University of Northern Colorado

Scholarship & Creative Works @ Digital UNC

Dissertations

Student Research

8-2019

Dispositions of Junior Elementary Teacher Candidates

Amy Lynn Bartlow

Follow this and additional works at: https://digscholarship.unco.edu/dissertations

UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

DISPOSITIONS OF JUNIOR ELEMENTARY
TEACHER CANDIDATES

A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education

Amy Lynn Bartlow

College of Education and Behavioral Sciences
School of Teacher Education
Educational Studies

August 2019

This Dissertation by: Amy Lynn Bartlow

Entitled: *Dispositions of Junior Elementary Teacher Candidates*

has been approved as meeting the requirement for the Degree of Doctor of Education in College of Education and Behavioral Sciences in School of Teacher Education, Program of Educational Studies.

Accepted by the Doctoral Committee:

_____
Dr. Jennifer Harding, Research Advisor

_____
Dr. Jennifer Urbach, Committee Member

_____
Dr. Jody Lawrence, Committee Member

_____
Dr. Michelle Athanasiou, Faculty Representative

Date of Dissertation Defense _____

Accepted by the Graduate School

_____
Linda L. Black, Ed.D.
Associate Provost and Dean
Graduate School and International Admissions

ABSTRACT

Bartlow, Amy. *Dispositions of junior elementary teacher candidates.* Doctor of
    Education dissertation proposal, University of Northern Colorado, 2019.

Schools of teacher education strive to prepare teacher candidates with the most

effective dispositions. Qualitative case study was used to gather data from university

coursework, teacher candidate fieldwork, fieldwork observations, coursework

observations and teacher candidate interviews. The varied data collection and yearlong

data collection period allowed the researcher to gain a holistic and longitudinal view of

teacher candidate dispositions. The researcher is a teacher educator who serves as an

advisor, fieldwork supervisor, and instructor in the initial semester of professional

coursework for participants. Particular attention was given to rigor and quality,

participant protection, and credibility through specific procedures and processes. Results

describe the dispositions of elementary teacher candidates over their first year of

professional coursework in the areas of dispositions related to self, dispositions related to

students and dispositions related to teaching. When compared to the dispositions of

effective teachers, this group of 13 teacher candidates exhibited many of the same

dispositions overall with only a few dispositions revealing contradictory results. In

longitudinal analysis, dispositions related to self remained consistent over time while

dispositions related to students and teaching were more inconsistent. Individual teacher

candidate results were much more varied as most candidates exhibited inconsistencies

and contradictions in each area. These findings can help guide teacher education programs in assessing and supporting individual teacher candidates with dispositional contradictions, designing and delivering experience for teacher candidates which incorporate feedback to support growth and self-efficacy, assessing and addressing any unwanted trends in individual or group dispositions, and designing teacher candidate screening processes.

ACKNOWLEDGEMENTS

I have been the recipient of an overwhelming amount of support throughout the dissertation process. I am indebted to so many for their encouragement, guidance and expertise.

First of all, I would like to acknowledge my family, my friends and the educators in my life. My family has stood and worked by my side throughout this process, supporting me and lending a hand whenever needed. My husband, Jon, and my son, Cole, have been my cheerleaders and grounding presences. We've worked tremendously hard as a family to achieve our goals and I can only dream about what lies ahead for us. My parents, sister and friends offered encouragement and help along the way as I learned how to balance life and the demands of a doctorate. They are and will always remain deeply important to me. The fellow educators in my life have offered wisdom and support every step of the way, gave me strength and praise, and helped me to see the light at the end when it seemed occluded. All of these people have inspired me to strive for the best version of myself, as both an individual and a professional. I can never fully express how impactful their influence has been.

This dissertation could not have been completed without the invaluable help of my research advisor, Dr. Jenni Harding. Her collaboration and guidance were so important to the dissertation process. Our weekly phone calls and her feedback provided direction and insight that helped shape this study. She is a professional who exemplifies

dedication to her students. I am thankful to have found her as a colleague and look forward to continuing our professional relationship in the future.

Additionally, I want to recognize my committee, who pushed me to think about different perspectives and make sure to consider all factors as I completed this study. Their feedback was an important influence on the shape of this research and the final dissertation.

The faculty, administrators and students of the research site were also instrumental in the completion of this study. Their cooperation, openness and willingness to work with me allowed me to pursue this research in a robust and in-depth manner.

I am truly thankful to all who have contributed to this dissertation in both large and small ways; hidden and visible.

TABLE OF CONTENTS

CHAPTER

LIST OF TABLES

TABLE

LIST OF FIGURES

FIGURE

CHAPTER I

INTRODUCTION

Teacher effectiveness is a critical issue in schools today. Researchers have shown there are substantial differences between the most effective and least effective teachers in terms of impacting student success and achievement (Nye, Konstantopoulos, & Hedges, 2004). The Coleman Report (Coleman, 1966), laid the foundation for an influx of educational research which has identified teacher quality as the most important school-related factor affecting student achievement (Goldhaber, 2007). Some of these studies have suggested a poor teacher can rob a student of a year's worth of learning (Hanushek, 1992) and quality varies considerably among teachers (Rivkin, Hanushek, & Kain, 2005; Rockoff, 2004).

Schools of teacher education strive to develop effective teachers as they prepare teacher candidates for the field. Differences in the dispositions of the most effective teachers and least effective teachers has been revealed by research (Collinson, 1996; Combs, 1969; Demmon-Berger, 1986; Holland, 2009; Popp, Grant, & Stronge, 2011; Taylor & Wasicsko, 2000; Wubbels, Levy, & Brekelmans, 1997). The Council for the Accreditation of Educator Preparation (CAEP), a teacher education program accreditation body includes an explicit focus on dispositions in both its standards (CAEP, 2016) and stated purpose which is to ensure "the preparation of highly qualified educators through the accreditation of programs in which data drive decisions; resources and practices support candidate learning; and candidates demonstrate knowledge, skills, and

professional dispositions to raise P-12 student achievement" (CAEP, 2016). A concern for dispositions among educational scholars predates the research on teacher dispositions. John Dewey insisted teacher preparation build within the teacher dispositions of reflection, ethics, inquiry and an orientation towards the complex process of students (Dewey, 1904).

This study was designed to contribute to the body of research on teacher candidate dispositions and how they are present and might change longitudinally by exploring the dispositions of teacher candidate dispositions in their first year of professional coursework in an undergraduate elementary teacher education program. These findings can inform teacher education programs as they seek to prepare the most effective teacher candidates. In the remainder of this chapter, I discuss research problem in more detail, share the purpose of this study and research questions, explain the significance of this study and identify the theoretical foundation for this study. Additionally, I define important terms used throughout this report and summarize the chapter.

Statement of Problem

Dispositions have been acknowledged as critical qualities of effective teachers. Research and literature concerning dispositions has included beliefs, attitudes, motivations, moral character, and cognitive processes. In research and literature, dispositions have a broad range and are often not consistently defined. For this study, the disposition definition offered by Taylor and Wasicsko (2000) will be used: "the personal qualities or characteristics that are possessed by individuals, including attitudes, beliefs, interests, appreciations, [and] values" (p. 2).

Wasicsko (2007) further elaborates and distinguishes dispositions from skills and knowledge. The effective teacher, according to Wasicsko (2007), is a union of dispositions, knowledge and skill. Dispositions influence the way individuals act on knowledge and employ skills because "people act according to how the world appears to them" and "these behaviors are a direct outgrowth of underlying perceptions" (perceptions encompass attitudes, values and beliefs) (Wasicsko, 2007, p. 57). The study of psychology and the observations examined by philosophers reveal individual beliefs and thought processes are excellent predictors of the decisions made throughout life (Bandura, 1981; Dewey, 1910; Nisbett & Ross, 1980), which could presumably include how educators use knowledge and skills in the classroom. Dewey (1910) states, "In the loosest sense, thinking signifies everything, as we say, is "in our heads" or "goes through our minds" (p. 1). Thornton (2006) discusses how critical dispositions influence "the way content knowledge and pedagogical skills [come] to life in the classroom" (p. 67) She also states, "dispositions may be the key" (p. 67).

Research on the dispositions of effective teachers has revealed there are common discernable dispositions. Combs (1969) was one of the first to specifically explore the dispositions of effective teachers. He stated the effective teacher "has learned to use him/herself effectively and efficiently to carry out his/her own and society's purpose in the education of others" (p. 19). Combs and others, through more than fifteen studies at the University of Northern Colorado and University of Florida, identified the following dispositions of effective teachers: "perceptions of self as able, positive, and identified with diverse groups; perceptions of others as able, dependable, and worthy; perceptions of the purpose of education as freeing, self-revealing, and larger; and a frame of reference

which is people oriented, open, and focusing on personal meaning" (Taylor & Wasicsko, 2000, p. 4). Combs determined these factors could be used to separate effective and ineffective teachers successfully. Combs (1964) writings also cite self-efficacy and perceptions of self as critical for effective teaching.

Over time, researchers have contributed to the field by exploring dispositions and adding to and refining Combs' list. The dispositions of effective teachers uncovered include having high expectations for students and self, using differentiated instruction and management, maintaining proactive classroom management, caring for others, remaining flexible, being creative, possessing strong interpersonal skills (Demmon-Berger, 1986), thinking reflectively, learning continuously, being a risk taker, showing respect for self and others (Collinson, 1996), balancing intellectual and interpersonal learning, understanding assumptions, beliefs and values behind the choices of others (Holland, 2009; Taylor & Wasicsko, 2000), and positively identifying with a diverse group of students (Wubbels et al., 1997).

Nelsen asserts dispositions should be part of the crucial focus for teacher education programs as they guide the thinking and actions of future teachers in future situations (Nelsen, 2015). However, there is little research which tracks dispositions holistically over the course of a teacher education program. Without some understanding of what dispositions teacher candidates exhibit and/or develop in teacher education programs, further efforts to improve teacher education curriculum and delivery are not well informed. How can teacher educators determine if teacher education programs are truly developing the "positive teacher dispositions [which] predict effective, successful teaching" (Masunaga & Lewis, 2011, p. 44) without this information? Existing studies in

the area of teacher candidate dispositions have limited foci: the creation and use of disposition assessments to screen preservice teacher candidates (Abernathy, 2002; Choi, Benson, & Shudak, 2016; Duplass & Cruz, 2010; Frederiksen, Cooner, & Stevenson, 2012; King, Hilber, & Engley, 2007; Rike & Sharp, 2008) the impact of specific coursework or experiences on a restricted number of dispositions (Brewer, Lindquist, & Altemueller, 2011; Donovan, Green, & Hansen, 2011; Mueller & Hindin, 2011) and the assessment of limited dispositions in specialized areas (Cruz, 2017; Davis, 2017; Dee & Henkin, 2002; Yeníce, 2012;).

Research on the use of disposition assessments is often prompted by the National Council for Accreditation of Teacher Education's (NCATE) (2008) and more recently CAEP's (2016) insistence on teacher education program assessment and monitoring teacher candidates' dispositions to determine if each candidate is suitable for the teaching profession. Some institutions include a disposition grade in teacher education methods courses to holistically track candidate dispositions (Duplass & Cruz, 2010). While this has been helpful to screen for at-risk teacher candidates, it does not provide information on specific dispositions for each individual. Checklists and rubrics have been used with success to track candidates with "problematic dispositions" and allow for documentation and opportunities for intervention and action, when warranted (King et al., 2007; Rike & Sharp, 2008). However, there has been some concern about the reliability of rating scales and rubric evaluations as supervisors and cooperating teachers have been found to provide inconsistent evaluations of candidate dispositions (Choi et al., 2016). Directed reflections and narratives have also been used to provide teacher educators with

important information on specific dispositions as well as points of reference for future targeted instruction (Abernathy, 2002; Frederiksen et al., 2012).

The development of dispositions has been investigated through concentration on specific coursework completed or experiences had by teacher candidates. These studies focus on a restricted number of dispositions. Investigations in this area have found teacher candidates' dispositions are influenced heavily by coursework and field experiences while personal experiences take a much subtler role (Mueller & Hindin, 2011). Studies have indicated specifically targeted coursework can significantly increase positive dispositions (Donovan et al., 2011). Donovan, Green, and Hansen (2011) found targeted teacher education strategies including structured reflections, prolonged and organized exposure to programmatic theory and ideology, experiential and applied learning, and open dialogue with faculty may have positive impacts on reflective and critical thinking capacities. Dispositions improvement processes implemented in teacher education programs have also been shown to improve problematic dispositions (Brewer et al., 2011). While these studies offer some insight into how dispositions can be developed in teacher education programs, they do not provide a broad-based understanding of how dispositional development manifests longitudinally.

Studies which focus on particular dispositions in specialized areas have been done in the areas of science, mathematics, diversity and social justice, technology, and special education. Research in this area has focused on critical thinking (Yeníce, 2012), self-efficacy (Cruz, 2017), and positive orientations towards mathematics, diversity, technology, and inclusion (Cruz, 2017; Davis, 2017; Dee & Henkin, 2002; Mueller & Hindin, 2011). Missing from this body of work is a holistic approach to dispositions

revealing how dispositions are present in groups of teacher candidates at any given time in a teacher education program. Without a broader view of disposition development from entrance into a teacher education program to exit from the same program, teacher educators lack the needed scope of understanding to make critical decisions about how dispositions are addressed in programs.

The philosophy and psychology reveal that dispositions drive behavior (Bandura, 1981; Dewey, 1904, 1910, 1922; Nisbett & Ross, 1980) and the field of research and literature regarding dispositions has identified and described specific dispositions as qualities of the most effective teachers (Brophy & Good, 1974; Collinson, 1996; Combs, 1969; Combs, 1964; Demmon-Berger, 1986; Holland, 2009; Popp et al., 2011; Taylor & Wasicsko, 2000; Wasicsko, 2007; Wubbels et al., 1997). Dispositions have been long identified as important focuses for teacher education programs (Arnstine, 1967; Dewey, 1904; Dewey, 1916/2004; Katz & Raths, 1985) and are included in teacher education program accreditation standards (CAEP, 2016; Council of Chief State School Officers [CCSSO], 2013; NCATE, 2008). Research on teacher candidate dispositions has been limited to dispositions assessments (Abernathy, 2002; Choi et al., 2016; Duplass & Cruz, 2010; Frederiksen et al., 2012; King et al., 2007; Rike & Sharp, 2008) and specific, limited dispositions (Brewer et al., 2011; Cruz, 2017; Davis, 2017; Dee & Henkin, 2002; Donovan et al., 2011; Mueller & Hindin, 2011; Yeníce, 2012).

The lack of knowledge on the subject of measuring and understanding these dispositions holistically and longitudinally reveals a critical gap in the current literature where the understandings needed to inform and guide best practice in preservice teacher development. By examining the dispositions of teacher candidates, teacher educators can

make more informed decisions. Additionally, an understanding of the potential of various dispositions to develop over time can inform not only these curricular decisions, but could possibly influence advisement of students. Ultimately, this knowledge may help teacher education programs prepare the most effective teacher candidates.

Purpose of the Study

The purpose of this study was to use case study methods to examine the dispositions of third year undergraduate elementary teacher candidates in their first year of professional coursework. Examining the traits, beliefs and attitudes which characterize a group of teacher candidates can help to further develop understandings about how teacher dispositions are present and develop over the course of an undergraduate elementary education program. An understanding of the essence of the group's dispositions was developed through careful collection of participants' perceptions of their own dispositions as well as observations of their behavior.

Research Questions

This dissertation sought to explore dispositions of elementary teacher candidates and answer two primary research questions.

Q1   What dispositions are exhibited by junior elementary teacher candidates in the first year of professional coursework?

Q2   Do the dispositions exhibited by junior elementary teacher candidates change or develop over the first year of professional coursework? If so, how do they change or develop?

Rationale of the Study

As drivers of behavior and critically identified qualities of effective teachers, dispositions are important characteristics for teacher education programs to attend to as they prepare teacher candidates. Not only do teacher education accreditation standards

demand teacher education programs focus on dispositions (CAEP, 2016), studies have also revealed teachers' dispositions are as important as high levels of content knowledge and methodological skill. A teacher's dispositions affect all aspects of the classroom and teacher effectiveness (Osguthorpe, 2008).

Currently, literature and research reveal a gap in understanding teacher candidate dispositions holistically and longitudinally and developmentally. In order to gain such understandings, dispositions of teacher candidates should be examined through a comprehensive attention to all dispositions presented over a period of time by teacher candidates. This study sought to contribute to the knowledge teacher candidate dispositions through such an exploration.

Significance of the Study

This study contributes to the knowledge of teacher candidate dispositions by providing a better understanding of how dispositions are exhibited and develop during a year of professional coursework in an undergraduate program. By holistically exploring the dispositions of junior teacher candidates in their first year of professional coursework, this research will help fill a significant research gap in the understanding of teacher candidate dispositions. Without a broader view of disposition development from entrance into a teacher education program to exit from the same program, teacher educators lack the needed scope of understanding to make critical program decisions. These program decisions might be at which point particular dispositions should be addressed in the curriculum, field experiences, and mentoring processes through an understanding of the typical dispositions of teacher candidates in the first year of professional coursework and the longitudinal development of dispositions.

The benefits of this research include providing information which will allow teacher education programs and teacher educators to make more informed choices as they work to prepare teacher candidates and attempt to develop specific dispositions in those candidates. Teacher education policies may also be affected as programs are able to generate new policies or change existing policies to target and develop specific dispositions. Ultimately, this knowledge can help teacher education programs prepare the most effective teacher candidates.

Theoretical Foundation

Dispositions

The theoretical framework forming the foundation of this research comes from the work of both theorists and psychologists who contend attitudes, beliefs, values and perceptions drive behavior (Bandura, 1981; Dewey, 1910; Dewey, 1922; Nisbett & Ross, 1980). John Dewey's writings (1922) directly link thought to action and dispositions to behavior. Dewey (1904) also asserts dispositions can be modified and changed through experiences. Combs (1969) and Wasicsko (2007) assert dispositions and personal perceptions inform the way teachers use knowledge and employ skills in the classroom.

It is through these works this study is framed. Dispositions are important as influencers of behavior through the application of knowledge, and dispositions may change or develop over time. This research investigates the dispositions of teacher candidates as discovered through their actions and perceptions while also exploring the longitudinal patterns of teacher candidate dispositions over the first year of professional coursework.

Constructivism

Through a constructivist lens, the researcher seeks to assemble understandings and insights to answer the research questions. This approach is guided by the researcher's belief in the construction of knowledge by individuals as they engage with situations and interpret information (Crotty, 2003). Personal experiences interact with existing knowledge and understanding to create meaning. Knowledge and understandings are continually redefined and reconstructed as individuals engage in the world. We cannot separate knowledge from the individual. Thus, knowledge becomes uniquely personal and multiple truths exist (Egbert & Sanden, 2014). In this study, participant's perspectives and displayed dispositions are constructed in real-world settings. Individual teacher candidate's dispositions are a result of their unique knowledge, understandings, and experiences. To gain an understanding of the essence of the group's dispositions, this research will focus on careful collection and analysis of the range of participants' perceptions of their own dispositions through document analysis and interviews as well as observations of teacher candidate behavior during coursework, while delivery lessons, and in fieldwork.

<div align="center">

Definition of Terms

</div>

For the purpose of this study, the following terms are defined using definitions from literature.

Disposition: The definition offered by Taylor and Wasicsko (2000) will be used: "the personal qualities or characteristics that are possessed by individuals, including attitudes, beliefs, interests, appreciations, [and] values" (p. 2).

Teacher candidate: As defined by NCATE (2008), teacher candidates are "individuals admitted to, or enrolled in, programs for the initial or advanced preparation of teachers" (p. 85).

Mixed Results: Mixed results, as used to describe data, indicates the data collected about a particular disposition revealed contradictory dispositions trends for teacher candidates and no clear conclusion about this disposition can be drawn.

Summary

This chapter outlined the rationale and importance of this study as well as purpose of the study and research questions to be addressed. A brief literature review and definition of important terms were also provided. Chapter 2 will present a review of the literature which provides the basis for the conceptual framework for understanding the dispositions of effective teachers as well as a review of existing literature on teacher candidate dispositions. Chapter 3 will include a detailed explanation of the study's methodology and research design.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

Historically the domains effective teachers need to master have been labeled

knowledge, skills, and attitudes. Over time, dispositions gradually took the place of

attitudes (Freeman, 2007). Particular dispositions have been identified as significant

qualities of effective teachers. As schools of teacher education seek to prepare teacher

candidates, there have been calls to focus on the development of skills, knowledge, and

dispositions. The Council for the Accreditation of Educator Programs (CAEP), a teacher

education program accreditation organization, requires teacher education programs to

focus on specific "critical dispositions" as explicitly listed in each of ten Interstate

Teacher Assessment and Support Consortium (InTASC) standards (CCSSO, 2013). The

InTASC standards document states the use of the term "critical dispositions" and specific

focus on dispositions in the standards "indicates that habits of professional action and

moral commitments that underlie the performances [of teachers] play a key role in how

teachers do, in fact, act in practice" (CCSSO, 2013, p. 6).

However, there is a critical gap in the holistic and longitudinal knowledge of the

dispositions that teacher candidates display in teacher education programs. A deeper level

of understanding of teacher candidate dispositions is needed to help guide teacher

preparation. Literature related to dispositions, teaching, teacher education, and teacher

candidates is examined in this chapter to provide background for the research questions

of this study. The literature review is divided into the following sections: dispositions; dispositions and effective teachers; dispositions and teacher education; teacher candidate dispositions research; and conceptual framework.

Dispositions

The idea that dispositions are characteristics of an individual has been discussed at length by John Dewey (1922). Dewey used the terms habit and disposition interchangeably (Nelsen, 2015) and considered a habit to be a predisposition to act in a particular way or have a particular way of being (Dewey, 1922). Habits, or dispositions, influence all levels of thinking, know-how, and the working capacities with which we participate in the world. These habits/dispositions are developed through our interactions, experiences, and in response to problems that arise in situations we encounter.

In John Dewey's writings, habits/dispositions are the driving force behind thinking and action in an individual. Dewey (1922), as he often did, clarified the sometimes misunderstood use of the word. He stated, in his use, habits are context specific, dynamic, and more than just repetitive activity:

> The word *habit* may seem twisted somewhat from its customary use when
>
> employed as we have been using it. But we need a word to express that
>
> kind of human activity which is influenced by prior activity and is in that
>
> sense acquired; which contains within itself a certain ordering or
>
> systematization of minor elements of action; which is projective, dynamic
>
> in quality, ready for overt manifestation; and which is operative in some
>
> subdued subordinate form even when not obviously dominating activity.
>
> Habit even in its ordinary usage comes nearer to denoting these facts than

any other word. If the facts are recognized, we may also use the words

attitude and *disposition*. (p. 40-41)

Some researchers do not agree beliefs provide the greatest insight into behavior. Roehler, Duffy, Herrmann, Conley and Johnson (1988) present an interpretation that argues knowledge is the driving force at the "heart of the 'thought' and in the 'thought-to-practice'" (p. 164). They also contend knowledge is an ever-developing construct and more accurately reflects the "fluid nature of … thought in action" (p. 164). Knowledge is fluid and beliefs are static, they reason. As a result, behavior is influenced and shaped by personal experience. Because knowledge is the structure that allows us to make sense of experience, it is knowledge that ultimately creates effective behaviors.

However, Dewey (1916/2004) also asserted habits/dispositions are necessary for us to acquire and create knowledge as we interact with our environment. They control how individual knowledge is developed:

…only that which has been organized into our disposition so as to enable

us to adapt the environment to our needs and to adapt our aims and desires

to the situation in which we live is really knowledge. Knowledge is not

just something which we are now conscious of, but consists of the

dispositions we consciously use in understanding what now happens . . .

Knowledge as an act is bringing some of our dispositions to consciousness

with a view to straightening out a perplexity, by conceiving the connection

between ourselves and the world in which we live. (p. 275)

Dewey (1904) wrote habits/dispositions are developed over time and can be revised with the implementation of specific learning environments, "Let me point out that

the adjustment of habits to ends, through the medium of a problematic, doubtful, precarious situation, is the structural form upon which present intelligence and emotion are built. It remains the ground-pattern" (p. 229).

Dewey (1904) asserted habits/dispositions were our tendencies to respond to specific situations in specific ways with some pattern of consistency. The work of other philosophers and the study of psychology indicates attitudes, beliefs, values, and perceptions are important precursors of behavior (Bandura, 1981; Dewey, 1910; Nisbett & Ross, 1980). As such, an understanding of dispositions offers a unique and important window to understanding individual behavior.

While specific, discernable dispositions have been acknowledged as characteristics of effective teachers, the literature has not consistently defined dispositions. Research regarding dispositions has included beliefs, attitudes, motivations, moral character, and cognitive processes. With Dewey's discussion of dispositions in mind, the following definition, as developed by Taylor and Wasicsko (2000) will be used for this paper: "the personal qualities or characteristics that are possessed by individuals, including attitudes, beliefs, interests, appreciations, [and] values (p. 2)". As Wasicsko (2007) further explains, dispositions are distinct from skills and knowledge and the effective teacher is a combination of dispositions, skills, and knowledge. Dispositions drive the way that teachers use skills and implement knowledge (Wasicsko, 2007).

Dispositions and Effective Teachers

The exploration of the dispositions of effective teachers is rooted in the work of Arthur Combs (1969). Combs' research sought to uncover the qualities of teachers and others in the helping profession which allowed them to be more effective than many of

their peers in facilitating the greatest positive change in students, clients and others (Wasicsko, 2007). As explained by Wasicsko (2007), Combs asserted:

> People behave according to how the world appears to them; behaviors are symptoms of underlying perceptions (Combs used the terms attitudes, values and beliefs synonymously with perceptions); core perceptions are formed over a lifetime and change slowly; behavior can be understood if one can determine how people perceive themselves, their world and their goals; and one understands perceptions by "reading behavior backwards" (p. 57)

Through more than fifteen studies completed by Combs and others at the University of Northern Colorado and the University of Florida, the perceptual characteristics of effective teachers were explored. The researchers defined effective teaching by selecting teachers based on evaluations of teachers by students, colleagues, and administrators; national honors for outstanding teaching; and assessment of student outcomes (Wasicsko, 2007). The following dispositions (or perceptual characteristics as labeled by Combs) were identified as common characteristics of effective teachers:

> perceptions of self as able, positive, and identified with diverse groups; perceptions of others as able, dependable, and worthy; perceptions of the purpose of education as freeing, self-revealing, and larger; and a frame of reference that is people oriented, open, and focusing on personal meaning (as cited in Taylor & Wasicsko, 2000, p. 4)

Combs (1964) later asserted personal self-efficacy and perceptions of self were the most critical characteristics of effective teachers. Combs stated a teacher's self-

perception will determine the quality and nature of relationships with both colleagues and students. He wrote:

> Teachers who believe they are able will try. Teachers who do not think they are able will avoid responsibilities. Teachers who feel they are liked by their students will behave differently from those who feel they are disliked. Teachers who feel they are acceptable to the administration can behave differently from those who have serious doubts about their acceptability. (p. 376)

Demmon-Berger (1986) explore the dispositions of effective teachers in an analysis examining the most successful schools though the 1970's and early 1980's. Findings indicated the most effective teachers had high expectations for both students and self; believed in differentiated instruction and management; had strong self-efficacy; valued classroom management and preventative discipline; cared about students, believed in a democratic classroom approach; focused on perceptual understandings over factual memorization; maintained a flexible attitude; employed imagination and were creative; were open and had strong interpersonal and communication skills; and valued out of class availability for students. Vivienne Collinson's (1996) work with exemplary teachers also revealed exemplary teachers "routinely mention certain dispositions" as important personally and professionally (p. 8). These included being continuous learners, being reflective, having a strong work ethic, having the courage to take risks, having respect for themselves and others, being curious and flexible, caring for others, and having high expectations for others.

Teachers who were reflective; capable of understanding the assumptions, beliefs and values that motivate choices; able to balance students' intellectual achievements and interpersonal learning; used collaborative classroom management; and fostered creative and flexible thought were deemed most effective in examinations of research published by Holland (2009) as well as Reiman and Thies-Sprinthall (as cited in Taylor & Wasicsko, 2000, p. 3). The research of Popp, Grant, and Stronge (2011) on effective teachers of at-risk students highlighted high expectations for students and valuing both academic and affective needs. The observations and research of Jere Brophy and Thomas Good (1974) revealed that effective teachers have high expectations for all students and believe that all students are worthy, able and dependable. In their work, Theo Wubbels, Jack Levy, and Mieke Brekelmans (1997) observed how effective teachers identify positively with diverse groups of students, have respectful and positive interactions with students, and are caring and empathetic.

Dispositions and Teacher Education

Dewey (1904) wrote teacher preparation must build within the teacher dispositions of reflection, ethics, inquiry, and an orientation towards the complex process of students. Dewey's work also asserts dispositions can be taught and cultivated through emphasis upon the importance of the acquisition and development of these dispositions. Dewey (1904) emphasizes for a "good teacher" this is of utmost importance. Dewey (1904) specifically called for teacher education to develop the dispositions of reflection, ethics, inquiry and an orientation towards the complex process of students in teacher candidates. Dewey (1904, 1916/2004) recommends a structured teacher education approach that engages preservice teachers in discussion, reflection and exposure to

children and educational situations in order to develop dispositions. Nelsen (2015) asserts effective dispositions should be developed through experiential, inquiry-based education in the tradition of Dewey:

> Dewey's work emphasizes that revising and developing new dispositions only happens during the process of inquiry: When we are faced with novel situations and problems that our prior ways of engaging cannot resolve, we develop new resources, new habits and ultimately new dispositions in our aims to resolve the problems or tasks. (p. 95)

As such an integral part of an individual, habits/dispositions become increasingly important to the work of teacher education. Since habits/dispositions drive thinking and decision making, it follows that development of effective habits would drive effective action in the classroom.

One of the earliest extensive discussion of dispositions as related to teaching was presented by Donald Arnstine (1967). Neither Dewey's or Arnstine's writing, however, had the impact on teacher education later work by Katz and Raths (1985) did. Katz and Raths asserted dispositions should be integral to the goals of teacher education programs. Dispositions were soon after adopted as part of the Council of Chief State School Officers (CCSSO) Interstate Teacher Assessment and Support Consortium (InTASC). In 1992, the InTASC domains for teacher education were updated from "knowledge, skills, and attitudes" to "knowledge, skills, and dispositions" (as cited in Freeman, 2007) and more recently to "performances, essential knowledge, and critical dispositions" (CCSSO, 2013, p. 16). States subsequently began including dispositions in a number of teacher certification rules and regulations, and the National Council for Accreditation of Teacher

Education, a teacher education program accreditation organization, followed with the inclusion of dispositions in 2002 (Freeman, 2007). Both NCATE, as an accrediting body, and InTASC, as an organization which seeks to promote "the preparation, licensing and on-going professional development of teachers" (CCSSO, 2012, p. 1), underscore the importance of dispositions as focuses of teacher education programs. NCATE (2008) only required assessment of two specific dispositions: "fairness and the belief that all students can learn" (p. 90). Institutions were allowed to develop their own dispositional frameworks and assessment tools. This has resulted in a wide variety of definitions and lists of disposition in institutions across the United States (Misco & Shiveley, 2007).

NCATE combined with the Teacher Education Accreditation Council (TEAC) in 2013 to form the Council for the Accreditation of Educator Preparation (CAEP). This accrediting body continues to insists teacher education programs focus dispositions through their reliance on InTASC standards which explicitly list critical dispositions in each of their ten standards (CAEP, 2016; CCSSO, 2013).

Teacher Candidate Dispositions Research

While teacher education program accrediting agencies and standards require a focus on dispositions as part of their conceptual framework, curriculum, and evaluation of teacher candidates, research and literature outline specific dispositions common among the most effective teachers, there is very little holistic research about what dispositions teacher candidates display during a teacher education program and if those dispositions change over time. Literature and research in the area of teacher dispositions has been most often limited to the construction and application of disposition assessments to screen teacher candidates (Abernathy, 2002; Choi et al., 2016; Duplass & Cruz, 2010;

Frederiksen et al., 2012; King et al., 2007; Rike & Sharp, 2008); the study of specific,

restricted dispositions and teacher education experiences (Brewer et al., 2011; Donovan

et al., 2011; Mueller & Hindin, 2011); and assessment of a limited number of specialized

dispositions (Cruz, 2017; Davis, 2017; Dee & Henkin, 2002; Yeníce, 2012).

   Research on the construction and application of disposition assessments in teacher

education programs has been driven by accrediting agencies requirements (CAEP, 2016;

NCATE, 2008). As institutions attempt to determine if candidates are suited to the

teaching profession or are adequately prepared to enter the field, teacher education

programs assess and monitor teacher candidate dispositions. Rubrics, checklists, and

disposition grades have all been used to assess teacher candidate dispositions (Duplass &

Cruz, 2010; King et al., 2007; Rike & Sharp, 2008). These approaches have been useful

in providing documentation for candidates with problematic dispositions which can be

used to create opportunities for intervention and response, if warranted. Responses may

include additional coursework requirements, individual goal setting meetings, and

counseling out of the program among others. Disposition grades attempt to track

dispositions holistically, but don't provide evidence on individual dispositions.

Additionally, concern has been expressed that rating scales, rubrics, and grade reports

completed by university supervisors, university faculty and cooperating teachers in the

field are unreliable and result in inconsistent appraisals of teacher candidate dispositions

(Choi et al., 2016). Surveys have been used to assess teacher candidate dispositions but as

Thornton (2006) finds, candidates self-evaluations are often inaccurate. An assessment

technique that has shown promise in providing information on individual, specific

dispositions is the use of directed reflections and narratives which also offer points of

reference for future targeted instruction in teacher education programs (Abernathy, 2002; Frederiksen et al., 2012).

Other teacher candidate research has focused on the development or presence of specific, restricted dispositions and centers on specific coursework or experiences that teacher candidates engage in. These explorations reveal coursework and field experiences significantly affect the development of teacher candidate dispositions and influenced dispositions more than personal experiences (Mueller & Hindin, 2011). Targeted coursework in specific areas and teacher education strategies like structured reflections, prolonged and organized exposure to theory and ideology, experiential and applied learning, and open dialogue can impact specific dispositions positively (Donovan et al., 2011; Renzaglia, Hutchins, & Lee, 1997). For teacher candidates with problematic dispositions, interventions delivered by teacher education programs have been shown to improve these dispositions (Brewer et al., 2011). These studies do offer some insight into how dispositions can be changed over time in teacher education programs, but don't explore how dispositions are holistically present or the longitudinal broad-based development of teacher candidate dispositions.

Some more generalized research has been completed recently. Engle (2017) completed a five year exit study of teacher candidates which found teacher candidates indicate growth in understanding the value of making connections in teaching, differentiation, collaboration, positive interactions with students, high expectations, confidence and classroom management. Seay's (2017) recent research also focused teacher candidate perceptions of dispositional change and found perceptual increases in the areas of professional preparedness, self-direction and initiative. These studies, however, are

limited to teacher candidate perceptions of change and do not examine dispositions holistically at various points throughout the program.

There has also been research in several specialized areas which concentrate on particular related dispositions. These investigations have been focused in the areas of science, mathematics, diversity and social justice, technology, and special education and has explored the dispositions of critical thinking (Yeníce, 2012), self-efficacy (Cruz, 2017), and positive orientations towards mathematics, diversity, technology, and inclusion (Cruz, 2017; Davis, 2017; Dee & Henkin, 2002; Mueller & Hindin, 2011). These studies do not explore the holistic dispositions of a group of teacher candidates and fail to create a complete understanding of teacher candidate dispositions, how they are present at any given time and how candidates exhibit dispositions longitudinally.

Conceptual framework

Dispositions

Dispositions, for the purpose of this research will be defined as follows: "the personal qualities or characteristics that are possessed by individuals, including attitudes, beliefs, interests, appreciations, [and] values (Taylor & Wasicsko, 2000 p. 2)."

This conception of dispositions sets dispositions apart from knowledge and skills. The research to be carried out focuses only on dispositions, but it is important to note the researcher also believes the effective teacher must possess deep knowledge of content and the profession along with pedagogic skills to positively impact student learning and growth (Wasicsko, 2007). Dispositions, in this work, are understood to be driver behind behavior which utilize the

knowledge and skills an individual possesses. The knowledge and skills acquired

are also influenced by dispositions. This follows Combs (1969) conception of

perceptual factors and his belief people behave according to how the world

appears to them. The relationship between dispositions, knowledge, skills, and

behavior used as the framework for this study is depicted in Figure 1.
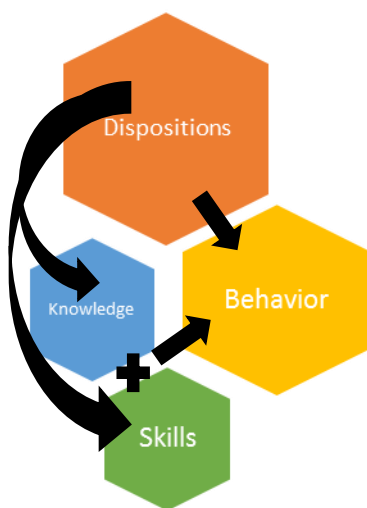
Figure 1. Relationship between dispositions, knowledge, skills, and behavior.

Thus, by collecting data about teacher candidate behavior, attitudes,

beliefs, interests, appreciations, and values, teacher candidate dispositions might

be uncovered and examined. A longitudinal examination of teacher candidate

dispositions may offer valuable information for teacher education programs as

they seek to develop the most effective teachers whose behaviors positively

impact students.

Constructivism

The researcher seeks to form understandings to answer the research

questions through a constructivist lens. Constructivism is a theory that asserts

learning occurs through individualized processing of and adaptation to experiences (Glasersfeld, 2005). We each construct our own understandings of these experiences (Brooks & Brooks, 1999). Knowledge is constructed by individuals through the perception of new information which interacts with existing personal understandings (Egbert & Sanden, 2014). Individuals continually reconstruct knowledge as prior understandings are updated and revised through the perception of new information. Knowledge has personal meaning that is unique to each individual. Meaning is influenced by the context in which the knowledge was acquired as well as the prior experiences and understanding of the individual (Crotty, 2003). Knowledge cannot be understood as detached from the individual who provides the basis for its individual construction through active involvement and discovery (Schiro, 2013). In this way, multiple truths are created as knowledge is personal and unique (Egbert & Sanden, 2014).

As reflected by this lens, individual teacher candidate dispositions are developed as a result of their personal experiences. Individual perspectives and dispositions are constructed in real-world settings. To explore the dispositions, careful consideration, collection, and analysis of the range of individual participants' dispositions must be attended to. This exploration can help us gain an understanding of the essence of teacher candidate dispositions.

Conclusion

Dispositions are those personal, individual qualities that reveal how we perceive the world and are comprised of our attitudes, beliefs, interests, appreciations and values

(Combs, 1969; Taylor & Wasicsko, 2000). Dispositions influence our thoughts and thus our behavior. The study of teachers has associated specific dispositions with the most effective teachers. In work to prepare effective teacher candidates, teacher education includes a focus on dispositions in their programs. However, there is little literature which reveals how dispositions are holistically and longitudinally present in teacher candidates and if those dispositions change over time. This research sought to explore the dispositions of junior teacher candidates during their first year of professional coursework both holistically and longitudinally to contribute to the understandings of dispositions of teacher candidates. This work explores how dispositions are present in teacher candidates; how they are exhibited over time, and if these dispositions are developed or changed in a teacher education program. Chapter 3 will describe the research methodology used in this exploration of teacher candidate dispositions. Chapter 3 will include a rationale for qualitative research methodology, details regarding the setting, context and participants, data collection methods, and data analysis approaches. Attention will also be given to a discussion of credibility, transferability, limitations, and delimitations.

CHAPTER III

RESEARCH METHODOLOGY

Introduction

The exploration of teacher candidate dispositions as they exist in the real-life context of teacher education programs and are connected to the personal experiences and characteristics of individual teacher candidates was well suited to case study research which allowed the researcher to gain an understanding of the range and essence of this cohort of teacher candidates' dispositions. The following chapter will detail the methods and process of the study through a discussion of rationale for the qualitative research approach, research setting and context, research participants, data collection methods, data analysis, trustworthiness, transferability, and limitations and delimitations of this research.

Qualitative Rationale

Qualitative case study is a strong match for this research based on the characteristics of case study research and the nature of data collection methods which have been shown to be effective in the exploration of dispositions (Abernathy, 2002; Combs, 1969; Creswell, 2012; Frederiksen et al., 2012; Stake, 1995; Taylor & Wasicsko, 2000; Welch, Pitts, Tenini, Kuenlen, & Wood, 2010). Case study research seeks to "study the particularity and complexity" of a case and "understand its activity within important circumstances" (Stake, 1995, p. xi). This study explored dispositions in a holistic fashion and aligns with qualitative inquiry as research that "emphasizes episodes of nuance, the

sequentially of happenings in context, the wholeness of the individual" (Stake, 1995, p. xii).

As a "situated activity that locates the observer in the world", qualitative research engages researchers in studying "things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them" (Denzin & Lincoln, 2005, p. 3). The goal of this research was to make visible teacher candidate dispositions through multiple methods of data collection that allow for thick description, triangulation and rigorous study (Bloomberg & Volpe, 2016; Creswell, 2012). The researcher's identification as an instructor in the program allows for the creation of a deeply detailed image of the case through "significant interaction" with participants (Bloomberg & Volpe, 2016, p. 45).

Researcher Stance

As an undergraduate teacher educator, the researcher is interested in the development of effective dispositions in undergraduate teacher candidates. Both theorists and psychologists contend that attitudes, beliefs, values, and perceptions drive behavior (Bandura, 1981; Dewey, 1910; Dewey, 1922; Nisbett & Ross, 1980). Dispositions, as defined in this work are "the personal qualities or characteristics that are possessed by individuals, including attitudes, beliefs, interests, appreciations, [and] values" (Taylor & Wasicsko, 2000, p. 2). As these personal qualities of an individual, dispositions influence behavior by determining how an individual applies knowledge and skills. The work of Dewey (1904) and others (Katz & Raths, 1985; Nelsen, 2015) asserts that dispositions may change or develop over time.

The researcher believes some dispositions lend themselves to more effective outcomes once teacher candidates are licensed and enter their own classrooms. As a professional seeking to inform teacher education practice the researcher has found no other research literature that provides a holistic view of teacher candidate dispositions. As such, the researcher desires to understand teacher candidate dispositions more thoroughly and examine dispositions as candidates progress through a teacher education program.

Setting and Context

The setting of this study was the undergraduate elementary teacher education program of a Division II public university in the Midwest. Of the teacher candidates enrolled in the elementary education program, 90 percent are female, 84 percent are white, 7 percent are Hispanic, and 7 percent are multiracial (Office of Teacher Education, 2018). These demographics are generally consistent with national data on the demographics of teachers at the primary school level (Taie & Goldring, 2017). The elementary education program does display a slight increase in the percentage of white individuals compared to 80 percent nationally, and a marked absence of black individuals compared to 7 percent nationally (Taie & Goldring, 2017).

This site was selected because the undergraduate elementary teacher education program works as a cohort system allowing the dispositions of elementary teacher candidates to be explored longitudinally as candidates move into and complete their first year of professional coursework. In this program, teacher candidates have completed most of their general education coursework prior to entry into the professional course blocks. Beginning in the first semester of the junior year of the undergraduate program, candidates complete four semesters of professional coursework together as a cohort

which allows longitudinal study of the cohort as a group. This junior year marks the beginning of the final two years of coursework in the undergraduate program. For program purposes, teacher candidates completing their first and second semesters of professional coursework are labeled as juniors. During this junior year of professional program coursework, candidates are enrolled in approximately 15 hours of core professional courses in the first semester and 16 hours of core professional courses in their second semester.

Each semester, candidates complete field experiences that coordinate with university courses. In the first semester, teacher candidates spend 33 hours in the field in assigned elementary classrooms and are required to teach two lessons and plan and complete a read aloud for students in their assigned classroom. In the second semester, teacher candidates engage in a targeted English language arts practicum with small groups of first graders and plan and execute a science night activity at a local elementary school for students and families. Fieldwork sites are located in both small urban and rural districts. A number of the sites have high percentages of students who qualify for the free/reduced lunch program and most of the counties where sites are located have a poverty rate of 17% or higher (U.S. Department of Commerce, 2017). Elementary student demographics at field sites vary and represent a range of sociocultural contexts.

Faculty in the elementary education program teach several core professional courses and supervise teacher candidate field experiences both directly and indirectly. Faculty maintain a responsive stance in course and fieldwork experiences to meet the needs of teacher candidates. Due to their interaction, faculty and teacher candidates often develop strong rapport. This particular setting allows dispositions to be researched in a

targeted fashion within the teacher education program. The accessibility of teacher candidates as well as the researcher's familiarity with and access to the structure of this program also contributed to the selection of the site.

<center>**Participants**</center>

The participants of this study were 13 junior undergraduate teacher candidates, as identified by the elementary education degree program. These teacher candidates were completing their first year of professional coursework in the elementary education program. Of the 15 teacher candidates enrolled in the cohort beginning in the spring of 2018 and continuing through the fall of 2018, 13 volunteered for participation in this study. This cohort of elementary teacher candidates were purposefully selected. These candidates provide unique insight into the dispositions of teacher candidates as they completed coursework in the elementary education program. This group demographically represents a typical cohort of elementary teacher candidates in the program.

As an information-rich case, this group serves to illuminate an understanding of the dispositions of a cohort of beginning undergraduate teacher candidates (Glesne, 2016). If specific criteria had been used to filter or specifically select only a few of the candidates as participants, a broad understanding of dispositions would not have been gained. By controlling for characteristics, the scope of the exploration would have been limited and would not have adequately address the research questions. This group of junior elementary teacher candidates served as an instrumental case for the purposes of this study (Bloomberg & Volpe, 2016; Stake, 1995).

To protect the confidentiality of participants, information collected during observations was recorded by participant number only. Data collected for document

analysis was also identified by assigned number. For the four participants who volunteered to complete interviews, each was allowed to select a pseudonym which was used for all interview transcripts and notes. Only the researcher had access to the document which linked names to numbers and pseudonyms. All information was stored in a secure location. Electronic files were kept on a password protected server while physical notes and artifacts were locked in a file cabinet in the researcher's office. Only the researcher had access to the password and key.

Teacher candidate participants were contacted before the beginning of the fall semester by means of electronic letter (Appendix A) informing them of the nature and details of the study. This letter requested that willing participants complete an electronic consent form (Appendix B). The consent form allowed teacher candidates to choose to participate in the observations and artifact collection and/or interviews. Consent forms clearly stated that participation was voluntary and that participants could choose to withdraw from the study at any time with no consequences. At no time did the researcher approach potential participants in person and ask for their participation. Since the researcher also negotiated the role of instructor, field supervisor, and advisor in the elementary education program, this could have been viewed as a coercive action (Toy-Cronin, 2018).

Participant time and interests were protected throughout the research process. Observations and artifact collection were completed as part of participants' normal experiences in program coursework. Observations were completed during college coursework and existing field experiences. Artifacts were collected from regular coursework completed for the first year of their teacher education program. For those

participants who volunteered to participate in interviews, interviews were scheduled at the participant's convenience in a location that the participant choose. Locations included the researcher's office and a conference room in the teacher education building. No data were collected from students who were currently enrolled in courses that the researcher taught during the semester of active data collection, fall 2018. All data collected from those courses the researcher taught were collected as archival data after the grades for the semester had been posted and consent had been obtained.

The researcher maintained many roles including an instructor for the first semester of professional courses, fieldwork supervisor, and academic advisor for beginning elementary teacher candidates. During this study the researcher retained these roles while also taking on the role of listening ear, seeing eye, and inquirer. Participants were reminded their contributions to the research are important and their candor is to be protected by the researcher-participant relationship. During the semester of active data collection, fall of 2018, the researcher was not the instructor for any of the classes or supervisor for any field experiences in which participants are enrolled, but remained engaged as the academic advisor for those participants previously assigned to the researcher. As an academic advisor, the researcher met with teacher candidates assigned as advisees once a semester for enrollment advising as well as on an as needed basis for any particular support teacher candidates requested.

In data collection, it was possible the researcher may have come across sensitive information about a particular candidate or the group of candidates. The researcher may have found that, in the course of this research, some concern about a candidate or candidates revealed itself. As a teacher educator, the researcher may have had to address

these issues for the well-being of the individual. These decisions could affect the individual, their progress in the program, and the study. Careful documentation of any issues or concerns that arose and consultation with the research advisor was used to protect participants. Candidates were informed via consent form (Appendix B) that the researcher was obligated under state law as a mandatory reporter.

Pilot Studies

The researcher had previously completed two distinct pilot studies related to the proposed research. The initial pilot study was completed from August 2016 to October 2016. This initial pilot study included 45 junior undergraduate teacher candidates in the first semester of professional coursework and explored their perceived and demonstrated dispositions This pilot included teacher candidate surveys, course document collection and analysis, observations, and interviews. Additionally, cooperating teachers for teacher candidate field experiences were surveyed.

Data were analyzed according to a framework adapted from the work of Arthur Combs (1969). Combs' framework was modified to integrate additional literature regarding the dispositions of effective teachers. The framework used identified dispositions of effective teachers in three areas: dispositions related to self, dispositions related to teaching, and dispositions related to students. Changes were made to the original framework to incorporate additional effective teacher dispositions literature and reorganize the work into the three listed categories. The conceptual framework below details the dispositions of exemplary teachers and was used to evaluate the exhibited dispositions of beginning preservice teachers in this initial pilot.

Effective Teachers' Dispositions Related to Self
1. Perceive themselves as able and have a strong sense of self-efficacy (Combs, 1969; Demmon-Berger, 1986)
2. Are continuous learners dedicated to lifelong learning and are reflective (Collinson, 1996)
3. Have high expectations for themselves, are dedicated and have a strong work ethic (Collinson, 1996; Demmon-Berger, 1986)
4. Are open to new ideas and have courage to take risks (Collinson, 1996; Dewey, 1922)
5. Respect themselves and perceive themselves as worthy and dependable (Collinson, 1996; Combs, 1969)

Effective Teachers' Dispositions Related to Teaching
1. Believe education has a higher purpose which is focused on meaning instead of facts, the beliefs and values behind choices, and the understanding of assumptions (Combs, 1969; Demmon-Berger, 1986)
2. Are willing to meet the needs of students and balance intellectual achievements with interpersonal learning (Brophy & Good, 1974; Demmon-Berger, 1986; Wubbels et al., 1997)
3. Perceive teaching as people oriented and open and have comfortable interactions with others while teaching (Combs, 1969; Demmon-Berger, 1986)
4. Perceive teaching as involved and interactive (Combs, 1969; Demmon-Berger, 1986)
5. Perceive teaching as flexible, creative/imaginative, and filled with curiosity (Collinson, 1996; Combs, 1969; Demmon-Berger, 1986)

Effective Teachers' Dispositions Related to Students
1. Are caring and empathetic (Brophy & Good, 1974; Collinson, 1996; Demmon-Berger, 1986; Wubbels et al., 1997)
2. Have high expectations for students, perceive students as able, worthy and dependable (Combs, 1969; Collinson, 1996; Demmon-Berger, 1986)
3. Have clear and positive standards for classroom behavior and a collaborative approach to classroom management (Brophy & Good, 1974; Demmon-Berger, 1986)
4. Have respectful and positive interactions with students (Brophy & Good, 1974; Collinson, 1996; Wubbels et al., 1997)
5. Positively identify with diverse groups of students and student needs (Brophy & Good, 1974; Combs, 1969; Wubbels et al., 1997)

Teacher candidate dispositions were compared to the dispositions of effective teachers as presented in the framework. Findings revealed that teacher candidates demonstrated some of the dispositions of effective teachers, but also displayed specific

dispositions that did not match those of effective teachers. Notably, participants exhibited some discrepancy between their perceptions and observed actions.

An additional pilot study was completed from August 2017 to December 2017 to further understand dispositions with teacher candidates. The participants for the second pilot study were three undergraduate teacher candidates. Three semi-structured interviews (Merriam, 2009) were completed with each candidate over the course of the semester to explore their dispositions. Data were analyzed according to the framework used for the initial pilot (Bartlow, 2017). Findings again revealed teacher candidates exhibited some dispositions of effective teachers while other disposition did not reflect those of effective teachers. Candidates also displayed some change in dispositions over the course of the semester, particularly in the areas of dispositions related to self and dispositions related to teaching.

In these pilot studies, observation, course document analysis, and interviews revealed themselves as the most beneficial data collection methods for the exploration of teacher candidate dispositions. In evaluating particular data collection methods, the usefulness of specific course documents and certain interview questions was discovered. Course documents that were particularly effective included teacher candidate reflections, field evaluations, lesson videos, teacher candidate created lesson plans, and field experience journals. Interview questions were found to be the most effective have been included in interview protocols for the proposed study. Additionally, surveys were found to be an unreliable method of gaining understanding into teacher candidate dispositions as teacher candidate self-reported dispositions did not match those identified in other forms of data collection; therefore, surveys will not be used for the proposed study. These

pilot studies allowed the researcher to acquire insight into the most effective data collection methods and include them in the proposed research, gained experience exploring dispositions, and formed a foundational understanding of teacher candidates' dispositions.

Data Collection

The methods of data collection for this study were observation, artifact collection with course document analysis, and interview. The collection of multiple forms of data fits well with case study (Creswell, 2012) and allowed for a thick description and triangulation of data. To protect the anonymity of participants, information was recorded only by number and pseudonym. Data were collected during the fall 2018 semester as noted in the dissertation timeline (Appendix D).

The use of observation to assess dispositions follows the tradition of research in this field. Welch, Pitts, Tenini, Kuenlen, and Wood (2010) state that assessment of dispositions, because they are affective and social learning objectives, must be based on observation of teacher behaviors. They assert these behaviors can only be truly evaluated during an observational opportunity. In many of the studies conducted by Combs (1969) and others, observational methods have been used to assess teacher dispositions (Taylor & Wasicsko, 2000). Observations for this research were conducted during coursework and fieldwork at specified times by the researcher. Observations for Spring of 2018 were completed using three archived videos submitted by each candidate for Early Childhood Foundations and Curriculum, Curriculum Development for Elementary Education and Clinical Experience. Two of the videos were completed as part of teacher candidate field work and include teacher candidate taught lessons and a read aloud. The remaining

videos for Spring 2018 were submitted as part of group presentations for Early Childhood Foundations and Curriculum. Observations in Fall of 2018 occurred during university coursework and fieldwork for Primary Reading and Language Arts and Elementary School Science. Thirty-nine observations were completed and included opportunities to watch students in the field during Primary Reading and Language Arts Practicum and Elementary School Science Night. This resulted in 9-10 total observations for each individual candidate.

As an observer, the researcher took the role of a friendly, knowledgeable outsider whom participants have a relationship with, but are not being supervised by during the data collection period. The researcher selected the least intrusive location from which to observe and took notes quietly on the teacher candidates, their interactions and behavior, and other contextual factors. On-site and video observations were used to gain insight into teacher candidate dispositions. Observation notes utilized a two-column format. The researcher recorded a narrative account of the observation period while also noting any particularly interesting moments or insights. Observation notes payed particular attention to teacher candidate dispositions in four categories: dispositions related to self; dispositions related to teaching; dispositions related to students; and general dispositions. This is reflective of the framework used by Arthur Combs (1969) in his seminal exploration of the dispositions of effective teachers. By using this framework, the researcher was able to gather specific information reflecting teacher candidate dispositions while also remaining open to the full scope of dispositions that may have been present.

Artifact collection and document analysis have also been shown to be an effective tool for investigation of dispositions. Prior research has revealed that dispositions can be understood through the work and writings of teacher candidates (Abernathy, 2002; Frederiksen et al., 2012). Course documents were collected from archives for the Spring of 2018 from Early Childhood Foundations and Curriculum, Curriculum Development for Elementary Education, and Clinical Experience. Additional course documents were collected in the Fall of 2018 from Primary Reading and Language Arts and Elementary School Science. Documents collected included responses to prompts, teacher candidate reflections, field journals, cooperating teacher field evaluations, case study responses, essays, teacher candidate-created lesson documents, and final projects. These documents allowed the researcher to analyze teacher candidate dispositions through collection of their thought processes, understandings, attitudes, beliefs, and values. These documents were completed as part of the normal coursework teacher candidates submitted for the courses selected and the teacher education field instruments developed for Clinical Experience.

Interviews allowed for examination of the multiple realities of the participants through the use of conversation and questioning to uncover the "unique experiences" and "special stories" (Stake, 1995, p. 65). Interviews were semi-structured (Merriam, 2009) and asked participants to share their perceptions of their own dispositions and any perceived change in dispositions over time. Interview questions (Appendix C) included questions about candidates' perceptions of themselves, teaching, the teacher education program, and their dispositions. Interviews were completed two times: at the beginning of the Fall 2018 semester in August, 2018 and near the end of the Fall 2018 semester in

December, 2018. Interviews ranged between 18-57 minutes long and were completed at the convenience of participants in terms of time and location. Interviews were audio recording, transcribed using Trint online transcription services and hand checked to ensure accuracy. The researcher used member checking during interviews to ensure that interpretations of participants' words matches the meaning they intend to convey.

Data Analysis

Observation notes, course documents, and interview transcripts were analyzed to determine how specific teaching dispositions are revealed in junior elementary teacher candidates during the first year of professional coursework.

Prior to coding, data were organized into four quarters representing particular time frames in the academic year. These time frames were January 2018 to Midterm Spring 2018; Midterm Spring 2018 to End of Spring Semester 2018; August 2018 to Midterm Fall 2018; and Midterm Fall 2018 to End of Fall Semester 2018. Within each time frame, data were coded using several coding methods. Open coding, or initial coding, was used as a starting point to allow the researcher to "reflect deeply on the contents and nuances" (Saldaña, 2016, p. 115) of the data and allow the teaching dispositions data to lead the study. Open coding lends itself to various data forms and as such, was well suited to this study. First, observation notes, course documents, and transcripts were read over by the researcher. Next, the researcher used open coding to highlight sections of data of interest and generate codes related to the content of the notes, documents, and transcripts. This revealed ideas, concepts, and themes that were present in the data. Within open coding, specific notation was made to indicate if a code was a positive or negative instance of a particular concept. This allowed the researcher to

note if a candidate displayed an example of a particular concept or idea or displayed a non-example of a particular concept or idea. Once open coding was completed, values coding was used in the same way to identify participant's values, attitudes, and beliefs (Saldaña, 2016). Values coding permitted dispositions to be drawn out defined by this study "the personal qualities or characteristics that are possessed by individuals, including attitudes, beliefs, interest, appreciations, [and] values" (Taylor & Wasicsko, 2000, p. 2). Again, positive and negative instances were separated to allow more specific tracking of various displayed dispositions.

Data sources were then rechecked to confirm coding determinations. After codes had been rechecked, the researcher evaluated each of the coding processes an additional time to highlight and isolate unique coding instances. This allowed the researcher to determine if a code was more or less present overall and over time in each of the time periods. The unique coding instances revealed in open coding and values coding were analyzed for patterns and also compared to the four categories of dispositions: dispositions related to self; dispositions related to teaching; dispositions related to students; and general dispositions. This frame for analyzing codes helped the researcher attend to apparent dispositions while also being open enough to uncover the specific dispositions of the participants as related to each category.

Coded data were recorded electronically using NVivo 12. Once data were recorded and organized, it was used to gain a holistic understanding of how dispositions are present overall and in each quarter of the research cycle. Data analysis included attending to themes and patterns which emerged from coded data. Examining the changes in dispositions from quarter to quarter created an understanding of how dispositions were

present and if they changed or do not changed in the first year of professional

coursework. Longitudinal coding (Saldaña, 2016) was used to reveal changes in

dispositions through comparison of data collected over time. Data collection and analysis

was completed according to Table 1.

Table 1

Data Collection and Analysis Timeline

	Aug18	Sep18	Oct 18	Nov18	Dec18	Jan19	Feb19
Spring 2018 Archived Data & Media Collection	X						
Video observations using archived Spring 2018 media	X	X	X	X	X		
Coding 1st Quarter Spring 2018 Data	X	X	X	X	X		
Analyze 1st Quarter Spring 2018 Data	X	X	X	X	X	X	X
Coding 2nd Quarter Spring 2018 Data		X	X	X	X	X	X
Analyze 2nd Quarter Spring 2018 Data		X	X	X	X	X	X
Initial Interviews	X						
Coursework Observations EDUC 362 & 366	X	X					
Collect 3rd Quarter Fall 2018 Course Documents					X	X	X
Coding 3rd Quarter Fall 2018 Data					X	X	X
Analyze 3rd Quarter Fall 2018 Data					X	X	X
Fieldwork Observations EDUC 362 & EDUC 366			X	X			
Final Interviews					X		
Collect 4th Quarter Fall 2018 Course Documents					X	X	X
Coding 4th Quarter Fall 2018 Data					X	X	X
Analyze 4th Quarter Fall 2018 Data					X	X	X
Longitudinal Analysis							X

Credibility

McMillan (2016) states credibility in qualitative research is achieved when "results accurately portray the views and meanings of the participants" (p. 308). Credibility in this study was established through several validation measures including prolonged engagement with participants, repeated observation, varied document analysis, repeated interviews, data triangulation, member checking, and a reflexive approach.

The researcher was an active participant in the research setting which provided opportunities to be deeply engaged with participants and collect data through multiple methods in an extended timeframe. The methods used helped confirm that the dispositions uncovered accurately represent the cohort of teacher candidates. Repeated observations and interviews as well as varied document analysis provided opportunities for prolonged engagement which supports the credibility of the study. The ability to reliably collect data about dispositions can be improved through frequent observations (Welch et al., 2010). The researcher, as researcher and program faculty, had extensive experience and close involvement with the participants. This allowed the study to reach a significant level of saturation in gaining insight into teacher candidate dispositions.

Data source triangulation include the use of observations, document analysis, and interviews to record teacher candidate dispositions and determine if similar evidence of dispositions can be found under different circumstances. Stake (1995) writes data source triangulation allows the researcher "to see if the phenomenon or case remains the same at other times, in other spaces or as persons act differently" (p. 112). Member checking in interviews was used to create a layer of source-specific credibility. By restating answers to participants to ensure that the interpretation of their words matches

the meaning they intend to convey, participants were encouraged to provide "alternative language or interpretation" (Stake, 1995, p. 112) when necessary.

One additional threat to research rigor and quality is the role the researcher played as both researcher and advisor. Because the researcher is personally and intimately involved with the cohort of teacher candidates, there is a threat that personal biases could affect data collection and analysis. To minimize this threat no data were collected from teacher candidates while they were enrolled in courses the researcher taught. All data collected for those courses which the researcher had instructed previously was collected and analyzed after grades had been posted. At no time during the active data collection period in fall 2018 were the teacher candidates supervised or instructed by the researcher. The researcher also utilized journaling to reflect upon relationships with participants throughout the study.

Throughout the study, the researcher used a reflexive approach to identify and limit any personal bias that could threaten the research (McMillan, 2016). The researcher worked diligently and reflectively to be aware of subjective biases that could have arose and remove them from both data collection and analysis. Analytic memos were used to reflect on personal relationships with the participants and site, data collection and analysis experiences, and any personal or ethical dilemmas that could have arose during the study. This helped make personal beliefs and perspectives clear and enabled the researcher to address any concerns of bias that might have arose (Saldaña, 2016). Data triangulation through comparison of observation data, course document analysis, and interview data; member checking; and analysis of a variety of documents also helped reduce this bias.

During the research process, a detailed audit trail was kept which included field notes, a research journal, detailed records of data collection, and explanations of coding decisions so that the work completed in the study remained transparent and straightforward (McMillan, 2016). The researcher engaged in multiple passes in coding and analyzing data to ensure consistency. The researcher sought input from teacher educator peers and the research advisor to review work completed and data analysis. In the final write up, the use of rich, thick description creates the most complete representation of the case possible (McMillan, 2016). Participants' voices and perspectives were honored through the use of interview transcripts, observational anecdotes, and information acquired directly from artifacts (Glesne, 2016).

Transferability

Merriam (2009) writes, "The general lies within the particular; that is what we learn in a particular situation we can transfer or generalize to similar situations subsequently encountered" (p. 225). This case study explored the dispositions of a cohort of beginning undergraduate teacher candidates. This information-rich case serves to illuminate an understanding of how these dispositions are present in a group of teacher candidates. The transferability of this study is positively impacted by the use of detailed description of the study's context allowing readers to judge the extent that the study's findings apply to other situations (Merriam, 2009). This case serves as an instrumental case (Stake, 1995) which provides insight into the field of dispositions and particular information about teacher candidate dispositions.

Limitations and Delimitations

This study sought to explore the dispositions of junior elementary teacher candidates in an undergraduate program. The limitations of this study include the sole focus on one program with a specific geographical location and sociocultural orientation. The focus only on elementary teacher candidates also limits the application of the results of this study. Additionally, the researcher in this study is embedded in participants' experiences as a faculty member of the university and program in which this research takes place. This could be seen as a limitation, but is supported by the tradition of qualitative research.

The delimitations of this study include the exclusion of secondary teacher candidates or candidates from other cohorts or universities. Due to program structures, longitudinal data collection of secondary teacher candidates would not be feasible as core professional coursework is not taught in a cohort system. Furthermore, the relationship the researcher has to this program allows for deep, detailed and rich data collection that may not be possible as an outsider at another institution.

Conclusion

This research is oriented towards the holistic field of dispositions and used case study to explore and expand upon the understandings of dispositions and the impact of teacher education programs. Specific procedures and processes were used to complete high quality research which attended conscientiously to ethical concerns. Through rigorous methodology and careful consideration of participants, this study aimed to begin the work of building a dispositional development model that informs the work of teacher education programs.

CHAPTER IV

FINDINGS

Introduction

The purpose of the study was to examine the dispositions of third year

undergraduate elementary teacher candidates over their first year of professional

coursework using case study methods. This study sought to develop further

understandings about how dispositions may be present or change over the course of an

undergraduate elementary education program through an exploration of the traits, beliefs

and attitudes which characterize a group of teacher candidates. The use of qualitative

case study was well-matched to exploration of teacher candidate dispositions in the active

context of a teacher education program. Careful collection of participants' perceptions of

their own dispositions as well as observations of their behaviors contributed to an

understanding of the essence of the group's dispositions. The following research

questions guided the study:

> Q1   What dispositions are exhibited by junior elementary teacher candidates in
> the first year of professional coursework?

> Q2   Do the dispositions exhibited by junior elementary teacher candidates
> change or develop over the first year of professional coursework? If so,
> how do they change or develop?

Data collection was completed at a Division II university in the Midwest with an

enrollment of 6,625 (fall 2018). There were a total of 248 students enrolled in the

elementary education program in the fall of 2018. Of the 15 teacher candidates in the

cohort of elementary education majors selected for this study, 13 volunteered to participate. Of those who volunteered to participation in the study, four candidates agreed to participate in interviews as well as document analysis and observations. All data collected was first analyzed through open coding and then values coding. During data analysis, common dispositional themes emerged connecting both open and values codes.

This study plays an important role in illuminating a holistic view of teacher candidate dispositions overtime. Previous research on teacher candidate dispositions indicates specific coursework can impact the development of specific dispositions like reflection (Donovan et al., 2011), positive orientations towards students and their learning (Dee & Henkin, 2002; Mueller & Hindin, 2011), self-efficacy (Cruz, 2017), differentiation, collaboration, positive interactions with students, confidence and classroom management (Engle, 2017). The results of this study also confirm these dispositions are present, to some degree, in this cohort of teacher candidates, however not all dispositions exhibit development or change over the first year of professional coursework.

This study further expands on previous work in the field by approaching dispositions in a broad-based fashion to understand how dispositional development manifests longitudinally. In this longitudinal approach, this study contradicts Seay's (2017) findings which state professional preparedness, self-direction and initiative were increased over the course of a teacher education program as these dispositions exhibited no change throughout the first year of professional coursework. Additionally, this study highlights important contradictions for a number of dispositions displayed by teacher

candidates. In this chapter, I present the patterns for each of these dispositional themes as related to each research question.

Findings for Question 1

Q1   What dispositions are exhibited by junior elementary teacher candidates in the first year of professional coursework?

Question 1 addresses the holistic view of dispositions exhibited by a cohort of teacher candidates in their first year of professional coursework. Overall, coding revealed teacher candidates displayed many desired dispositions in the areas of self, students, and teaching. A general dispositions area was including in both coding schemes, but did not yield any patterns or themes. The following dispositions were drawn from coding for teacher candidates in each of three categories:

Dispositions Related to Self
Dependable, high personal expectations
Strong self-efficacy
Continuous learner, growth mindset
Reflective
Dispositions Related to Students
Caring
Positive and collaborative classroom management
See students as able
Positive interactions
Meet students' needs
Dispositions Related to Teaching
Balance academic and interpersonal goals
Involved, interactive, enthusiastic
Education has a higher purpose
Monitor learning
Focused on people

In general, *continuous learner, growth mindset*; *meet students' needs*; and *balance academic and interpersonal goals* were the strongest dispositions. *Dependable, high personal expectations; reflective; caring; positive interactions; focus on people;* and *education has a higher purpose* were also positively represented for this group of teacher

candidates. Notably, most of the dispositions displayed by teacher candidates over their

first year of professional coursework were positively oriented towards those dispositions

effective teachers exhibit (Collinson, 1996; Combs, 1969; Demmon-Berger, 1986;

Holland, 2009; Taylor & Wasicsko, 2000; Wubbels et al., 1997). *Self efficacy*; *positive*

and collaborative classroom management; *involved, interactive, enthusiastic;* and

monitor learning produced mixed results. The areas of dispositions related to teaching

and dispositions related to students had the most mixed results while the area of

dispositions related to self had the clearest patterns of dispositions related to those of

effective teachers (see Table 2).

Table 2

Overall Dispositions

	Dispositions Related to Self	Dispositions Related to Students	Dispositions Related to Teaching
Clearly Indicated	- Continuous learner, growth mindset - Dependable, high personal expectations - Reflective	- Meet students' needs - Caring - Positive interactions	- Balance academic and interpersonal goals - Focus on people - Education has a higher purpose
Mixed Results	- Self-efficacy	- See students as able - Positive and collaborative classroom management	- Involved, interactive, enthusiastic - Monitor learning

Dispositions Related to Self

Dispositions related to self is a category of dispositions including how teacher

candidates perceive themselves as well as how they are perceived by others through their

actions. Teacher candidates were continuous learners with a growth mindset, were

dependable with high personal expectations, and were reflective (see Table 3). Data

indicated these dispositions were displayed often and with clear contrast to the few

negative instances recorded for each of these dispositions. Continuous learner, growth

mindset presented the strongest pattern throughout the first year of professional

coursework for this cohort of teacher candidates while self-efficacy presented mixed

results.

Table 3

Overall Dispositions Related to Self

Dispositions Related to Self	
Clearly Indicated	- Continuous learner, growth mindset - Dependable, high Personal expectations - Reflective
Mixed Results	-Self-efficacy

Continuous learner, growth mindset. Continuous learner, growth mindset was

the strongest disposition exhibited by teacher candidates with positive instances greatly

outweighing negative instances. This disposition was displayed in fieldwork evaluations,

teacher candidate reflections and university coursework. On clinical experience field

placement evaluations, cooperating teachers noted teacher candidates "accept[ed]

constructive feedback in a positive manner" and "implement[ed] recommendations from

evaluations of professional performance". Cooperating teachers also provided written

comments reflecting continuous learning and growth mindset in teacher candidates like,

"Ms. X has taken all of my advice on her lessons and reflected on what she would do

differently when she has her own class to teach! She wants to learn and wants to become a great teacher."

Teacher candidates made statements reflecting growth mindset like, "I know that I still have a long way to go and much more to learn" and "Some students would say 'I can't do this' in which I would reply to them, 'We can, and we will.' It is all about what you put in your mind". Data collected from the Science Teaching Efficacy Belief Instrument (STEBI) indicated teacher candidates "will continually find better ways to teach science" and will "invite the principal to evaluate [their] science teaching".

Fieldwork journals completed by teacher candidates further support the desire to continually learn and grow. Many teacher candidates sought further information about particular experiences from both cooperating teachers and the university supervisor. Teacher candidates asked questions like, "Is there a more effective way that I could have handled this situation?" and "What are the best methods for getting students back on task?"

Most teacher candidates consistently exhibited continuous learning and a growth mindset throughout the data collection period. Of those who did not, candidate numbers one, five, and thirteen displayed some difficulty maintaining an orientation towards continuous learning and a growth mindset at different times in the data collection period. However, overall instances of continuous learning, growth mindset outnumbered difficulties. These candidates were scored lower by cooperating teachers in the area of "accepted constructive feedback in a positive manner" at times and scored more highly in this area at others. They also displayed mixed results on the Science Teaching Efficacy Belief Instrument (STEBI). For teacher candidate number seven, instances of a fixed

mindset were slightly more prevalent than those indicating a growth mindset. This candidate was continually marked lower in the areas of "Implements the recommendations from evaluations of professional performance" and "Demonstrates maturity and accepts constructive criticism in a positive manner" on field experience evaluations.

Dependable, high personal expectations. Being dependable with high personal expectations was displayed by teacher candidates in their fieldwork and university courses. Professionalism was also included in this dispositional area. Cooperating teachers who supervised the first semester's field placements consistently indicated teacher candidates were "dependable" and "punctual" on clinical experience field placement evaluations. One cooperating teacher wrote a comment stating, "X is always there before her scheduled time and consistently stays later than required". The researcher also noted most teacher candidates were present and punctual in their university courses and fieldwork during the second semester. Observational notes state, "All teacher candidates were gathered in the hall as they waited for Dr. X to address them before practicum began."

Twelve of the thirteen individual teacher candidates displayed dependability consistently. Only teacher candidate number three had dependability concerns in both fieldwork and university coursework. This candidate displayed the most difficulties with dependability in university coursework. For this teacher candidate, it was documented assigned work was often late or missing and significant attendance concerns were identified for this teacher candidate in three of the courses included in data collection as well as in second semester fieldwork.

High personal expectations were exhibited by teacher candidates in university coursework, personal reflections, and interviews. Candidates stated they were hardworking with statements like, "I love taking on any task that is presented to me. Learning has never come easy to me but I am always willing to go the extra mile to accomplish my goals" and "I'm pretty hardworking and determined." In field work reflections teacher candidates also detailed the amount of work and preparation they put into planning for student learning experiences.

The teacher candidate group overall indicated they had high personal expectations. The majority of individual teacher candidates each had a few instances, however, where it was noted they could have been more prepared or put in more effort for a particular project or lesson delivered. Candidates made statements like, "my professional goals would include rehearsing my project more whether its' with a partner or group" and the researcher noted at times candidates' work appeared "minimally prepared" or "unrehearsed". Teacher candidate number six was the only candidate with consistent concerns in the area of high personal expectations. Throughout university coursework, researcher observations and teacher candidate reflections, teacher candidate number six often appeared unprepared for fieldwork as documented in observation notes, felt personally they could have put more effort into coursework and fieldwork, and was noted as unfocused and inattentive during coursework observations.

Teacher candidates consistently displayed professionalism during their fieldwork as specified by cooperating teachers and as noted in researcher observation of fieldwork. Cooperating teachers indicated, "candidate's dress and personal hygiene are appropriate for a school setting" and candidates "[maintain] a consistently positive and professional

demeanor". Written comments were also provided by cooperating teachers supporting teacher candidate professionalism like "X is very professional and courteous" and "X has been very professional". Researcher observations also noted teacher candidates were displayed professionalism in fieldwork experiences. Notes included "[Teacher candidates] walked quietly through the hallways and lined up to wait quietly outside of the classrooms," "were very respectful of the space and when they talked they spoke to one another very quietly" and "seemed very polished and professional".

Of the thirteen teacher candidates in the participant group, ten had only positive instances of professionalism. Cooperating teachers consistently evaluated this group as professional on field evaluations. Of the remaining three candidates, teacher candidate numbers four and five were observed during Science Night as portraying less than professional demeanors towards the school principal and student participants as it was noted they seemed "closed off". Teacher candidate number seven had professionalism concerns noted consistently by the cooperating teacher on field experience evaluations and Science Night observations by the researcher. In addition to appearing closed off and turning their back to individuals at Science Night, this candidate received field evaluations indicating the candidate's dress and personal hygiene were not appropriate for a school setting and the candidate did not maintain a consistently positive and professional demeanor.

Reflective. Teacher candidates were reflective during their first year of professional coursework. Reflection was prominent in teacher candidate field journals, university coursework assignments, fieldwork reflections and fieldwork evaluations. In field journals, teacher candidates shared reflections on their observations of specific

classroom practices and interactions with students. In response to a cooperating teacher's use of a specific math program, one candidate stated:

> The other problem I could see becoming an issue is that all the students can see what levels' their peers are at. While I haven't witnessed any negativity or bullying between students regarding their levels it doesn't mean it isn't happening. This could be easily fixed by making it less public and would avoid a possibility of bullying.

Another candidate reflected on an interaction with a particular student and noted their preconceptions and revisions they needed to make to their perspective:

> I felt this was significant because I had made an observation about a student that was completely wrong. I began to realize that maybe he was so disruptive during the lesson because he was bored. I also continued to check on this student periodically and the second week he finally came to me and asked me a question about his spelling homework. I was very surprised, but maybe he just needed to get to know me a little to want me to help him.

Assignments completed for university coursework contained further instances of reflection. As a reflection upon a group presentation project, candidates submitted comments like, "Overall, our presentation was mediocre. We both could have done and said different things to make it more interesting and less boring" and another wrote, "I have come to realize there are still several areas of presenting that I need to improve on, like confidence and eye contact. I also found some strengths that did not really know I had." Teacher candidates also answered questions about their Science Night experience indicating reflection. One candidate shared insights gained regarding student learning, "I

was able to see real time the Conceptual Change Model take place in some of the students. They approached us with their own preconceptions, observed and tested, and some made connections about plant structures to their life." Another candidate conveyed difficulties with lesson delivery in the following statement:

The volume of students coming and going was much greater than that of the students in our peer presentation. Considering the difference, there were just some parts of our lesson plan that did not flow as it should. We intended to open our lesson plan with the reading of a poem related to the moon and its phases, yet it did not work the way we planned. At times, there was just one student and they seemed unimpressed, or there were new students arriving by the second. These issues coupled with the loud echo that made it a bit hard to hear, forced us to drop the reading of the poem.

A third candidate described and reflected upon the impact of a particular interaction with a student in the following comments:

My all time favorite moment was when a little boy put his hand to his heart and told us thank you. All we did was simply give him the cloth track we were using as a different surface. This was important to me because if we as pre-service teachers can make an impact like this on a science/math night, then I questioned myself and what impact I would have on a child in an entire year better yet multiple children that come through my classroom.

Both fieldwork reflections and fieldwork evaluations also illustrated the reflection of teacher candidates. Cooperating teachers reported teacher candidates "[Practice] self-evaluation and reflection" on Clinical Experience Field Placement Evaluations. They also

provided written comments indicating teacher candidates were reflective like, "X is a reflective person and did great taking into account my recommendations." Additionally, as part of an assignment to self-evaluate video lessons, one teacher candidate wrote, "Seeing how an experienced teacher uses these assessment methods in her classroom and how beneficial they are for instant feedback proves the worth of informal assessments in the classroom." Another candidate wrote the following in a reflection:

But, the number one thing I need to take in to consideration is that every kid will come to me at a different level of knowledge. With that in mind looking into the future knowing I want to teach lower grades I must be prepared to have differentiated instruction in all aspects of teaching. Whether it be for numbers, reading, letters, or even tying shoes.

Almost all teacher candidates were consistently reflective with only teacher candidates numbers five and seven displaying some difficulties in reflection. The cooperating teacher for teacher candidate number five indicated struggles with reflection early, but later marked the candidate was reflective. Teacher candidate number seven was continually evaluated as struggling in the area of reflection and exhibited a lack of reflection in coursework, personal reflections and fieldwork journals.

Self-efficacy. The area of self-efficacy displayed a less solid pattern. While positive displays of self-efficacy were slightly more prevalent than difficulties with self-efficacy, the data collected revealed teacher candidates still had significant struggles with this disposition. Teacher candidates, cooperating teachers, and researcher observations all noted issues with nervousness, confident delivery of lessons, and apprehension regarding the teaching of particular subjects. In reflections, teacher candidates made comments

about their nervousness and lack of confidence with statements like, "When I first started reading, I was nervous, and I could hear it in my voice" and "One struggle that I still have is that I am not very confident when I am speaking. I need to be more authoritative when speaking to the students." Cooperating teachers reported some candidates had difficulty conducting "class with poise, confidence, and enthusiasm" and noted lack of self-efficacy in their written comments with statements like, "X will make a wonderful teacher. She did a nice job working with my students. As her confidence builds and she gets more classroom experience she will do fine." In researcher observation of lessons, some candidates had challenge in the area of self-efficacy and made notes like, "The low energy and lack of confident presentation was noted in the observation".

For other candidates, or at other times during the data collection period, cooperating teachers indicated teacher candidates were able to "Conduct class with poise, confidence, and enthusiasm" and on lesson evaluations cooperating teachers often noted teacher candidates had strong voice, desired speed, enthusiasm, and accurate oral and written communication. Cooperating teachers also noted teacher candidates had a "positive presence in the classroom". At times, teacher candidates also indicated they were confident in their lesson reflections making statements like, "I also had confidence when answering questions and giving directions. I think this is something that is so important as a teacher because you are the role model and kids are looking towards you for guidance" and "I felt comfortable and natural. I feel like I belong in the classroom educating and it shows in my calm, collected nature in the video".

Self-efficacy among individual teacher candidates was also mixed. Five of the teacher candidates in the participant group displayed consistently strong confidence.

There were four teacher candidates for whom instances of confidence and difficulties with confidence were equally noted and four teacher candidates who clearly struggled with confidence overall. Teacher candidate numbers one, three, five, and seven had struggles with self-confidence noted by cooperating teachers in field work and by the researcher in fieldwork observation. Struggles were also indicated in university coursework and personal reflections by teacher candidates.

Dispositions Related to Students

The category of dispositions related to students includes teacher candidate beliefs, attitudes and ideas about students. Clear themes emerged in this area for meeting students' needs, caring and positive interactions (see Table 4). Many instances were coded for these dispositions in the data. See students as able was varied as teacher candidates exhibited the belief all students could learn but at times, did not appear to see student as able, worthy and dependable at others. Mixed results in the area positive and collaborative classroom management were displayed in equal numbers of positive and negative instances for this disposition.

Table 4

Overall Dispositions Related to Students

	Dispositions Related to Students
Clearly Indicated	- Meet students' needs - Caring - Positive interactions
Mixed Results	- See students as able - Positive and collaborative classroom management

Meet students' needs. Meet students' needs was the most prevalent disposition in the area of dispositions related to students. Teacher candidates noted they recognized and sought the benefits of meeting students' needs in reflections, fieldwork journals, university coursework and interviews. Candidates noted particular strategies supporting students' needs and shared personal goals to include various students' needs in their work with students. In an interview, Xavier, teacher candidate number eleven, he stated:

> You know every student has their own personal capacity and so I think I just need to remember that X student is not going to be the same as a student and I can't hold either one to each other's standards. So, I just have to try to make accommodations and get them as far as they can get.
>
> Another candidate wrote in a field reflection:
>
> Being able to work one on one with a student has helped me realize that students need variations in delivery methods. I would often have to reword problems for this student. I think this will help me in the future as I will try to come up with more than one way to teach a subject.

Cooperating teachers and researcher observations also documented the use of differentiation in the classroom to support students. In lesson evaluations, cooperating teachers indicated teacher candidates were "aware of and make adjustments for learner needs" and field experience evaluations specified teacher candidates select "materials and activities consistent with the objectives of the lesson and students' diverse abilities resulting in appropriate adaptations and modifications". Written remarks provided by cooperating teachers on lesson evaluations and field experience evaluations also supported the use of differentiation by teacher candidates. These included comments like,

"X gave clues to help those struggling and led them to success" and "X helped a variety of students, by reading to them, give problem solving strategies, and helping students correct mistakes".

The researcher also noted in observations teacher candidates were able to meet the needs of various students by rephrasing directions or questions, providing individualized support and adapting strategies to students. At Science Night the researcher documented, "Candidates worked well with a wide variety of students and age ranges which included older and younger siblings and parents."

Of thirteen participants, nine teacher candidates were strong in meeting students' needs. These candidates had both positive ideas about the use of differentiation and positive experiences in meeting students' needs. Three candidates, numbers eight, ten and twelve, displayed some mixed results in the area of meeting students' needs. While they had positive ideas about differentiation and some positive experiences implementing differentiation, they also had specific difficulties implementing strategies to meet students' needs as indicated by cooperating teachers and the researcher on lesson plan evaluations, on field experience evaluations and during observations. Teacher candidate number three had many challenges meeting students' needs as noted by the cooperating teacher, researcher and the teacher candidate themselves. This candidate had difficulty responding to the needs of individual students and making adjustments, adaptations and modifications throughout the data collection period.

Caring. Among all dispositions, caring was the only disposition noted with exclusively positive instances. However, this disposition was not noted for all teacher candidates. For candidates whom displayed this disposition, it was displayed in university

coursework, fieldwork journals, personal reflections and interviews by teacher candidates. Candidates stated personal goals like, being "A person that is empathetic and cares about [students'] future(s)" and "I want to be able to help as many kids as I can and be a positive person in their life." They also exhibited caring in fieldwork journals and reflections as demonstrated in thoughts about their field placements like the following:

It was great to spend more time getting to know the students. They all told me stories and wanted me to play with them. After I sat back down with my cooperating teacher, a group of girls came over to talk with me. I have spent some time getting to know them all and look forward to seeing them perform in the talent show on Tuesday. I think saying goodbye is going to be difficult for me.

Only two teacher candidates, numbers one and four, had no instances of caring indicated in the data coded. While it cannot be concluded these two candidates did not care for students, it is important to note in the data collection period, no instances of caring were evident in the data gathered.

Positive interactions. Positive interactions was also a strong disposition in the area of dispositions related to students. Cooperating teachers noted teacher candidates listened "carefully to all students then [respond] in a professional manner," on field evaluations and submitted supporting comments like, "Many of my students struggle with reading and have difficulties following both oral and written instructions. She stays calm and gently encourages them" and "X made sure to praise them when she could but also encourage them when they had trouble with a problem". Teacher candidates and the researcher noted positive responses to students in reflections and observation notes.

Candidates reflected on their experience with students and shared remarks like the following:

> Once he was finished, he asked me if he was done. I let him know he needs to feel confident in his own work and check it himself first before taking it up, but it looked good. I praised him for his effort and persistence and asked him how it felt to complete the assignment on his own

The researcher also documented teacher candidates positively responded to, encouraged and guided students throughout fieldwork observations noting instances like, "X was encouraging and kind as the student answered questions and retold from the book" and "X reinforced student answers by smiling, restating and adding on to the answers".

Of the participants, eight consistently had positive interactions with students. Four candidates, numbers three, five, seven, and nine, revealed mixed results in this area with some difficulty interacting positively as noted by cooperating teachers, the researcher and candidates themselves. Teacher candidate number one had mostly struggles with positive interactions documented consistently in researcher observations.

See students as able. This disposition reflects the attitudes and beliefs of teacher candidates towards their elementary students and revealed interesting and contradictory information. In some instances, this disposition was exhibited by teacher candidates who indicated a strong belief all students can learn. This was noted by cooperating teachers on field experience evaluations and in teacher candidates' reflections. Cooperating teachers indicated teacher candidates persisted "in helping all students achieve success" consistently throughout the data collection period. Teacher candidates also indicated this

belief with statements like, "in my future classroom I am going to be eager to find strategies that will help my students learn to the way that is best for them" and "I believe that every students can learn if we put in our effort and the students put in theirs".

However, at times, teacher candidates didn't apply those beliefs to their actions in the classroom as noted by cooperating teachers and the researcher. Cooperating teachers reported some candidates didn't encourage students to access higher level thinking in lessons. The researcher also noted at times teacher candidates didn't support the learning of all students at a high level in fieldwork observations. In field journals, university coursework and reflections, teacher candidates themselves displayed mixed conceptions about students' ability to learn and function at a high level. Responses on the STEBI revealed some candidates did not believe some "underachieving students" were able to learn science effectively. Science Night reflections also contained mixed statements about student ability as some candidates made statements like the following:

> One preconception I had was that the majority of students were not going to be able to fully understand the science behind our two activities. I assumed they would grasp the overall concept and maybe a couple details pertaining to clouds but that most students would struggle especially students in Kindergarten or younger.

Only teacher candidate number seven exhibited consistent concerns for this disposition. This was noted on field evaluations, field journals and university coursework. This candidate did not "[persist] in helping all students achieve success", did not deliver instruction at a level which indicated a strong beliefs about student learning abilities. Half

of the remaining teacher candidates consistently displayed a belief that *Students are Able* while the other half exhibited some struggles with this disposition at times.

Positive and collaborative classroom management. Teacher candidates displayed mixed results for positive and collaborative classroom management. Positive and negative instances were almost equal for this disposition. In fieldwork journals, teacher candidates recounted instances in which they were able to successfully handle what might have been a difficult situation in terms of classroom management but also noted difficulties in effectively addressing classroom management in fieldwork. Cooperating teachers reported at times "students were always on task and engaged" on lesson evaluations while also documenting at other times "some students are not on task or not engaged". Cooperating teachers also indicated some teacher candidates were able to "[monitor] students' behaviors and activities in the classroom at all times," "[teach and reinforce] classroom expectations, rules, routines, and procedures fairly", and "[accomplish] smooth and orderly transitions between parts of the lesson" while indicating others struggled in these areas. Comments like, "she does great at monitoring behavior while I'm teaching" on field evaluations supported this disposition whereas suggestions for improvement with classroom management strategies illuminated teacher candidate difficulties. Teacher candidates and the researcher also noted positive experiences with classroom management during fieldwork as well as specific difficulties with classroom management while teaching or interacting with students in the classroom.

Three teacher candidates, numbers one, three and seven, had clear patterns of difficulty with positive and collaborative classroom management. This was indicated in teacher candidate reflections, cooperating teacher evaluations and researcher

observations. Of the remaining candidates, six had mixed results in this area with some difficulties with positive and cooperative classroom management but also some experiences successfully navigating classroom management. Four candidates, numbers four, five, six, and nine, had very clear patterns of positive and collaborative classroom management noted in various forms of data.

Dispositions Related to Teaching

Dispositions related to teaching include ideas about teaching and education teacher candidates have and exhibit through their behavior. Within dispositions related to teaching, balance academic and interpersonal goals, focus on people and education has a higher purpose were the most prevalent dispositions displayed by teacher candidates (see Table 5). The dispositions with mixed results in the area of dispositions related to teaching were involved, interactive, enthusiastic; and monitor learning. While positive instances did slightly outweigh negative instances, teacher candidates displayed a significant numbers of difficulties in these areas.

Table 5

Overall Dispositions Related to Teaching

	Dispositions Related to Teaching
Clearly Indicated	- Balance academic and interpersonal goals - Focus on people - Education has a higher purpose
Mixed Results	- Involved, interactive, enthusiastic - Monitor learning

Balance academic and interpersonal goals. The clearest trend in the area of dispositions related to teaching was the desire to balance academic and interpersonal

goals. Teacher candidates indicated in assignments submitted for university courses, field journals, field reflections, and interviews they desired to balance students' academic goals with other developmental areas of need. Learning community guidelines for Primary Reading practicum incorporated social emotional targets as well as expectations for academic effort with lists like, "Be Kind, Be Respectful, Be Honest, and Do Your Best". Other work stated explicitly the need to attend to various goals as candidates submitted statements like the following:

> My job as a future educator will be to educate my students in all aspects of life and not just school related subjects. No matter what age I teach my main goal will be to get them prepared for the next chapter/grade of their lives

> Candidates also indicated they wished to understand students in fieldwork

experiences beyond academic performance as they made comments about how best to reach students to help them be successful. One candidate said:

> Working with this student on this assignment served to develop a relationship and build confidence. I also believe I utilized concepts of social learning theory with him. I did not do much beyond guiding him and show him a new method to one type of problem, but through positive words I think it boosted his sense of self efficacy a little and hopefully that experience will spill over into other facets of his life as I continue to work in his classroom and with him.

> All of the teacher candidate participants indicated a strong orientation to the

disposition to balance academic and interpersonal goals. There were only a few isolated instances where teacher candidate focus seemed limited to academic goals.

Focus on people. Focus on people was also clearly represented in teacher candidates' dispositions in the area of teaching. Teacher candidates exhibited positive attitudes about and positive instances of collaboration, communicating effectively and interacting respectfully and positively with others. Personal reflections submitted by teacher candidates included statements like, "one of the strengths I have is that I am very adaptable, and I can work with other people well" and "we were very collaborative with each other and listened to one another's opinions." On field experience evaluations and lesson plan evaluations cooperating teachers reported candidates "[communicated] effectively, appropriately and professionally in all forms and to all audiences." The researcher also documented teacher candidates as collaborative and having positive interactions in coursework observations.

Seven of the teacher candidates in the cohort displayed strong people focused dispositions related to teaching. Teacher candidate numbers six, seven and eight exhibited some instances of a people focused disposition while at other times they struggled with collaboration or communication. The remaining three teacher candidates, numbers one, three and five, struggled with effective communication as noted by cooperating teachers, the researcher and teacher candidates themselves.

Education has a higher purpose. Teacher candidates overall exhibited the disposition education has a higher purpose. Teacher candidates were able to consistently create relevancy and make real world connections in their university coursework and fieldwork, but did exhibit some difficulty in reliably including high levels of critical thinking in lessons. In university coursework and interviews, candidates mentioned the desire to extend their impact on students beyond the classroom. One teacher candidate

wrote the following on an assignment for Elementary School Science, "I would like to find ways to expand my students' learning outside of the classroom, giving them opportunities to learn more of what interests them." Xavier, teacher candidate number eleven, shared in an interview intentions in the classroom were "to build strength and character in students" while also "educating them academically." This candidate wanted "to instill a strong work ethic. Teach kids to work hard be reliable dependable and have a good moral compass."

Researcher observations indicated teacher candidates often set a purpose for lessons taught, brought in familiar examples or tied lesson concepts, created personal connections for students. Teacher candidates also recognized their use of relevancy and real world connections in reflections and university coursework. One candidate discussed the use of a local landmark in a lesson as they stated, "I used [this location] because I felt that with it being a prominent landmark for the area, it could pique student interest." Only teacher candidate number one had difficulty making real-world connections for students and struggled to clearly draw relevancy to students' attention.

Inclusion of deep and critical thinking in lessons was more mixed in relation to this disposition. On lesson evaluations and field experience evaluations, cooperating teachers noted most often, "lesson includes a variety of levels of thinking skills" and teacher candidates were able to deliver lessons which included "a variety of levels of thinking skills". In contrast, it was often documented in researcher observations critical thinking levels of lessons delivered by teacher candidates were low and did not require higher-level thinking. Observation notes like, "Low critical thinking, very little support for students in deepening their understanding of the concepts" were common for

fieldwork observations. In Science Night reflections, teacher candidates also displayed mixed dispositions as some listed depth of thinking as a strength of their station and others stated they should have included more critical thinking and reflection.

Only three of the teacher candidates, numbers two, four, and thirteen, in the participant group consistently displayed the ability to include deep and critical thinking in lessons. Nine of the remaining teacher candidates had mixed results in this area. Candidate number ten had very few instances of using deep and critical thinking in lessons as it was noted by the cooperating teacher and researcher in lessons the teacher candidate limited instruction to low levels of thinking.

Involved, interactive, enthusiastic. While there were many positive instances of teacher candidates being involved, interactive, and enthusiastic, there were still notable challenges in this area for teacher candidates. Most teacher candidates indicated the disposition toward involved and interactive teaching, but some lacked enthusiasm from time to time.

Teacher candidates exhibited beliefs teaching should be involved and interactive in field journals, university coursework and interviews. In an interview, Bob, teacher candidate number six, shared perceptions of an effective teaching by stating the following:

I've kind of pictured myself …being just kind of upbeat and trying to engage the students instead of sitting at my desk reading off the white board. I'll be able to walk around my classroom and engage each student or at the table students and be just be up and around and want them to learn I guess make them want to learn.

In personal reflections, teacher candidates also indicated strengths in transferring this belief to their field experiences. Candidates made statements like, "Overall, I feel that my strengths were getting the students engaged in the beginning, keeping their attention during the reading, and having them think during and after the reading" and "I was able to gain my students' attention and keep them focused on what I was teaching them."

Cooperating teachers noted for some teacher candidates, "enthusiasm was evident throughout the presentation" while for others, "enthusiasm was evident some of the time" or "enthusiasm was not evident" on lesson evaluations. Mixed feedback was also given on field experience evaluations as markings for, "shows interest and enthusiasm for teaching and learning" and "conducts class with poise, confidence, and enthusiasm" varied greatly. Researcher observations and teacher candidate reflections on lesson videos were also wide-ranging. At times, observation notes indicate enthusiasm with statements like, "X seemed to have energy and confidence as he presented" while at other times, notes reflect difficulties such as, "voice wasn't very engaging, not a lot of excitement or energy in her delivery". Teacher candidates' reflections also varied with some stating, "Another struggle I had was being unenthusiastic" as others shared enthusiasm as one of their strengths.

Four teacher candidates, numbers three, five, six and nine, displayed involvement, interaction and enthusiasm as some points and needed more of these characteristics at other points. Of the remaining nine teacher candidates, eight had clearly strong patterns for this disposition. Only teacher candidate number one exhibited consistent difficulties displaying involvement, interaction and enthusiasm. This teacher candidate received comments on field experiences evaluations reporting concerns regarding enthusiasm in

the classroom and noted energy and enthusiasm were areas of personal difficulty. The researcher also documented in observations a consistent struggle with this disposition.

Monitor learning. Teacher candidates also had contradictory results related to the disposition monitor learning. In video lesson reflections, teacher candidates affirmed monitoring learning was at times a strength and at others a weakness. Teacher candidates made statements like, "Throughout my lesson, I made sure to walk by every table when the students were working to make sure they were understanding and doing the lesson correctly" and "something I struggled with was checking for student understanding".

Researcher observations and cooperating teacher feedback also indicated mixed results. Observation notes recorded positive instances of monitoring learning like, "X circulated while students worked to support those who were struggling at the beginning of the work on the worksheet" but also difficulties monitoring learning like, "X walked around to monitor students, but did not check in on their thinking. Several students had their hands raised with questions, but X chose to move on without helping them to understand the task or answer their questions". Cooperating teachers reported some candidates monitor "student learning throughout lesson and adjusts as necessary" and provide "focus on important points and checks for understanding" while others simply did not.

These mixed results are reinforced in individual teacher candidate data. Nine of the thirteen teacher candidates shared almost equal positive and negative instances of this disposition. Only two teacher candidates, numbers two and four, were consistently able to monitor learning while the remaining two teacher candidates, numbers one and three, had overwhelming difficulties monitoring learning.

Overall Trends for Individual Teacher Candidates

Throughout the area of dispositions related to self, no individual teacher candidate exhibited clear, positive patterns for all of the dispositions discussed (see Table 6). Three teacher candidates, numbers four, nine and eleven, were strong in all but one disposition individually. Teacher candidates, numbers four and eleven displayed some mixed results for dependable, high expectations while data collected for teacher candidate number nine revealed contradictions in self-efficacy. Most of the remaining teacher candidates displayed varied results in the area of dispositions related to self with some clear strengths in specific dispositions and mixed results for others. A few teacher candidates, numbers one, three, five and seven presented a few specific areas with challenges. These areas, however, were not consistent for the group and varied among candidates. Teacher candidate number seven had the most difficulty with dispositions related to self and exhibited challenges for continuous learning, growth mindset; reflection; and self-efficacy. Individual teacher candidate dispositions for each of the dispositional themes are detailed in tables for each of the dispositional areas in Appendix E.

Table 6

Individual Dispositions Related to Self

Number of Teacher Candidates	Positive Trends	Mixed Results	Negative Trends/ Challenges
Dispositions Related to Self			
-Dependable, high personal expectations	8	5	0
-Strong self-efficacy	5	4	4
-Continuous learner, growth mindset	9	3	1
-Reflective	11	2	0

Individual teacher candidates exhibited more mixed results in the area of

dispositions related to students (see Table 7). Teacher candidate numbers one, three and

seven were the only candidates with concerns for specific dispositions in the area of

dispositions related to students. Each of these teacher candidates exhibited difficulties in

two of the dispositions in this area. Teacher candidate numbers four and nine had the

clearest patterns of positive instances for dispositions related to students while the

remainder of teacher candidates had mixed results for these dispositions.

Table 7

Individual Dispositions Related to Students

Number of Teacher Candidates	Positive Trends	Mixed Results	Negative Trends/ Challenges	Not Indicated
Dispositions Related to Students				
-Caring	11	0	0	2
-Positive and collaborative classroom management	4	6	3	
-Positive interactions	8	4	1	
-See students as able	6	6	1	
-Meet students' needs	9	3	1	

Dispositions related to teaching also displayed mixed results for most teacher

candidates (see Table 8). The clearest patterns for dispositions related to teaching were

displayed by teacher candidate number four with strong trends for each disposition. Four

teacher candidates, numbers one, three, five, and ten had difficulties with at least one

disposition in this area. The most frequent area of difficulty for individual teacher

candidates was focus on people followed by monitor learning. The remainder of the

teacher candidates had both mixed and positive instances of dispositions related to teaching.

Table 8

Individual Dispositions Related to Teaching

Number of Teacher Candidates	Positive Trends	Mixed Results	Negative Trends/ Challenges
Dispositions Related to Teaching			
-Balance academic and interpersonal goals	13	0	0
-Involved, interactive, enthusiastic	8	4	1
-Education has a higher purpose	3	9	1
-Monitor learning	2	9	2
-Focus on people	7	3	3

Overall, teacher candidate dispositions were varied for the cohort when analyzed over all three areas, self, students and teaching. The strongest dispositions were exhibited by teacher candidate number four who had the most positive instances for all dispositions in all three areas. Teacher candidate numbers one and three displayed the most struggles with challenges indicated for at least one disposition in each area. It was also noted teacher candidates five and seven had difficulties in at least one disposition for two of the areas. For all other teacher candidates, results across areas and dispositions remained widely varied.

Findings for Question 2

Q2   Do the dispositions exhibited by junior elementary teacher candidates change or develop over the first year of professional coursework? If so, how do they change or develop?

Question 2 seeks an understanding of how the dispositions of teacher candidates might change over time and was analyzed by separating coded data into four time periods

representing four quarters of the year-long data collection period. Open codes and values

codes for each dispositional theme were analyzed and compared for each quarter. Quarter

to quarter trends are reviewed overall for the group of teacher candidates in each of the

dispositional areas below. There were not enough coded instances, however, to analyze

specific codes and themes for each individual teacher candidates from quarter to quarter.

Dispositions Related to Self

In the area of dispositions related to self, Continuous learner, growth mindset;

dependable, high personal expectations; and reflective produced the strongest trends (see

Table 9). Continuous learner, growth mindset and dependable, high personal expectations

appeared as characteristics of candidates in each of the quarters examined. Reflective was

positive in all of the quarters of data in which it was present, however this disposition

could not be tracked through all quarters. Due to the nature of the data collected,

reflective instances were not present in data for quarter three. The lack of teacher

candidate reflections and field experience limited the opportunities to assess these

dispositions. Self-efficacy rendered the most mixed results as contradictions in teacher

candidate dispositions in this area were noted in all quarters.

Table 9

Dispositions Related to Self by Quarter

Time Period	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Clearly Indicated	-Continuous learner, growth mindset -Dependable, high personal expectations -Reflective	-Continuous learner, growth Mindset -Dependable, high personal expectations -Reflective	-Continuous learner, growth mindset -Dependable, high personal expectations	-Continuous learner, growth mindset -Dependable, high personal expectations -Reflective
Mixed Results Not Present in Data	-Self-efficacy	-Self-efficacy	-Self-efficacy -Reflective	- Self-efficacy

Researcher observations and cooperating teacher evaluations noted strengths in

continuous learner, growth mindset and dependable, high personal expectations

throughout all four quarters of data. Throughout the data collection period, cooperating

teachers noted teacher candidates were willing to learn and teacher candidates made

statements about their desire to improve and grow over time. Most teacher candidates

were punctual, dependable, and professional and displayed high personal expectations in

university courses and fieldwork. In the three quarters reflective instances were present

(quarters one, two and four), teacher candidates engaged in reflective thinking in personal

reflections and as reported by cooperating teachers.

The only disposition which remained mixed throughout the data collection period

was self-efficacy. Teacher candidates displayed contradictions in their confidence in all

four quarters. In personal reflections and university coursework, teacher candidates noted

nervousness and lack of confidence. Cooperating teachers and researcher observations in

quarters one and two also indicated a wide variety in the levels of confidence between teacher candidates at various times. In the third and fourth quarters, strengths as well as challenges for this disposition were noted in interviews, teacher candidate reflections and researcher observations.

Dispositions Related to Students

Meet students' needs and caring were the most prevalent themes in the area of dispositions related to students (see Table 10). Positive interactions was also positively indicated in the quarters where codes for this disposition were represented. Again, without field experiences and teacher candidate reflections, the nature of the data collected for quarter three limited the ability to track this disposition over all four quarters. See students as able is less positively indicated over time with strong representation in quarters one and two but mixed results in quarters three and four. Instances related to positive and collaborative classroom management revealed teacher candidates displayed mixed levels of this disposition throughout quarters one and two but exhibited strengths in this area in quarter four. Positive and cooperative classroom management was not tracked over quarter three due to the lack of fieldwork in this quarter.

Table 10

Dispositions Related to Students by Quarter

Time Period	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Clearly Indicated	- Meet students' needs - Caring - Positive interactions - See students as able	- Meet students' needs - Caring - Positive interactions - See students as able	- Meet students' needs - Caring	- Meet students' needs - Caring - Positive interactions - Positive and collaborative classroom management
Mixed Results	- Positive and collaborative classroom management	- Positive and collaborative classroom management	- See students as able	- See students as able
Not Present in Data			- Positive interactions - Positive and collaborative classroom management	

Throughout all field experiences, university coursework, and personal reflections, teacher candidates indicated they understand the value of meeting students' needs. Teacher candidates sought to differentiate for students and attempted to implement differentiation throughout all quarters of data collection. Cooperating teacher comments and evaluations as well as researcher observations also documented the successful support of student needs in fieldwork. Caring was similarly positive throughout all quarters of data, but with fewer instances than meet students' needs. Teacher candidates' goals, reflections and journals displayed caring and empathy for students. In quarters one, two, and four, Positive Interactions was also indicated strongly throughout researcher observations of fieldwork. Additional instances were also present in teacher candidate lesson reflections and cooperating teacher evaluations for quarters one and two.

Dispositions related to positive and collaborative classroom management revealed mixed results in quarters one and two but then appeared as strength for teacher candidates in quarter four. Reliance on researcher observations and university coursework resulted in no opportunities to gather data on this disposition over quarter three. Difficulties with positive and cooperative classroom management were noted by teacher candidates in some field journals and lesson reflections in the first two quarters while others indicated they had strong experiences with classroom management during these quarters. Feedback from cooperating teachers in evaluations and comments submitted was also varied. Researcher observations further confirmed these contradictions logging success with classroom management at times and teacher candidate difficulties in other instances. Teacher candidates displayed strengths in this area in quarter four fieldwork through

researcher observations as instances of effective classroom management were documented.

See students as able presented an interesting pattern over the four quarters of data. In the first two quarters, this disposition is displayed strongly by teacher candidates as noted in their field journals, in researcher observations and by cooperating teachers on field experience evaluations. In quarters three and four however, there are contradictions presented in data collected. In coursework and reflections associated with Elementary School Science, teacher candidates indicated they did not consistently hold the belief all students could learn. On the STEBI, some teacher candidates reported they did not expect low achieving students to learn science effectively. Teacher candidates also displayed mixed beliefs about students' ability to learn as they discussed difficulties in teaching the science material for Science Night to particular groups of students.

Dispositions Related to Teaching

In the area of dispositions related to teaching, the most common disposition displayed was Balance academic and interpersonal Goals (see Table 11). This disposition was demonstrated throughout all four quarters of data. Other trends were in dispositions related to education has a higher purpose, focus on people and monitoring Learning as these dispositions had positive or mixed instances throughout quarters one, two and three and were positively represented in quarter four. Involved, interactive, enthusiastic was positively indicated in early quarters but presents contradictions in quarter four.

Table 11

Dispositions Related to Teaching by Quarter

Time Period	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Clearly Indicated	- Balance academic and interpersonal goals - Focus on people - Involved, interactive and enthusiastic	- Balance academic and interpersonal goals - Focus on people - Education has a higher purpose - Monitor learning - Involved, interactive and enthusiastic	- Balance academic and interpersonal goals - Focus on people - Education has a higher purpose - Involved, interactive and enthusiastic	- Balance academic and interpersonal goals - Focus on people - Education has a higher purpose - Monitoring learning
Mixed Results	- Education has a higher purpose - Monitor learning		- Monitor learning	- Involved, interactive and enthusiastic

Balance academic and interpersonal goals presented the clearest trend over all four quarters. Throughout the data collection period, teacher candidates attended to concerns for balancing the needs of children beyond an academic focus. This disposition was reflected in fieldwork journals and reflections as well as in university coursework in the first two quarters. Attention to intellectual and other goals continued to be expressed in interviews and university coursework in quarters three and four. Also reflected in all four quarters was a focus on people. This disposition was represented in field evaluations, personal reflections and researcher observations through teacher candidates' attitudes towards collaboration, successful collaboration and communication and positive interactions with others.

Teacher candidates displayed mixed dispositions around education has a higher purpose in quarter one as some struggled to make real world connections and create relevancy for students while others were able to successfully display this disposition. Teacher candidates were observed making more real-world connections and creating relevancy more often in lesson delivered in field experiences during quarter two. University coursework and teacher candidate reflections in quarters one and two also conveyed teacher candidate beliefs education has a purpose which reaches beyond the classroom. In quarter three, teacher candidates exhibited this disposition in university coursework and a belief education has a higher purpose remained strongly represented through reflections on Science Night experiences and researcher observations of fieldwork in quarter four.

Monitor learning also presented mixed results for quarter one. In this quarter, cooperating teachers reported some candidates had difficulty providing checks for

understanding and monitoring learning during lesson delivery while others were able to monitor learning effectively. Researcher observations of lessons in this quarter also indicated some difficulties monitoring learning in this quarter. In quarter two data, teacher candidates presented strength in this area with positive feedback from cooperating teachers and positive instances noted by the researcher in observation. Quarter three again presented mixed results. Due to the lack of fieldwork in this quarter, insight into teacher candidate dispositions in this area were gained through interviews and university coursework. Some candidates indicated they understood the importance of monitoring learning during instruction and described strategies to do so with statements like, "Science notebooks are also beneficial to teachers, as they offer a convenient way for teachers to view and assess a student's development and thinking process." Others, however, revealed they were unsure how to apply specific monitoring strategies. In the final quarter of data, monitoring learning reappears as a strength for teacher candidates. Teacher candidates wrote about the importance of monitoring learning and successful experiences monitoring learning in university coursework and reflections.

Involved, interactive, enthusiastic was clearly displayed in quarters one, two and three but presented mixed results in quarter four. Teacher candidate reflections, cooperating teacher evaluations and researcher observation notes all indicated for some teacher candidates enthusiasm was a strength at times, while for others or at other times, enthusiasm was not displayed in fieldwork. In quarters one, two and three, teacher candidates exhibited strong patterns of involvement, interaction and enthusiasm as noted in cooperating teacher evaluations of fieldwork and lessons presented as well as in researcher observation notes. Teacher candidates made statements regarding

involvement, interaction and enthusiasm on university coursework and in reflections. Contradictions in this area appear in quarter four. Some candidates were documented displaying strong involvement, interaction and enthusiasm in fieldwork in researcher observations while it was noted others needed to exhibit more enthusiasm when working with students.

Overall, dispositions related to self are most consistent and strongly represented with consistent patterns across all four quarters. Within this area, self-efficacy remains mixed throughout, but the other dispositions related to self remain constant and positively indicated. Three of the dispositions related to students, meet students' needs, caring and positive interactions also present clear consistent trends across all four quarter. However, in this area, there are changes in positive and collaborative classroom management and see students as able over time. Teacher candidates showed improvement in classroom management but exhibited more struggles related to beliefs about students. Variance in dispositions over time is also present in the area of dispositions related to teaching. Balance academic and interpersonal goals and focus on people are clearly displayed in all four quarters. Two dispositions, education has a higher purpose and monitor learning become more positively indicated over time, although monitor learning does continue to vary until quarter four. Teacher candidates were less likely to display involvement, interaction and enthusiasm in quarter four indicating increased struggles for this disposition.

Summary

This chapter highlighted the results of this study as related to each specific research question. These results illuminated the dispositions of elementary teacher

candidates over their first year of professional coursework in the areas of dispositions related to self, dispositions related to students and dispositions related to teaching. Qualitative case study was used to gather data from university coursework, teacher candidate fieldwork, fieldwork observations, coursework observations and teacher candidate interviews. The varied data collection allowed the researcher to gain a holistic view of teacher candidate dispositions. Strong dispositions present for this group of teacher candidates in the area of dispositions related to self were continuous learner, growth mindset; dependable, high personal expectations; and reflective. In the area of dispositions related to students, meet students' needs, caring, and positive interactions presented clear trends. The third area, dispositions related to teaching, indicated strong patterns for balance academic and interpersonal goals, focus on people, and education has a higher purpose. Some dispositions revealed contradictory results for teacher candidates over the first year of coursework. These were self-efficacy; see students as able and positive and collaborative classroom management; involved, interactive, enthusiastic; and monitor learning.

Dispositions were further analyzed for their presentation by the group of teacher candidates over the four quarters of data collection. Dispositions related to self remained consistent over time. Dispositions related to students and teaching were more variable. Notably, positive and collaborative classroom management, education has a higher purpose and monitor learning showed improvements over time while see students as able and involved, interactive, enthusiastic became more contradictory over the data collection period. Individual teacher candidate results were much more varied as most candidates exhibited inconsistencies and contradictions in each area.

Chapter 5 will further discuss these results, drawing conclusions, discussing implications and making recommendations based on the study.

CHAPTER V

DISCUSSION

In this study, qualitative case study methods were used to explore the dispositions of undergraduate elementary teacher candidates over their first year of professional coursework. The goal of this study was to better understand dispositions exhibited by junior elementary teacher candidates and examine if any changes occurred in observed dispositions over the first year of professional coursework. This chapter discusses interpretations of the findings of this study along with implications. Suggestions for future research and limitations of this study are also shared.

Overview

Teacher effectiveness has been linked to student achievement (Coleman, 1966; Goldhaber, 2007; Hanushek, 1992; Nye et al., 2004; Rivkin et al., 2005; Rockoff, 2004). As teacher education programs prepare teacher candidates for the profession, developing effective teachers remains at the forefront of their focus. Dispositions are an important part of this focus and are included explicitly in accreditation standards (CAEP, 2016). When comparing the most effective and least effective teachers, specific dispositional differences have been identified (Collinson, 1996; Combs, 1969; Demmon-Berger, 1986; Holland, 2009; Popp et al., 2011; Taylor & Wasicsko, 2000; Wubbels et al., 1997). However, there is very limited research on the development of dispositions in teacher candidates.

This study was designed to contribute to the body of research on teacher candidate dispositions by examining both the presence of dispositions in junior elementary teacher candidates over the first year of professional coursework and the longitudinal change in teacher candidate dispositions. These research questions guided this study:

Q1   What dispositions are exhibited by junior elementary teacher candidates in the first year of professional coursework?

Q2   Do the dispositions exhibited by junior elementary teacher candidates change or develop over the first year of professional coursework? If so, how do they change or develop?

The following sections provide discussions and implications, limitations and suggestions for future research as driven by the findings for these research questions.

Discussion and Implications

As a general trend, the group of junior elementary teacher candidates participating in this study exhibited dispositions reflecting those of effective teachers in the areas of dispositions related to self, dispositions related to students and dispositions related to teaching. Some specific dispositions revealed contradictions throughout the first year of professional coursework, but overall, the group appeared to display many of the dispositions identified in effective teachers. However, when dispositions were examined as presented by individual teacher candidates, strong contradictions become clear for dispositions related to self, dispositions related to students, and dispositions related to teaching.

The examination of change in teacher candidate dispositions over the first year of professional coursework indicates only a few dispositions vary for this group longitudinally. In the area of dispositions related to self, all dispositions remain static.

Dispositions related to students had some positive development related to classroom management and a negative trend in beliefs about student learning ability. Mixed results were also uncovered in the area of dispositions related to teaching as candidates displayed mixed results in dispositions associated with assessing learning, some growth in beliefs about the purpose of education and struggles in remaining highly interactive and enthusiastic.

All of these findings have important implications for teacher education programs. These implications include how teacher education programs approach and support individuals with contradictions for specific dispositions, provide feedback to support growth and self-efficacy, address undesirable changes, and use teacher candidate screening processes.

Contradictions

The group of teacher candidates in this study had clear contradictions overall in the dispositions of self-efficacy; see students as able; positive and collaborative classroom management; involved, interactive and enthusiastic; and monitor learning. Contradictions in the dispositions of positive and collaborative classroom management appear to lessen for the cohort in the final two quarters of data collection, but the remaining four dispositions continue to present inconsistencies throughout the first year of coursework for this group of junior elementary teacher candidates.

For teacher candidates individually, contradictions are even more prevalent. Individual teacher candidates appear to struggle with more than just the five dispositions indicated in the examination of whole group data and present additional inconsistencies in dispositions identified as dependable, high personal expectations; positive interactions

and education has a higher purpose. These contradictions are displayed in data collected for each individual teacher candidate. At times individuals exhibit both strengths and struggles in a particular disposition. For example, teacher candidate number eight, received positive comments concerning self-efficacy on field evaluations, but shared personal difficulties with confidence in reflections with statements like the following:

> I was so nervous and overwhelmed going into Science Night. I did not feel like I had a solid enough grasp on the content to teach students, and I was worried that I would be so nervous that I would just forget all of the information.

Contradictions were indicated by teacher candidate number nine in involvement, interaction and enthusiasm in both personal reflections and cooperating teacher evaluations. Teacher candidate number nine stated engagement and involvement was a strength in a lesson, but also reflected "One major area that I need to work on is being more enthusiastic when teaching. If I do not show that I am excited about learning, the students will not be excited to learn either." The cooperating teacher also documented in evaluations teacher candidate number nine kept students active and engaged at times but also struggled with engagement and enthusiasm from time to time.

Other contradictions were present when teacher candidate behaviors didn't match their stated beliefs. For example, teacher candidate number two made statements reflecting a belief in students' learning abilities, but later struggled to put this belief into action in lessons. Observation notes indicate teach candidate two did not plan lessons with a strong belief in student ability as the "lesson was low level with copying directly from the example…lesson could have been more impactful to student thinking if they had done more independent thinking." Teacher candidate number twelve, also exhibited

difficulties putting her beliefs about in meeting students' needs into effect. In the final interview, this candidate shared strong beliefs about meeting students' needs:

> I think that it's important to know what your students need based off of their development and their learning ability and you might have to make differentiation plans in class and structure things for them specifically to help them learn the best that they can.

However, difficulties in achieving this goal was noted in lesson plan evaluations, field evaluations and researcher observations as teacher candidate number twelve struggled to successfully differentiate and adjust lessons to meet various students' learning needs.

These contradictions should be important points of focus for teacher education programs as resolving them for individual teacher candidates is critical in the task of developing teachers whose dispositions are most like those of effective teachers. Previous research (Engle, 2017) also found significant inconsistencies in examination of teacher candidate dispositional development. This study shows most often, teacher candidates are not able to resolve these contradictions on their own as a byproduct of professional coursework. While some positive progress was made in the area of classroom management, contradictions were still noted for several teacher candidates in regards to positive and collaborative classroom management in the last quarter of the first year of professional coursework.

Schools of education would be well served by efforts to identify dispositional inconsistencies for teacher candidates early in their teacher education programs. As modeled by this study, dispositional assessments should include teacher candidate perceptions (through reflections, university coursework and individual interactions),

evaluations by professionals (through evaluations and feedback provided by teachers in the field), and observations by teacher education faculty (through coursework interactions, coursework and fieldwork observations, and careful analysis of university coursework). Previous research in the area of teacher candidate disposition assessment reveals reliability concerns about the use of rating scales, rubrics, grade reports, and surveys (Choi et al., 2016; Thornton, 2006) in isolation. The combination of methods, as applied to this research, provides a triangulated, holistic perspective of teacher candidates' dispositions.

After gathering data about teacher candidate dispositions, teacher education programs must take action to address conflicts and struggles for particular dispositions. A targeted, personalized approach would be best applied to addressing and resolving these struggles as dispositional conflicts often vary among individual teacher candidates. Targeted interventions have been shown to be successful for dispositional concerns for individual teacher candidates (Brewer et al., 2011). If a particular concern is noted across the majority of teacher candidates in a particular cohort, a more generalized approach could be utilized, but it would be wise to continue to track the dispositions of individual candidates to ensure contradictions do not persist or reemerge. Specific teacher education strategies and targeted coursework including the use of structured reflections, prolonged and organized exposure to theory and ideology, experiential and applied learning, and open dialogue has been shown to impact dispositions positively (Donovan et al., 2011; Renzaglia et al., 1997) and could be used to support individuals or groups and resolve contradictions.

Providing Feedback

Self-efficacy presented as the disposition with the most contradictions over all four quarters of the first year of professional coursework. Research indicates self-efficacy is among one of the critical dispositions effective teachers display (Combs, 1969; Demmon-Berger, 1986). Because teacher candidates are not yet experienced teachers, some difficulties in the area of self-efficacy are to be expected. However, the continued contradictions revealed for this disposition paired with information gathered from teacher candidates in this study have important implications for teacher educators and teacher education programs. Research on teacher candidate self-efficacy has been previously confined to the development of targeted self-efficacy related to a particular subject area or as a result of a particular teacher education experience (Colson, Sparks, Berridge, Frimming, & Willis, 2017; Cruz, 2017; Engle, 2017; Kissau & Algozzine, 2015). Previous work has identified there is some positive development in self-efficacy over time, however this study indicates contradictions and inconsistencies in self-efficacy persist throughout the first year of professional coursework. Interviews with teacher candidates suggested continued difficulties with self-efficacy were a function of the amount of learning to process and a lack of feedback over the second semester of the first year of professional coursework. All four interview participants made statements about their struggles with self-efficacy in the second semester of coursework.

Haley, teacher candidate number five, shared struggles with second semester coursework:

I just feel like the assignments were too much for the time we were given to do them and I don't exactly feel like some of it is practical for what we're going to be

doing when we're actually in the classroom… Like some of the stuff that we had

to do… we only had a few days to do it and then turn it in… So we didn't have a

lot of time and there wasn't a lot of explanation on what to do and how to do it.

And there is no feedback given on any of it. So I don't even know if we did it

right.

Bob, teacher candidate number six, also commented on the second semester of

coursework and indicated difficulties with confidence:

We haven't gotten any feedback on them and so we're all like sit there wondering

like if we're doing it right…We have no idea what we're doing really. Well a lot

of us feel like that. But I'm sure there's some that feel confident enough to do it

but a lot of us are freaking out about it.

Xavier's and Jessica's comments speak to specific contradictions felt by teacher

candidates in the area of self-efficacy. Xavier, teacher candidate number eleven, shared:

I definitely learned valuable things that would make you a better teacher. I feel

more confident in that regard from day one going through explorations and just

kind of like watching and seeing what you know what a real teacher does. Even

though I kind of felt silly doing that because I've been I've been in multiple

classrooms after graduating and done different things in different capacities…But

I feel less confident because over the last semester, I've gotten the impression that

there is so much more that we will work with that will be mandated to do. But

again I wasn't afforded the time to really understand it. We went through a lot of

things. I feel like for the sake of just doing it that way by the time I graduated I've

got that check in the box…and I've done it whether I know how to do it or not

Jessica's, teacher candidate number twelve, comments were very similar:

> In some ways I've felt more confident. There was a lot of struggles that I thought were really intimidating…that I overcame and it was a wonderful experience. And then maybe [methods classes have] made me feel a little less confident. I haven't done as well as I would like to have. And I just I feel like I did my best but my best wasn't as good as I wanted for this point. I think that it will continue to improve as I practice that more especially once I practice in the real world. But at this point I just feel like I wish that I could have done better so that maybe knocked my confidence down a little bit and made me feel like that I wasn't as strong as I thought I might have been.

The issues of lack of time to process and feedback reoccur in all of the teacher candidates' comments. Teacher education programs should be particularly focused on reducing these difficulties for teacher candidates by structuring programs so adequate feedback is given throughout the program. With little feedback on how well teacher candidates are mastering particular teaching tasks, they are unable to gain confidence in their abilities. Continuous feedback provided to teacher candidates as they experience their professional coursework would support the development of self-efficacy. Thoughtful planning of teacher education courses and experiences should include considerations for pacing of content with sufficient time to process, apply and reflect upon learning to support the development of self-efficacy in teacher candidates. This could help resolve contradictions in this area and allow self-efficacy to be more positively exhibited over time.

Addressing Undesirable Changes

For the dispositions see students as able and involved, interactive and enthusiastic, there were strengths for the teacher candidates in this cohort noted early in the data collection period increased contradictions by the fourth quarter. This indicates an undesired trend as it appears these dispositions become more problematic over time. Trends for negative beliefs in student learning abilities were noted in teacher candidate reflections and university coursework. Teacher candidates shared concerns about students understanding concepts presented and indicated they did not expect low achieving students to learn effectively. Less involvement, interaction and enthusiasm was documented in researcher observations of fieldwork as some teacher candidates appeared to have low energy and engagement throughout Primary Reading Practicum and during Science Night. In the fourth quarter, teacher candidates seemed less likely to believe in student learning abilities and less involved, interactive and enthusiastic in teaching experiences.

It is possible continued difficulties with self-efficacy may contribute to difficulties in these particular dispositions. As teacher candidates struggle with their own confidence, they may, in turn, see student learning as a function of their personal capabilities and thus exhibit less positive beliefs in students' learning abilities. Additionally, a lack of self-confidence could feed reduction in involvement, interaction and enthusiasm in work with students as teacher candidates who do not feel confident are less likely to have high energy and engagement.

As mentioned earlier, teacher education programs should continually assess teacher candidate dispositions to track and address any areas of concern. Dispositional

assessments should include multiple inputs incorporating university coursework, professional evaluations, and teacher education faculty observations. Since see students as able and involved, interactive and enthusiastic presented strongly in the first three quarters, any concerns for these dispositions in individuals or the group as a whole could be addressed and remedied as soon as they were noted. Again, targeted coursework and specific strategies (Donovan et al., 2011; Renzaglia et al., 1997) could be utilized to address concerns in these areas.

Teacher Candidate Screening Processes

Overall, this cohort had few struggles with specific dispositions, both as a group and as individuals. However, there were some concerns for teacher candidate numbers one, three, five and seven. As a whole, the results of this study indicate the screening processes are working for this institution. These processes include teacher candidate disposition assessments completed by university instructors; field evaluations completed by cooperating teachers, university coursework completed for an introduction to education course and a teacher candidate screening interview. If there had been consistent dispositional difficulties for this group or negative overall trends, the screening processes for this institution may have needed to be reviewed or revised. The results of this research reinforce the use of multiple inputs to the teacher candidate screening process that include contributions from university faculty, cooperating teachers and teacher candidates.

<div align="center">

Limitations

</div>

The limitations of this study of dispositions of beginning elementary teacher candidates in an undergraduate program include a solitary focus on one teacher education

program in a particular geographical location and sociocultural orientation. The inclusion of only elementary teacher candidates further limits the application of the results of this study. Additionally, the lack of field experiences and teacher candidate reflections over the third quarter in the data collection period reduce the ability to track some dispositions over this quarter. One final limitation was amount of data collected to track dispositions for each individual candidate over the four quarters of data collection which restricted the analysis of individual data from quarter to quarter.

Further Research

This research explored the dispositions of junior elementary teacher candidates over their first year of professional coursework and sought to understand how dispositions are present and change over time. This study included field observations, university coursework observations and university coursework documents from select teacher education courses, field evaluations, teacher candidate reflections, and interviews. Findings reflected, as a group, junior elementary teacher candidates exhibited many of the dispositions of effective teachers throughout their first year of professional coursework. However, there were many inconsistencies within particular dispositions for individual teacher candidates. These findings indicate there is still much to learn about teacher candidate dispositions and their development.

This sort of holistic, longitudinal research about teacher candidate dispositions is not well investigated. Those studies which approach teacher candidate dispositions from either a longitudinal or holistic approach are limited to single data collection methods. The use of single data collection approaches has been found to be problematic (Choi et al., 2016; Thornton, 2006). Certainly, there is a need for more research in this area as

teacher education programs seek to better understand teacher candidate dispositions and how those dispositions might be developed to better prepare effective teachers. There is much potential for additional research in this area.

Research which includes teacher education programs across various sized institutions in a wide variety of geographic regions and sociocultural settings would expand upon the findings of this research and allow teacher educators to explore the patterns and trends across various institutions with various characteristics. Additionally, an inclusion of secondary undergraduate teacher education programs as well as alternative certification programs at various levels would also widen the scope of teacher candidate disposition research. Researchers could address questions like, Do elementary and secondary teacher candidates exhibit similar dispositions? and How do dispositions for teacher candidates in alternative certification programs compare to those in traditional undergraduate teacher education programs?

In order to increase the depth of understanding for individual dispositions, data could be collected across even more professional courses and fieldwork experiences. The inclusion of more coursework documents, fieldwork evaluations, researcher observations and interviews would result in more information to be gathered for each of the dispositions. This would allow for further analysis of individual teacher candidate dispositional change over time. More insight could be gained from such analysis regarding how particular dispositions are present at particular periods for individuals. This insight might provide answers for questions about inconsistencies and contradictions.

A longer data collection period would also be useful in further exploring teacher candidate dispositions. If teacher candidate dispositions were tracked from entrance to exit in a teacher education program throughout all professional coursework, even more information about dispositions and any change in dispositions over time could be gained. Likewise, teacher candidates could be followed beyond the teacher education setting and into their first classrooms as a professional educator to further track dispositions. This could provide very interesting information about dispositions, how they are operationalized for new teachers and how dispositional change may be present over the first few years of a teacher's career.

REFERENCES

Abernathy, T. (2002). Using a storybook prompt to uncover inservice and preservice

   teachers' dispositions toward struggling students. *The Teacher Educator,* 38(2),

   78-98.

Arnstine, D. (1967). *Philosophy of education: Learning and schooling.* New York:

   Harper & Row.

Bandura, A. (1981). Social cognitive theory of moral thought and action. *Handbook of*

   moral behavior and development, volume 1: Theory (1st ed., pp. 45-103).

   Hillsdale, New Jersey: Lawrence Erlbaum Associates.

Bartlow, A. L. (2017). Dispositions of elementary teacher candidates. Unpublished

   manuscript.

Bloomberg, L. D., & Volpe, M. (2016). *Completing your qualitative dissertation.*

   Thousand Oaks, CA: SAGE Publications.

Brewer, R. D., Lindquist, C., & Altemueller, L. (2011). The dispositions improvement

   process. *International Journal of Instruction,* 4(2), 51-68.

Brooks, J. G., & Brooks, M. G. (1999). In search of understanding: The case for

   constructivist classrooms. Alexandria, Virginia: Association for Supervision and

   Curriculum Development.

Brophy, J., & Good, T. (1974). *Teacher-student relationships: Causes and consequences.*

   New York, NY: Hold, Rinehart and Winston.

Choi, H., Benson, N. F., & Shudak, N. J. (2016). Assessment of teacher candidate dispositions: Evidence of reliability and validity. *Teacher Education Quarterly*, 43(3),71-89.

Coleman, J. S. (1966). *Equality of educational opportunity.* Washington, D.C.: U.S. Government Printing Office.

Collinson, V. (1996). Becoming an exemplary teacher: Integrating professional, interpersonal, and intrapersonal knowledge. A paper prepared for the JUSTEC Annual Conference.

Colson, T., Sparks, K., Berridge, G., Frimming, R., & Willis, C. (2017). Pre-service teachers and self-efficacy: A study in contrast. *Discourse and Communication for Sustainable Education*, 8(2), 66-76.

Combs, A. (1969). *Florida helping studies.* Gainesville: University of Florida Press.

Combs, A. W. (1964). The personal approach to good teaching. *Educational Leadership*, 21, 369-399.

Council for the Accreditation of Educator Preparation. (2016). 2013 CAEP standards. Washington, DC: Council for the Accreditation of Educator Preparation.

Council of Chief State School Officers. (2012). *Interstate new teacher assessment support consortium*. Retrieved from http://programs.ccsso.org/projects/interstate_new_teacher_assessment_and_support_consortium/

Council of Chief State School Officers. (2013). *InTASC model core teaching standards and learning progressions for teachers 1.0.* Washington, DC: Council of Chief State School Officers.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. New Jersey: Pearson Education.

Crotty, M. (2003). *The foundations of social research: Meaning and perspective in the research process*. London: Sage.

Cruz, J. M. (2017). *Investigating the mathematical dispositions and self-efficacy for teaching mathematics of preservice teachers* (Order No. 10264074). Available from ProQuest Dissertations & Theses Global. (1938701919). Retrieved from https://unco.idm.oclc.org/login?url=https://search-proquest-com.unco.idm.oclc.org/docview/1938701919?accountid=12832

Davis, E. B. (2017). *A mixed-methods study of a teacher preparation program: Preservice teachers' perceived preparedness to integrate technology effectively* (Order No. 10278387). Available from ProQuest Dissertations & Theses Global. (1912391634). Retrieved from https://unco.idm.oclc.org/login?url=https://search-proquest-com.unco.idm.oclc.org/docview/1912391634?accountid=12832

Dee, J. R., & Henkin, A. B. (2002). Assessing dispositions towards cultural diversity among preservice teachers. *Urban education,* 37(1), 22-40.

Demmon-Berger, D. (1986). *Effective teaching: Observations from research.* Alexandria, Virginia: American Association of School Administrators.

Denzin, N. K., & Lincoln, Y. S. (2005). Introduction: The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The handbook of qualitative research* (pp. 1-32). Thousand Oaks, CA: Sage Publications.

Dewey, J. (1904). *The relation of theory to practice in the education of teachers*. (In the third yearbook of the national society for the scientific study of education p. 9-

30). Bloomington, Illinois: Public School Publishing Company. Retrieved from:

https://archive.org/details/relationoftheory00dewe

Dewey, J. (1910). *How we think* (1st ed.). Boston: Heath & Co.

Dewey, J. (1922). *Human nature and conduct*. New York: Henry Holt and Company.

Dewey, J. (2004). *Democracy and education.* Kessinger Publishing. (Original work published in 1916).

Donovan, L., Green, T., & Hansen, L. E. (2011). One-to-one laptop teacher education: Does involvement affect candidate technology skills and dispositions? *Journal of Research on Technology in Education,* 44(2), 121-139.

Duplass, J. A., & Cruz, B. C. (2010). Professional dispositions: What's a social studies education professor to do? *The Social Studies,* 101, 140-151.

Egbert, J., & Sanden, S. (2014). Foundations of education research: Understanding theoretical components. New York, NY: Routledge.

Engle, T. L. (2017). *The development of dispositions in a professional development school from the teacher candidates' perspective* (Order No. 10743116). Available from ProQuest Dissertations & Theses Global. (1999343813). Retrieved from https://unco.idm.oclc.org/login?url=https://search-proquest-com.unco.idm.oclc.org/docview/1999343813?accountid=12832

Frederiksen, H., Cooner, D., & Stevenson, C. (2012). Assessing teacher dispositions in pre-service teachers. *Journal of College Teaching & Learning,* 9(1), 39-52.

Freeman, L. (2007). An overview of dispositions in teacher education. In M. E. Diez & J. Raths (Eds.), *Dispositions in teacher education* (pp. 3-29). Charlotte, NC: Information Age Publishing.

Glasersfeld, E. (2005). Introduction: Apsects of constructivism. In C. T. Fosnot (Ed.), *Constructivism: Theory, perspectives, and practice* (pp. 3-7). New York: Teachers College Press.

Glesne, C. (2016). *Becoming qualitative researchers: An introduction.* Boston: Pearson.

Goldhaber, D. (2007). *Everyone's doing it, but what does teacher testing tell us about teacher effectiveness?* The Journal of Human Resources, 765-794.

Hanushek, E. A. (1992). The trade-off between child quantity and quality. *Journal of Political Economy, 100*(1), 84-117.

Holland, P. E. (2009). The principal's role in teacher development. *SRATE Journal, 18*(1), 16-24.

Katz, L. G., & Raths, J. D. (1985). Dispositions as goals for teacher education. *Teaching and Teacher Education, 1*(4), 301-307.

King, N. M., Hilber, C. B., & Engley, E. (2007). Developing professional dispositions in the preservice teacher: Raising standards. *International Forum of Teaching and Studies,* 3(3), 14-21.

Kissau, S., & Algozzine, B. (2015). The impact of mode of instructional delivery on second language teacher self-efficacy. ReCALL : The Journal of EUROCALL, 27(2), 239-256.

Masunaga, H., & Lewis, T. (2011). Self-perceived dispositions that predict challenges during student teaching: A data mining analysis. *Issues in Teacher Education, 20*(1), 35-49.

McMillan, J. H. (2016). *Fundamentals of Educational Research.* Boston: Pearson.

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation.* San Francisco, CA: Jossey-Bass.

Misco, T., & Shiveley, J. (2007). Making sense of dispositions in teacher education: Arriving at democratic aims and experiences. *Journal of Educational Controversy, 2*(2).

Mueller, M., & Hindin, A. (2011). An analysis of factors that influence preservice elementary teachers' developing dispositions about teaching all children. *Issues in Teacher Education,* 20(1), 17-34.

National Council for Accreditation of Teacher Education. (2008). *Professional standards for the accreditation of teacher preparation institutions*

Nelsen, P. (2015). Intelligent dispositions: Dewey, habits and inquiry in teacher education. *Journal of Teacher Education, 66(1), 86-97.*

Nisbett, R., & Ross, L. (1980). *Human inference: Strategies and shortcomings of social judgement* (1st ed.). Englewood Cliffs, New Jersey: Prentice-Hall.

Nye, B., Konstantopoulos, S., & Hedges, L. (2004). How large are teacher effects? *Educational Evaluation and Policy Analysis, 26*(3), 237-257.

Office of Teacher Education. (2018). Ethnicity summary tables by major. [Diversity of Teacher Candidates]. Unpublished raw data.

Osguthorpe, R. D. (2008). On the reasons we want teachers of good disposition and moral character. *Journal of Teacher Education, 59(4)*, 288-299.

Popp, P. A., Grant, L. W., & Stronge, J. H. (2011). Effective teachers for at-risk or highly mobile students: What are the dispositions and behaviors of award-winning teachers? *Journal of Education for Students Placed at Risk*, 16(4), 275-291.

Renzaglia, A., Hutchins, M., & Lee, S. (1997). The impact of teacher education on the beliefs, attitudes and dispositions of preservice special educators. *Teacher Education and Special Education, 20*(4), 360-377.

Rike, C. J., & Sharp, L. K. (2008). Assessing preservice teachers' dispositions: A critical dimension of professional preparation. *Childhood Education,* 84(3), 150-153.

Rivkin, S., Hanushek, E., & Kain, J. (2005). Teachers, schools, and academic achievement. *Econometrica, 73*(2), 417-458.

Rockoff, J. (2004). The impact of individual teachers of students' achievement: Evidence from panel data. *American Economic Review, 94*(2), 247-252.

Roehler, L. R., Duffy, G. G., Herrmann, B. A., Conley, M., & Johnson, J. (1988). Knowledge structures as evidence of the 'personal': Bridging the gap from thought to practice. *Journal of Curriculum Studies, 20*, 159-165.

Saldaña, J. (2016). *The coding manual for qualitative researchers*. London: SAGE Publications.

Schiro, M. S. (2013). *Curriculum theory: Conflicting visions and enduring concerns.* Thousand Oaks, CA: SAGE Publications.

Seay, D. (2017). *An examination of the relationship between a candidate's disposition assessments from admission to the program to completion of the program* (Order No. 10261931). Available from ProQuest Dissertations & Theses Global. (1884277269). Retrieved from https://unco.idm.oclc.org/login?url=https://search-proquest-com.unco.idm.oclc.org/docview/1884277269?accountid=12832

Stake, R. (1995). *The art of case study research.* Thousand Oaks, California: SAGE Publications.

Taie, S., & Goldring, R. (2017). Characteristics of Public Elementary and Secondary School Teachers in the United States: Results from the 2015-16 National Teacher and Principal Survey. First Look. NCES 2017-072. *National Center for Education Statistics.*

Taylor, R. L., & Wasicsko, M. M. (2000). *The dispositions to teach*. Paper presented at the annual meeting of the Southern Region Association of Teacher Educators Conference, Lexington, KY.

Thornton, H. (2006). Dispositions in action: Do dispositions make a difference in practice? *Teacher Education Quarterly, 33*(2), 53-68.

Toy-Cronin, B. (2018). Ethical issues in insider-outsider research. In R. Iphofen & M. Tolich (Eds.), *The SAGE handbook of qualitative research ethics* (455-468). London: SAGE Publications.

U.S. Department of Commerce, (2017). [Interactive map of Small Area Income and Poverty Estimates July 12, 2017]. *2016 All Ages in Poverty.* Retrieved from https:// www.census.gov/data-tools/demo/saipe/saipe.html?s_appName=saipe&map_year Selector=2016&map_geoSelector=aa_c

Wasicsko, M. M. (2007). The perceptual approach to teacher dispositions. In M. E. Diez & J. Raths (Eds.), *Dispositions in teacher education* (pp. 53-89). Charlotte, NC: Information Age Publishing.

Welch, F. C., Pitts, R. E., Tenini, K. J., Kuenlen, M. G., & Wood, S. G. (2010). Significant issues in defining and assessing teacher dispositions. The Teacher Educator, 45, 179--201.

Wubbels, T., Levy, J., & Brekelmans, M. (1997). *Paying attention to relationships.* Educational Leadership, 54(7), 82-86.

Yeníce, N. (2012). A review on learning styles and critical thinking disposition of pre-service science teachers in terms of miscellaneous variables. *Asia-pacific form on science learning and teaching,* 13(2), 1-31.

APPENDIX A

ELECTRONIC PARTICIPANT CONTACT FORM

University of Northern Colorado & Pittsburg State University

Project Title: Dispositions of Junior Elementary Teacher Candidates
Researcher: Amy Bartlow, Instructor, Teaching and Leadership
Research Advisor: Dr. Jenni Harding, Professor, University of Northern Colorado
Phone number: 970-351-1029   **e-mail:**   jenni.harding@unco.edu

Dear Student,

I am researching the dispositions of preservice teachers and development of the dispositions over time. Dispositions are linked to the critical qualities of an effective educator, but there is little data which reveals how they are present or are developed over the course of a teacher education program. NCATE defines these dispositions as "the professional attitudes, values and beliefs demonstrated through both verbal and nonverbal behaviors as educators interact with students, families, colleagues and communities". I want to explore teacher candidate beliefs, attitudes and values during your first year of professional coursework.

Your role as a volunteer participant in this research is as teacher candidate included in a larger case study of your cohort. As a case study participant, your coursework from EDUC 320, EDUC 360, EDUC 307, EDUC 362, and EDUC 366 will be collected. Course artifacts from EDUC 320, EDUC 360 and EDUC 307 (which you have already completed) will be collected from documents and media files submitted during the Spring 2018 semester. Additionally, for EDUC 362 and EDUC 366, I will complete observations of your university courses and fieldwork. I will collect coursework from your professors and schedule observations by conferring with each of them. All data will be labeled by an assigned number only and at no time will it be linked to your identity.

You may also volunteer to participate in face-to-face interviews to be completed as part of a larger case study of your cohort. Interviews will be audio-recorded to make sure we capture your story. This study will occur at an arranged time and place that is convenient for you. The interview should take no more than 60 minutes. Two interviews will take place. One interview will be scheduled prior to the start of the Fall 2018 semester and an additional interview will be schedule for the end of the Fall 2018 semester. For the interview you will be asked to provide your age, gender, and ethnicity. You will choose a pseudonym (a fake name) before the interview, and only the researcher will examine individual responses.

There are certain instances where the researcher is required to give information to the appropriate authorities. Because the researcher is a mandatory reporter, this includes such

information as required by Kansas reporting law (K.S.A. 38-2223). Results of the study will be presented in a confidential way so that results cannot be linked back to you.

Your contribution to this study will benefit other teachers and students as we understand more about teacher candidate dispositions and how teacher education programs might use information about teacher candidate dispositions to prepare future teachers. Therefore, your experiences and stories are very important. The observation of your professional coursework and field experiences as well as your personal thoughts and opinions will provide valuable insight into the development of preservice teachers.

Risks to you are minimal. The potential benefits to you include gaining insight on your dispositions, learning something about yourself, and the possibility of helping other students and teachers. Participation is voluntary. You may decide not to participate in this study and if you begin participation, you may still decide to stop and withdraw at any time.

If you agree to participate in this research, **please type your name and select "YES" below** indicating your desire to do so. You will also select which levels of participation you are volunteering for by checking the appropriate box(es). I will then send you a consent form to complete at your convenience. I greatly appreciate your assistance and am excited to learn more through this study.

If you have any concerns about your selection or treatment as a research participant, please contact Nicole Morse, IRB Administrator, Office of Sponsored Programs, 25 Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1910.

Sincerely,

Amy Bartlow

Type YES if you volunteer to participate in this study: _____

Name: _____

☐ I volunteer to participate in <u>collection of course documents and observation</u> of university coursework and field activities for Spring 2018 (archived documents and media) and Fall 2018.

☐ I volunteer to participate in face to face interviews.

APPENDIX B

PARTICIPANT CONSENT FORM

CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH
University of Northern Colorado & Pittsburg State University

Project Title: Dispositions of Junior Elementary Teacher Candidates
Researcher: Amy Bartlow, Instructor, Teaching and Leadership
Research Advisor: Dr. Jenni Harding, Professor, University of Northern Colorado
Phone number: 970-351-1029   **e-mail:**   jenni.harding@unco.edu

I am researching the dispositions of preservice teachers and development of the dispositions over time. Dispositions are linked to the critical qualities of an effective educator, but there is little data which reveals how they are present or are developed over the course of a teacher education program. NCATE defines these dispositions as "the professional attitudes, values and beliefs demonstrated through both verbal and nonverbal behaviors as educators interact with students, families, colleagues and communities". I want to explore teacher candidate beliefs, attitudes and values during your first year of professional coursework.

Your role as a volunteer participant in this research is as teacher candidate included in a larger case study of your cohort. As a case study participant, your coursework from EDUC 320, EDUC 360, EDUC 307, EDUC 362, and EDUC 366 will be collected. Course artifacts from EDUC 320, EDUC 360 and EDUC 307 (which you have already completed) will be collected from documents and media files submitted during the Spring 2018 semester. Additionally, for EDUC 362 and EDUC 366, I will complete observations of your university courses and fieldwork. I will collect coursework from your professors and schedule observations by conferring with each of them. All data will be labeled by an assigned number only and at no time will it be linked to your identity.

You may also volunteer to participate in face-to-face interviews to be completed as part of a larger case study of your cohort. Interviews will be audio-recorded to make sure we capture your story. This study will occur at an arranged time and place that is convenient for you. If the interview is completed in a public place, please be aware that privacy may be impacted. The interview should take no more than 60 minutes. Two interviews will take place. One interview will be scheduled prior to the start of the Fall 2018 semester and an additional interview will be schedule for the end of the Fall 2018 semester. For the interview you will be asked to provide your age, gender, and ethnicity. You will choose a pseudonym (a fake name) before the interview, and only the researcher will examine individual responses.

There are certain instances where the researcher is required to give information to the appropriate authorities. Because the researcher is a mandatory reporter, this includes such information as required by Kansas reporting law (K.S.A. 38-2223). Results of the study will be presented in a confidential way so that results cannot be linked back to you. You will be given access to the full research report once the study has been completed.

Your contribution to this study will benefit other teachers and students as we understand more about teacher candidate dispositions and how teacher education programs might use information about teacher candidate dispositions to prepare future teachers. Therefore, your experiences and stories are very important. The observation of your professional coursework and field experiences as well as your personal thoughts and opinions will provide valuable insight into the development of preservice teachers.

Risks to you are minimal. The potential benefits to you include gaining insight on your dispositions, learning something about yourself, and the possibility of helping other students and teachers. Participation is voluntary. You may decide not to participate in this study and if you begin participation, you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please sign below if you would like to participate in this research.

A copy of this form will be given to you to retain for future reference. If you have any concerns about your selection or treatment as a research participant, please contact Nicole Morse, IRB Administrator, Office of Sponsored Programs, 25 Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1910.

☐ I volunteer to participate in <u>collection of course documents and observation</u> of university coursework and field activities for Spring 2018 (archived documents and media) and Fall 2018.

☐ I volunteer to participate in face to face interviews.

_____   _____
Participant's Signature   Date

_____   _____
Researcher's Signature   Date

APPENDIX C

SEMI-STRUCTURED INTERVIEW QUESTIONS

Initial Interview Questions (*August 2018)*

1. What pseudonym would you like to choose?

2. How would you describe yourself?

3. How would your friends and family describe you?

4. What are your strongest qualities?

5. What are your weakest characteristics?

6. Describe your perfect day.

7. Why do you want to become a teacher?

8. What are your intentions for your students? In other words, what do you hope to do when you go into a classroom?

   a. Do your beliefs about teaching play a role in these intentions?

   b. If so, why and if not, why not?

9. What are the most important aspects of being a teacher?

   a. Do you perceive yourself as strong or weak in these areas? Why?

10. What do you find most challenging about teaching?

11. Describe the ideal classroom environment.

12. What are your beliefs about teaching?

13. What do you believe a teacher's role is in meeting student's needs?

14. Tell me about your experience with children.

   a. *(possible prompts)*

      i. Any jobs working with school-aged children?

         1. Description of this position?

      ii. Any volunteer work with school-aged children?

         1. Description of this position?

15. What areas do you believe you need to improve most in as a future teacher?

16. What qualities or characteristics does an effective teacher exhibit?

17. What qualities or characteristics does an Ineffective teacher exhibit?

18. Is there anything else you would like to share or add?

Final Interview Questions *(December 2018)*

1. How have you been?
2. Have you had any impactful experiences as a teacher candidate this semester?
3. What are your intentions for your students? In other words, what do you hope to do when you go into a classroom?
    a. Do your beliefs about teaching play a role in these intentions?
    b. If so, why and if not, why not?
4. What are the most important aspects of being a teacher?
    a. Do you perceive yourself as strong or weak in these areas? Why?
5. What do you find most challenging about teaching?
6. Describe the ideal classroom environment.
7. What do you believe a teacher's role is in meeting student's needs?
8. What have you learned this semester?
9. What skills have you gained or developed this semester?
10. Tell me about your practicum experience.
11. Tell me about your experience with Science Night.
12. When you are in the classroom teaching, what do you focus on the most?
    a. *Prompt*- What is your big goal or objective?
13. What does the engaged student look like when you are teaching?
14. What areas do you believe you need to improve most in as a future teacher?
15. Throughout your first year of the elementary education program, have you felt more or less confident in your ability to be an effective teacher?
16. What qualities or characteristics does an effective teacher exhibit?
17. What qualities or characteristics does an ineffective teacher exhibit?
18. Could you tell me about your growth in *(fill in with area of growth that was evident through data analysis for this specific interview participant)*?
19. Is there anything else you would like to share or add?

APPENDIX D

DISSERTATION TIMELINE

Dissertation Timeline

	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Proposal Defense		X										
Literature Review	X	X	X	X	X	X	X	X		XS		
IRB		X	X	X								
Participant Consent				X								
Data Collection			X	X	X	X	X	X	X			
Data Analysis					X	X	X	X	X	X		
Submit Drafts									X	X	X	
Submit Final Draft											X	
Revise											X	
Final											X	
Defense												X

APPENDIX E

INDIVIDUAL TEACHER CANDIDATE DISPOSITIONS

Individual Teacher Candidate Dispositions Related to Self

Dispositions Related to Self	Positive Trends	Mixed Results	Negative Trends/ Challenges
Dependable, High Personal Expectations	1, 2, 8, 9, 10, 11, 12, 13	3, 4, 5, 6, 7	
Strong Self-Efficacy	4, 10, 11, 12, 13	6, 9, 2, 8	1, 3, 5, 7
Continuous Learner, Growth	2, 3, 4, 6, 8, 9, 10, 11, 12	1, 5, 13	7
Reflective	1, 2, 3, 4, 6, 8, 9, 10, 11, 12, 13	5, 7	

Individual Teacher Candidate Dispositions Related to Students

Dispositions Related to Students	Positive Trends	Mixed Results	Negative Trends/ Challenges	Not Indicated
Caring	2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13			1, 4
Positive and Collaborative Classroom Management	4, 5, 6, 9	2, 8, 10, 11, 12, 13	1, 3, 7	
Positive Interactions	2, 4, 6, 8, 10, 11, 12, 13	3, 5, 7, 9	1	
See Students as Able	4, 6, 8, 9, 12, 13	1, 2, 3, 5, 10, 11	7	
Meet Students' Needs	1, 2, 4, 5, 6, 7, 9, 11, 13	8, 10, 12	3	

Individual Teacher Candidate Dispositions Related to Teaching

Dispositions Related to Teaching	Positive Trends	Mixed Results	Negative Trends/ Challenges
Balance Academic and Interpersonal Goals	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13		
Involved, Interactive, Enthusiastic	2, 4, 7, 8, 10, 11, 12, 13	3, 5, 6, 9	1
Education has a Higher Purpose	2, 4, 13	1, 3, 5, 6, 7, 8, 9, 11, 12	10
Monitor Learning	2, 4	5, 6, 7, 8, 9, 10, 11, 12, 13	1, 3
Focus on People	2, 4, 9, 10, 11, 12, 13	6, 7, 8	1, 3, 5

APPENDIX F

INSTITUTIONAL REVIEW BOARD APPROVALS

Pittsburg State University

GRADUATE AND CONTINUING STUDIES

TO: University of Northern Colorado
FROM: Pawan K. Kahol; Dean of Graduate and Continuing Studies; Chair of IRB
DATE: June 18, 2018
SUBJECT: Amy Bartlow, a Ph.D. candidate at the University of Northern Colorado

An IRB application for protocol change/continued review of ongoing research was submitted for its approval by Amy Bartlow. I was informed that the research performed as a part of the "application for approval of investigations involving the use of human subjects" will serve as Ms. Bartlow's dissertation at the University of Northern Colorado and I needed to write a letter stating that the application has been approved.

I am pleased to write that Amy Bartlow's application was reviewed and approved by the IRB

Sincerely,

Pawan K. Kahol
Dean of Graduate and Continuing Studies, Dean of Research
Pittsburg State University, Pittsburg, Kansas 66672

Institutional Review Board

DATE: August 10, 2018

TO: Amy Bartlow, MS
FROM: University of Northern Colorado (UNCO) IRB

PROJECT TITLE: [1280459-1] DISPOSITIONS OF JUNIOR ELEMENTARY TEACHER
                    CANDIDATES
SUBMISSION TYPE: New Project

ACTION: APPROVED
APPROVAL DATE: August 10, 2018
EXPIRATION DATE: August 9, 2019
REVIEW TYPE: Expedited Review

Thank you for your submission of New Project materials for this project. The University of Northern
Colorado (UNCO) IRB has APPROVED your submission. All research must be conducted in accordance
with this approved submission.

This submission has received Expedited Review based on applicable federal regulations.

Please remember that informed consent is a process beginning with a description of the project and
insurance of participant understanding. Informed consent must continue throughout the project via
a dialogue between the researcher and research participant. Federal regulations require that each
participant receives a copy of the consent document.

Please note that any revision to previously approved materials must be approved by this committee prior
to initiation. Please use the appropriate revision forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others and SERIOUS and UNEXPECTED
adverse events must be reported promptly to this office.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this
office.

Based on the risks, this project requires continuing review by this committee on an annual basis. Please
use the appropriate forms for this procedure. Your documentation for continuing review must be received
with sufficient time for review and continued approval before the expiration date of August 9, 2019.

Please note that all research records must be retained for a minimum of three years after the completion
of the project.

If you have any questions, please contact Nicole Morse at 970-351-1910 or nicole.morse@unco.edu.
Please include your project title and reference number in all correspondence with this committee.

Amy -

Generated on IRBNet

Thank you for your patience with the UNC IRB process. Your materials were reviewed and approved by the Dr. Correa-Torres and subsequently I reviewed your application materials and protocols. Approval is recommended and you may begin participant recruitment and data collection after a two minor items are noted and addressed in your application:

1) update your consent form contact information for mistreatment as a research participant to Nicole Morse and remove Sherry May's name as she retired at the end of June 2018; and

2) please note that all identifiable data (e.g., interview recordings, signed consent forms, etc.) should be destroyed three years following the end of data collection rather than five years.

These changes do not need to be submitted for any subsequent review. Best wishes with your research and don't hesitate to contact me with any IRB-related questions or concerns.

Sincerely,

Dr. Megan Stellino, UNC IRB Co-Chair

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Northern Colorado (UNCO) IRB's records.