in the classroom to support learning across all content areas. Essential components of this assignment include:
a. Your philosophy of language arts instruction that is research based, but also includes self-analysis of your own learning experiences in the areas of language arts (daily journal from class) and their relationship to you as a professional educator.
b. Practice design-this is what your philosophy looks like when implemented in the classroom. The important structures and expectations you have as a teacher that will shape the learning environment specific to language arts. All areas of language arts should be addressed with specific structures and strategies provided as well as the relation to ELA CCS and integration of content disciplines.

Assignments specific to the Technology Internship (all assignments evaluated by X)
Although a considerable amount of the work you complete for the 1-credit Technology Internship will be rooted in practical application of the theories and tools we explore when we periodically meet, several assignments will be used to document your learning as you put those ideas into practice.

Technology Integration Rationales (25 points each)
For **TWO** of the lesson/unit plans you will create in the ELA methods course and deliver in your practicum clinical work, you will be required to submit an accompanying technology integration rationale. It is up to you to decide what **TWO** lessons on which you would like to focus. However, your instructor is certainly available to consult with you as you make those decisions.

The intent of the rationale is to provide an argument in which you justify, pedagogically, WHY you integrated the particular technology(ies) into that instruction. It would benefit your rationale to root your ideas in the digital learning teacher knowledge frameworks we analyzed at the start of the course.

Page Limit: 1 page

More specifically, your rationales should respond to the following prompts?

1. How would the technology you have selected address your desired learning outcomes? That means, how are you using the technology to address what it is you want your students to know or be able to do after the activity?
2. How does your use of the digital tool align with your selected pedagogical strategies? How does it compliment, or align, with the content of the lesson or unit?
3. What relative advantage does the use of the technology bring to teaching and learning?
4. How have you designed the lesson so that the technology seamlessly integrates with the content you are teaching?
5. What does your use of the technology say about how you think the content should be taught?
6. How does the technology increase opportunities for student interaction with ideas and content?

Final Reflection Project (100 pts.)

For this assignment, you will be more closely examining two technology integration framework: TPACK and SAMR. More importantly, your task for this paper will be to compare and contrast the two frameworks, and consider where your strengths and weaknesses in each may lie. You will be provided some starting points for researching both frameworks, but you will also be expected to research each independently.

Page Limit: 3 pages

Please respond to the following questions:
1. What are you strengths in regard to the TPACK model? Areas that need to be fortified?
2. How are you most often using technology in light of the SAMR model to support instruction? Substitution? Augmentation? Modification? Redefinition?
3. In your opinion, when is a learning task in school redefined or not? Can you think of an example you use in your teaching, or a colleague uses, that demonstrates "redefinition"?
4. What defines the redefinition? In other words, in your opinion, what types of instructional modifications are needed to move your use of technology toward "redefinition"?

<u>APPENDIX B</u>

CONSENT FORM

Subject Consent Form
For Participation in Human Research

Project Title: An examination of the professional development school model on the development of teacher efficacy of pre-service teachers.

You are being asked to participate in a research study of pre-service teachers and the affects of participation in a professional development school model on the development of teacher efficacy.

No personal information will be collected or used to identify individuals.

Procedures involved: Participation is voluntary. If you agree to participate you will be asked to complete a survey, participate in a focus group and complete an interview.

The participant has full access to the researcher and may ask for clarification at anytime during the research. Any comments, questions, or concerns relating to the research may be added to the study. There are no direct benefits for you and this research is not being funded by any source. There are no foreseen risks.

Confidentiality:
1. Participants' personal information such as names and other confidential information pertaining to the participant will not be used in the study.
2. Confidentiality will be maintained by keeping the name of each participant confidential. Participant responses will be coded so as not to attach any personal information to their interview.

Should the participant have questions about the research, they may contact Kathryn Will-Dubyak _____If they have additional questions about the rights of human subjects that may contact the Chair of the Institutional Review Board_____).

AUTHORIZATION: I have read the above and understand the discomforts, inconvenience and risk of this study. I, _____ (name of subject), agree to participate in this research. I understand that I may later refuse to participate, and that I may withdraw from the study at any time. I have received a copy of this consent form for my own records.

Signed: _____
Investigator: _____
Date: _____

APPENDIX C

DATA COLLECTION TOOLS

Teachers' Sense of Efficacy Scale (long form)

Teacher Beliefs	Directions: this questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.								
	Nothing		Very Little		Some Influence		Quite a Bit		A Great Deal
1. How much can you do to get though to the most difficult students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2. How much can you do to help you students think critically?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
3. How much can you do to control disruptive behavior in your classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
4. How much can you do to motivate students who show low interest in schoolwork?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
5. To what extent can you make your expectations clear about student behavior?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
6. How much can you do to get students to believe they can do well in schoolwork?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
7.How well can you respond to difficult questions from your students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

8. How well can you establish routines to keep activities running smoothly?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
9.How much can you do to help your students value learning?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
10. How much can you gauge student comprehension of what you have taught?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
11. To what extent can you craft good questions for your students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
12.How much can you do to foster student creativity?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
13.How much can you do to get children to follow classroom rules?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
14. How much can you do to improve the understanding of a student who is failing?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
15.How much can you do to calm a student who is disruptive or noisy?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
16.How well can you establish a classroom management system with each group of students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

17.How much can you do to adjust your lessons to the proper level for individual students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
18.How much can you use a variety of assessment strategies?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
19.How well can you keep a few problem students from ruining an entire lesson?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
20. To what extent can you provide an alternative explanation or example when students are confused?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
21. How well can you respond to defiant students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
22. How much can you assist families in helping children do well in school?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
23. How well can you implement alternative strategies in your classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
24.How well can you provide appropriate challenges for very capable students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

Focus Group Questions

1. When you consider your cooperating teacher and the opportunities you had in your field experience this semester, what influences did your cooperating teacher have on your ability to engage in practice being a teacher?

2. When you think about your cooperating teacher, what characteristics did they and or which characteristics made them a positive influence for you in learning to teach?

3. In what ways did the relationship and the interaction between you and your cooperating teacher inhibit your ability to practice being a teacher?

4. What connections were you able to make between your practicum seminar and your field experience?

5. What did you find most challenging between practicum seminar and your field experience?

6. What connections were you able to make between all of your methods courses and your field experience?

7. Can you describe a challenging circumstance you had in your field experience this semester? What were the resources you used to work through the challenge? What sort of support did you have? Or wish you had?

Interview Questions

1. Has being a part of the collaborative cohort at Harper affected your belief in your ability to effectively teach? If so, how?

2. We did a variety of different things throughout the fall semester in both our time together in our classroom at Harper and in the classrooms with the children. (Show list from exit ticket of activities) When you consider the activities of this semester related to the cohort, is there an activity that stands out as particularly powerful in its impact on your belief about your teaching? Why?

3. Student engagement is important to student success.

    a. Can you think of a situation during your experience at Harper where you could see the importance of student engagement?

    b. What did the Harper experience demonstrate to you about student engagement?

    c. Can you describe how what you experienced or saw students experience that influenced your attitudes and beliefs about the importance of engagement?

    d. What are your beliefs about your ability to effectively engage students in learning as a result of the Harper experience?

4. What did you learn about instructional strategies during your time at Harper?

    a. Were there connections between the work required for the methods courses and the instructional strategies you developed or tried during your time at Harper?

    b. Can you give an example of an instructional strategy you learned in class that was particularly successful for you at Harper?

5. Can you tell me about what you learned about classroom management through this experience?

6. Were you able to make connections between your learning within the morning courses and your practicum placement (prompt only if needed: specific events included vocabulary activity, workshop model observations and discussions, audio recording of use of questioning analysis, purposeful technology integration, TWS)?

7. What events or structures worked well for you during your time in the cohort?

    a. Did you feel like there was a connection between what you did in all your classes and how closely those activities mimicked or represented "real teaching" in classrooms?

    b. Did your coursework provide a "kind of practice" for you that simulated what it would be like in an authentic teaching situation? If so, did those coursework experiences help to change your beliefs about your success as a teacher?

8. What events or structures did you find most challenging during your time in the cohort?

     a.   How did you manage those challenges?

     b.   Did you learn anything from those challenging experiences?

9. Is there anything that you wish that you had more of, less of, or something that you wish had been completely different?

10. Can you describe your sense of how you learned from your peers in the cohort? Was that important to your beliefs about your ability to be successful as a teacher?

11. Did you did talk and compare your Harper experiences with your classmates who were not in the Hyalite experience about whether or not their experiences were different from yours?

12. How did the feedback you received from your CT/FS influence your beliefs and experience"?

13. The side-by-side PD provided an opportunity for you to work alongside the teachers in the grade level team you had been assigned to in order to complete lesson study. Would you talk about that experience for you and how it impacted your understandings of teaching?

Exit Slip

What's working well for you so far in the professional development?

What are you finding to be a challenge in the professional development?

Professional Development Exit Survey for Pre-Service Teachers

How has the professional development this semester affected your beliefs about your teaching?

What has been the most challenging part of the professional development?

What has been the most rewarding result from the professional development?

How do you think working with inservice teachers in the professional development affected your learning outcomes this semester?

In what ways could you use this professional development approach in the future to improve your practice?

Exit Survey for Class Assignments

In consideration of growth in your ability to be a teacher, indicate below how effective you believe the activities below were for you specifically.

Activity	Not Effective	Slightly Effective	Effective	Highly Effective
Analyzing Students' Writing				
Interviewing Teacher About Writing Instruction				
Multimodal Poetry Project				
Peer Observation Reflection				
Professional Goals				
Questioning				
Reflective Journals				
Teacher Work Sample				
Technology Integration Rationales				
Theory-to-Practice Project				
Transcription Based Reflection				
Vocabulary				
Workshop Model				