The Impact of a Reflective Practice Series on the Awareness Level of Six Teacher Candidates at a Public University in the Southeast

Lindsay M. Sturkie
University of South Carolina
THE IMPACT OF A REFLECTIVE PRACTICE SERIES ON THE AWARENESS LEVEL OF SIX TEACHER CANDIDATES AT A PUBLIC UNIVERSITY IN THE SOUTHEAST

by

Lindsay M. Sturkie

Bachelor of Science
Francis Marion University, 2006

Master of Education
Francis Marion University, 2011

Submitted in Partial Fulfillment of the Requirements

For the Degree of Doctor of Education in

Curriculum and Instruction

University of South Carolina

2017

Accepted by:

James D. Kirylo, Major Professor

Rhonda Jeffries, Committee Member

Richard R. Lussier, Committee Member

Christian Anderson, Committee Member

Cheryl L. Addy, Vice Provost and Dean of the Graduate School
DEDICATION

This work is dedicated to my three-year-old daughter, Mackenzie, and my soon-to-arrive second child. All of my effort and long hours of research and writing may have taken time away from my family, but it was for them that I sacrificed. I hope that in doing this I have set an example of the importance of continued education and of having faith in knowing that where the Lord guides, He provides. I hope that they will always be proud to be my children.

*Jesus looked at them and said, “With man this is impossible, but with God all things are possible.” Matthew19:26*
ACKNOWLEDGMENTS

I must first give thanks to Jesus Christ, my savior, comforter, and provider. Without knowing Him, I would have allowed discouragement and strife to overtake me. But with His presence I have been able to overcome personal and professional obstacles to complete this work.

Second, I would like to thank my parents for being supportive through all of my educational endeavors and for being the example of unconditional love and dedication. Third, I thank all other family and friends who have been positive and patient with me, cheering me on as I have progressed through this program. I have had some amazing people in my corner, and I wish I could name them all.

Fourth, my gratitude towards my committee members cannot be expressed in merely a few words, especially for my Chair, Dr. James Kirylo. This road has been difficult, but once Dr. Kirylo entered the picture I knew that I could trust the process and the outcome.

Fifth, many thanks need to be given to my colleagues who have provided additional guidance and support, especially Drs. Shirley Carr Bausmith, James R. Faulkenberry, Kimberly McCuiston, Tracy Meetze-Holcombe, and Steve Taylor.

Sixth, and lastly, thank you to my husband, Jon. Being as one, I can say WE made it. Through the many trials we have faced during these years, our love has prevailed.
ABSTRACT

This study examined the impact of a Reflective Practice Series (RPS) on the awareness level of preservice teachers enrolled in a field experience course in a teacher education program at a university in the southeast United States. This study took place during the Fall 2016 semester with six participants, two early childhood majors, two elementary majors, and two middle level majors. Data were collected through pre- and post-questionnaires, course assignments, and field observations. The results revealed that the teacher candidates were able to make connections between theory and reflective teaching, had varying viewpoints about the process of reflection, and most profoundly, recognized that there was some impact on their students’ academic achievement when the teacher candidates participated in reflective practices.

Keywords: preservice teachers, reflective practice, reflective teaching, teacher candidates, teacher education, field experience.
# TABLE OF CONTENTS

DEDICATION........................................................................................................ iii

ACKNOWLEDGMENTS ............................................................................................ iv

ABSTRACT ................................................................................................................ v

LIST OF ABBREVIATIONS ....................................................................................... ix

CHAPTER ONE: INTRODUCTION .............................................................................. 1
  Statement of the Problem of Practice ................................................................. 5
  Research Question .............................................................................................. 7
  Purpose of the Study ............................................................................................ 7
  Methodology ......................................................................................................... 7
  Significance of the Study ..................................................................................... 8
  Limitations of the Study ...................................................................................... 9
  Summary of the Findings ..................................................................................... 9
  Dissertation Overview ......................................................................................... 10
  Definition of Terms ............................................................................................. 11

CHAPTER TWO: REVIEW OF LITERATURE ............................................................ 13
  Defining Reflective Practice ............................................................................... 13
  Historical Context .............................................................................................. 15
  Theoretical Base .................................................................................................. 18
  Conclusion ........................................................................................................... 28

CHAPTER THREE: ACTION RESEARCH METHODOLOGY .................................. 30
APPENDIX A: CONSENT FORM ................................................................. 92
APPENDIX B: PRE-QUESTIONNAIRE ...................................................... 93
APPENDIX C: POST-QUESTIONNAIRE .................................................... 95
APPENDIX D: REFLECTING ON PERSONAL INFLUENCES ......................... 97
APPENDIX E: REFLECTIVE PRACTICES ............................................... 99
APPENDIX F: REFLECTION ON STUDENTS’ ACTIONS AND FEEDBACK ........ 100
APPENDIX G: CLASSROOM OBSERVATION RECORD ............................. 101
APPENDIX H: SELF-REFLECTION ON INSTRUCTION AND STUDENT LEARNING .................................................................................. 102
APPENDIX I: FIELD NOTES OBSERVATION RECORD .............................. 103
APPENDIX J: STUDENT LEARNING OBJECTIVE TEMPLATE ..................... 104
LIST OF ABBREVIATIONS

CF ................................................................. Contextual Factor

CT ................................................................. Cooperating Teacher

ECE .................................................................. Early Childhood Education

ELE .................................................................. Elementary Education

MLE .................................................................. Middle Level Education

RPS .................................................................. Reflective Practice Series

SLO .................................................................. Student Learning Objective
CHAPTER ONE

INTRODUCTION

Reflection is the mindful consideration, or belief, usually after having identified a problem, which one intends to act on for an expected outcome (Dewey, 1933; Schön, 1987). Reflection can be completed in stages, but it is a cyclical process which requires reviewing and revising. And while it is a cyclical process, reflective thinking has a goal and is evoked by the need for inquiry and exploration or experimentation. Perhaps, when effectively implementing reflection, one can grow professionally in his/her practices and within the working community.

A professional education program is an important space where teacher candidates should move towards an understanding of the unfolding process of reflective practices. Dewey (1933) identified reflective thinking as an “educational aim,” viewing its value as the following:

When the mind thoroughly appreciates anything, that object is experienced with heightened intensity of value. There is no inherent opposition between thought, knowledge, and appreciation. There is, however, a definite opposition between an idea or a fact grasped merely intellectually and the idea or fact which is emotionally colored because it is felt to be connected with the needs and satisfactions of the whole personality. In the latter case, it has immediate value; that is, it is appreciated. (p. 277)
Therefore, individuals who are reflective teachers make personal connections to their practices and are able to eliminate barriers which may hold them back from growing in their profession and in their practices. Making such connections is an important piece of reflection in education and in the development of reflective practice.

In an attempt to create a common language when examining and discussing reflective practices, Rodgers (2002) extracted four criteria which resonate with Dewey’s thoughts for reflection:

1. Reflection is a meaning-making process that moves a learner from one experience into the next with deeper understanding of its relationships with and connections to other experiences and ideas. It is the thread that makes continuity of learning possible, and ensures the progress of the individual and, ultimately, society. It is a means to essentially moral ends.
2. Reflection is a systematic, rigorous, disciplined way of thinking, with its roots in scientific inquiry.
3. Reflection needs to happen in community, in interaction with others.
4. Reflection requires attitudes that value personal and intellectual growth of oneself and of others. (p. 845)

Dewey’s ideas also influenced others’ theories and practices, such as H. Gordon Hullfish and Philip G. Smith, Donald Schön, and others. For example, Hullfish and Smith (1961) advocated for teachers to practice not only reflective thinking but also to model it for their students in order to encourage critical thinking in the subject areas. Moreover, Schön (1987) built on this idea and keyed the terms reflection-in-action and reflection-on-action; that is, “[reshaping] what we are doing while we are doing it” (p. 26).
Yet, while there is a plethora of educational research that indicates the value of reflective teaching, it appears in practice, however, teacher candidates seem to struggle with the concept (Jorgensen, 2015; Stuart & Thurlow, 2000; Volkman, 1992). A part of reflective practice, as previously noted, is being able to use one’s experience to make connections to new experiences. Teacher candidates, who have little experience outside of their practicum assignments, are limited in their reflective thinking skills. Without education and practice geared towards being reflective teachers, teacher candidates tend to have difficulty in acknowledging and discussing their beliefs and how their beliefs impact their pedagogical practices. For example, Stuart and Thurlow (2000) discussed in their study how preservice teachers were focused solely on instructional strategies and the “how-to’s” of teaching, that it impeded their ability to identify and articulate when it was necessary to make changes in their instructional practices. After having been exposed to intentional instruction of reflecting on beliefs and practices in a methods course, the preservice teachers “came to consciously understand and reexamine the effects of [their] beliefs on their decision making about classroom practice” (Stuart & Thurlow, 2000, p. 119). Through methodological instruction of reflective practice and additional experience in their practicum courses those preservice teachers strengthened their knowledge and use of reflection in their own pedagogical practices.

Therefore, in teacher education programs, there is noted importance on having teacher candidates participate in reflective practices in order to be more effective in their roles. In the study by McCabe, Walsh, Wideman, and Winter (2009), it was recommended that instruction on how to reflect critically should become a key component of teacher education programs. This instruction includes having the teacher
candidates reflect on their own biases, their methods of teaching, and the manner in which they plan and assess their instruction. Through reflective practices, teachers can develop and improve their skills. Lupinski, Jenkins, Beard, and Jones (2012) note several positive effects of engaging in reflection as a part of a teacher’s practice. These effects include improvements in planning and instruction and an increase in teachers’ self-esteem, which has a correlating effect on their belief that they can influence student learning. Teachers also share more interest in gathering and analyzing data on their teaching, which increases their level of having their students thinking critically (Lupinski, et al., 2012).

Noting the importance that reflective practice has in the education field, the teacher-researcher chose to focus on the teacher candidates in a teacher education program and their ability to participate in reflective practices. This study takes place within a School of Education field experience course at a public university in the southeast. A portion of the School of Education’s mission statement highlights the importance of reflection as a tool for effective instruction within the teacher education program. Therefore, it would be appropriate to assume that teacher candidates approaching the end of their education program would have at minimum the knowledge of what it means to be a reflective teacher and the prerequisite skills for reflective practices. However, during her time supervising student teachers at the end of their program, the teacher-researcher recognized the student teachers’ limited knowledge and skills of reflective practices. Through the student teachers’ daily lesson planning and teaching and as the student teachers analyzed their learners’ academic performances, they
were unable to articulate why and how adjustments were or should have been made in their teaching methods.

**Statement of the Problem of Practice**

The teacher-researcher, as an evaluator of student teachers’ major projects, which included their long-rang plan (LRP) and teacher candidate work sample (TCWS), recognized weaknesses in their ability to think critically about their performance during their field experience practices. These two projects (now replaced with the Student Learning Objective project, or SLO) consisted of questions requiring the student teachers to reflect formally on their planning, instruction, and assessment. Upon the analysis of the student teachers’ written reflections, it was determined by the teacher-researcher that the student teachers relied heavily on superficial responses. Overall, their reflections were relatively weak. For example, during their student teaching semester, the teacher candidates were unable to articulate their reasons for using specific instructional strategies and/or assessments. Moreover, connections were not made to theory-based practices to support the student teachers’ responses. Little to no evidence from their field experience (including their daily lessons, students’ feedback, and students’ academic achievement) were referenced in the reflections. Finally, the teacher candidates would also regularly comment about their struggle in knowing how to modify instruction for learners of diversity. Their understanding of cultural and learner diversity appears to be present; however, they would tend to gravitate towards generic instructional strategies in order to accommodate the diverse learners’ needs.

In order to strengthen the reflective thinking skills of her teacher candidates, the teacher-researcher aimed to implement a Reflective Practice Series (RPS) within a field
experience course. The RPS is defined as an eight-week interactive program, which includes discourse and examples that work to foster reflective practices and awareness of reflective practices. It followed the ideas of Schön (1987), specifically with the focus of reflection-in-action and reflection-on-action. Prior to beginning the RPS, the teacher-researcher surveyed the participants to determine whether or not they had a clear understanding of what is meant by reflective teaching. They were also given opportunities throughout the RPS to share occurrences that they defined as reflective practice. This data assisted the teacher-researcher in identifying their level of awareness as it pertained to reflective practices. See Chapter Three for additional details regarding the RPS.

For this study, the teacher-researcher selected the field experience education course prior to student teaching. Each teacher candidate enrolled within the course was partnered with a cooperating teacher (CT) during their time in the K-8 setting. Both the teacher-researcher and the CT could be viewed as mentors for the teacher candidates. However, the teacher-researcher was the one who intentionally modeled reflective practices for and with the teacher candidates. While the process of mentoring teacher candidates is time consuming and demands thoughtful attention from the mentor, it is nevertheless an important aspect to foster reflection (Bates, Ramirez, & Drits, 2009). In short, the essential problem of practice for this teacher-researcher was knowing to what degree students understood reflective practices and were incorporating reflective practices in their field experiences and in their reflections within their coursework.
Research Question

One research question was the focus of this study: What impact will a Reflective Practice Series (RPS) have on the awareness level of six teacher candidates enrolled in a field experience course within an education program at a public university in the southeast?

Purpose of the Study

The purpose of this study was to examine the impact of a Reflective Practice Series (RPS) on the awareness level of six teacher candidates enrolled in a field experience course within an education program at a university in the southeast. For the purposes of this study, a reflective practice series is an eight-week interactive program that includes professional development activities and examples that work to foster reflective practices and awareness of reflective practices. The teacher-researcher aimed to provide opportunities for reflective teaching during eight on-campus class sessions, in which the teacher candidates participated in collaborating, sharing, and analyzing their field experiences with their classmates and the teacher-researcher. Through the RPS, the teacher-researcher sought to answer the research question. The fundamental purpose of this research was to determine whether they were aware of and engaged in reflective practice.

Methodology

This study was conducted during the Fall 2016 semester at a public university in the southeast. Enrollment at the university is approximately 4,500 undergraduate and graduate students. The six participants were teacher candidates enrolled in a two-credit early childhood, elementary, and middle level education field experience course the
semester prior to their student teaching block. In order to ascertain the different perspectives of the teacher candidates majoring in early childhood, elementary, and middle level education, participants were chosen from each of the three majors. As part of the course’s requirements, the teacher candidates completed a minimum of 40 hours in a public school K-8 classroom setting with the idea they would engage in reflective practice. A more descriptive profile of each participant is provided in Chapter Three.

Data collection comprised of the administration of pre- and post-questionnaires, reflection assignments consisting of open-ended responses to guided prompts, self-evaluations of their instruction, and observation notes. Prior to the RPS, the teacher candidates received the pre-questionnaire, and their responses were used to guide the implementation of the RPS for the eight-week duration. The reflection assignments varied in content and were administered after topic-specific sessions of the RPS. The self-evaluation was analyzed using the evidence the participants provided after observing a recording of their instruction during their field experience. The teacher-researcher’s observation notes were then organized after each RPS session. Each of these instruments was used to identify emergent themes regarding the teacher candidates’ knowledge, perception, and use of reflective practice in their pedagogical practices.

**Significance of the Study**

Reflective practice has two related components: identifying and then understanding one’s assumptions. By engaging in reflective practice, teachers can comprehend the ideas that frame the reasons for their choices with regards to instruction, management, and interactions with students and other members of the education
community. The construct that frames that participation or engagement is within the parameters of a teacher education course.

This study can assist in informing teacher educators how to determine the best route for assessing reflective practices within programs. They will be able to determine the reflective practice skills among their own preservice teachers. Specifically, teacher educators will be able to see examples for infusing enhanced reflective curriculum during their field experiences.

**Limitations of the Study**

This study was limited to a short time frame. The RPS was completed during a duration of eight weeks during one semester for one course. Also, with only six participants, generalizations cannot be made to full teacher preparation programs. By design, action research are studies where generalizations cannot be made (Mertler, 2014). However, this study is transferable. Because this action research study involved teacher inquiry, with the teacher-researcher wanting to impact her own instruction and teacher candidates’ reflective practice skills, the limitations do not hinder the study’s transferability. Dana and Yendol-Hoppey (2014) discuss that if there is value of one teacher’s research that could be applicable to another teacher’s research or the classroom, then the research can be considered transferable.

**Summary of the Findings**

Using a pre- and post-questionnaire, reflective assignments and prompts, classroom observations, and the participants’ SLO unit of instruction project, the teacher-researcher was able to analyze the impact of the RPS on the awareness level of teacher candidates during a field experience course. Upon examining the data collected, three
dominant themes emerged: (1) the teacher candidates’ developing awareness of reflective practice and its impact on students’ academic improvement, (2) teacher candidates’ acknowledgement of the relatedness of theory to practice, and (3) teacher candidates’ changes of their awareness of the reflection process throughout their clinical experience. For the first theme, a finding from the study was that teacher candidates noted a positive relationship between their reflective practices and the achievements of their students. For the second theme, the teacher-researcher recognized that the teacher candidates were able to make clear connections to theories and the pedagogical practices they conducted during field experiences. For the final and third theme, the teacher-researcher documented the teacher candidates’ inconsistencies of understanding and discussing the reflective practice process throughout the RPS. These three themes are discussed further in Chapter Four.

**Dissertation Overview**

In this chapter, one has learned the direction of the study. Moving forward, Chapter Two will include a review of the literature defining reflective practice, examining the multiple theories of reflective practice, the use of reflective practice in teacher education, and the purpose of reflecting on learners’ diversity within the classroom. Chapter Three provides a detailed report on the methodological approach that was taken to conduct the study. Chapter Four includes a thorough analysis of the study. Chapter Five will conclude this report as the implications for future studies and an action plan are discussed.
Definition of Terms

1. **Contextual Factors (CFs):** characteristics of students within K-12 classroom settings including but not limited to ethnicity, gender, special education needs, interests, etc.

2. **Field Experience:** the placement or practicum of a teacher candidate, usually within a K-12 setting in a public school.

3. **Preservice Teacher or Teacher Candidate:** an undergraduate student enrolled in a teacher preparation program, completing field experience within his/her pursued area (i.e. Early Childhood Education, Elementary Education, Middle Level Education, etc.).

4. **Reflection:** giving serious consideration and thought with the intent to identify a problem, to reason, to suggest, to hypothesize, and/or to assess. (Zwozdiak-Myers, 2012)

5. **Reflection-in-Action:** taking part in immediate reflection and adjust as needed as problems arise, when one “can still make a difference to the situation at hand.” (Schön, 1987, p. 26)

6. **Reflection-on-Action:** thinking back on what was done to determine how one’s actions contributed to the outcome. (Schön, 1987)

7. **Reflective Practice:** one considering his/her specific action and instructional practices objectively, analyzing the effects of those practices, and implementing changes necessary to lead to improvement in student learning; critical reflective practice (CRP). (Belvis et al., 2013; Dana & Yendol-Hoppey, 2014; Harrison et
al., 2005; Ornstein & Levine, 2006; Trede & Smith, 2012; Zwozdiak-Myers, 2012)

8. **Reflective Practitioner**: one who actively participates in reflective practice, researching and wanting to improve his/her knowledge and practice, with “Goals and directions for action” (Schön, 1987, p. 33); in teaching, the goal is to increase student success.

9. **Reflective Practice Series**: an eight-week interactive program that includes activities and examples that work to foster reflective practices and awareness of reflective practices.

10. **Self-Study**: a form of reflective practice, in which one intentionally identifies a problem, collects data, and tests a hypothesis. (Dinkelman, 2003)

11. **Student Learning Objective (SLO)**: a goal established by a teacher for his/her students’ academic growth, involving the teacher assessing the students’ academic growth; used within the teacher evaluation system. (South Carolina Department of Education, 2017)
CHAPTER TWO

REVIEW OF LITERATURE

“Research is creating new knowledge.”

-Neil Armstrong

Introduction

Literature about reflective practice tends to focus on our conceptual understanding of it, to the strategies on its application, to its implementation in a school setting. In this chapter, therefore, a discussion of theoretical perspectives from which reflective practice has been formulated will be presented. Moreover, there will be an examination of the various reflective practice definitions followed by a review of the reflective practice role in teacher education programs. Finally, the review will also discuss how reflective practice may impact teacher candidates’ understanding of cultural diversity within their field experience placements and their impact on instructional planning and pedagogical practices.

Defining Reflective Practice

Ornstein and Levine (2006) describe reflective teachers as those who “frequently observe and think about the results of their teaching and adjust their methods accordingly” (p. 15). They further identify other terms that are often used interchangeably when discussing reflective practice: strategic teaching, inquiry-oriented teacher education, expert decision making, and higher-order self-reflection (Ornstein & Levine, 2006). Belvis, Pineda, Armengol, and Moreno (2013) term reflective practice as
a method beginning with observations and culminating in strategic planning for performance improvement. Others cluster reflective practice with self-evaluation and professional development which are learning processes founded on experiences which require skillful guidance (Harrison, Lawson & Wortley, 2005; Trede & Smith, 2012). Zwozdiak-Myers (2012) captures reflective practice as a “disposition to enquiry and a process” (p. 5). She places the process of reflective practice into nine dimensions, in which the teacher candidates, novice teachers, and experienced teachers:

1. study their own teaching for personal improvement;
2. systematically evaluate their own teaching through classroom research procedures;
3. link theory with their own practices;
4. question their personal theories and beliefs;
5. consider alternative perspectives and possibilities;
6. try out new strategies and ideas;
7. maximize the learning potential of all their students;
8. enhance the quality of their own teaching; and/or
9. continue to improve their own teaching. (Zwozidak-Myers, 2012, p. 5)

Dana and Yendol-Hoppey (2014) explain that teacher inquirers study and reflect on their practice “…by posing questions or ‘wonderings,’ collecting data to gain insights into their wonderings, analyzing the data along with reading relevant literature, making changes in practice based on new understandings developed during inquiring, and sharing findings…” (p. 12).
In summary, based on the aforementioned explanations of reflective practice, for the purpose of this study, reflective practice is defined as how one considers his/her specific action and instructional practice objectively, analyzing the effects of those practices, and implementing changes necessary to lead to improvement in student learning.

**Historical Context**

**Reflective practice and its role in teacher education.**

Understanding and acknowledging the place of reflective practice in teacher education programs is necessary before moving forward in reviewing the effects that it has on teacher candidates. McCabe, Walsh, Wideman, and Winter (2009) researched this concept by studying preservice teachers’ and faculty members’ understanding of critical reflective practice. It is already understood from theory that reflective practice can offer new knowledge to those who apply it, which in turn can enhance their professional lives (Cruickshank, 1985). However, the question of whether the teacher candidates are aware of and understand the potential benefits of reflective practice still remains, which is what has guided this study. McCabe et al. (2009) noted within their study that preservice teachers are both intrinsically and extrinsically motivated, with a focus on passing their courses but also a desire in succeeding their practice teaching. Thus, by applying reflective teaching within field experience courses, teacher candidates can grow professionally and strengthen their pedagogical skills.

In order to determine whether or not preservice teachers saw this connection of reflective practice to professional development, McCabe et al. (2009) compared the views of critical reflective practice among preservice students and faculty members.
They found that the student teachers view the critical reflective practice as an immediate application for their lesson plans and practicums, whereas the faculty members reference their pedagogical ideology and see the practice as a continuum. While there was minimal acknowledgement among the students that the application of reflective practice would help in their future careers and teaching, most viewed it as a requirement of their program. Therefore, recommendations were given for teacher educators to provide more insights into reflective practice, improving one’s instructional practices and for providing strategies for effective reflective practice (McCabe et al., 2009).

The development of preservice teachers’ reflective practice skills was examined and described in the qualitative study by Liou (2001). No systematic procedures were introduced or used to practice reflection among 20 student teachers. Instead, it was left to the participants’ practice and their written accounts to determine if they could reflect critically and, if they could, about what and how well they did so. It was found that the student teachers did not develop much in their critical reflections, paying less attention to theory than practice. However, the student teachers did appear to become more confident and better problem solvers during their experience, and they were able to note strengths and weaknesses in their planning and instruction. Liou (2001) noted some areas for consideration and for future studies, including examining critical reflection’s impact on student teachers’ teaching improvisation, or, as noted earlier, Schön’s classification of reflection-in-action. There was also the statement that “reflection, not being innate, needs guidance or to be learned” (Liou, 2001, p. 206). Therefore, the implementation of reflection teaching may be helpful in teacher education programs and courses.
Bates, Ramirez, and Drits (2009) noted in their study regarding the roles of university supervisors as mentors for critical reflection, “For many teacher candidates, critical reflection does not seem to be a naturally occurring trait or tendency; it needs to be introduced, fostered, reinforced, guided, and so on until the students begin to take responsibility for their reflections themselves. . .” (p. 90). They further explain how regular feedback and modeling from mentors or teachers are needed when it comes to strengthening teacher candidates’ critical reflection skills. As Mertler (2014) addressed, having access to preservice teachers allows for the research to be conducted at a level where it can be extremely impactful on education, giving teacher candidates a chance to transition more quickly into being full-time and effective teachers. Improvement within teacher education programs is necessary for teacher candidates transitioning from the roles of students to teachers. A large component of this transition includes reflecting: reflecting on the teacher candidate’s performance from a supervisor’s standpoint, providing opportunities for the teacher candidate to reflect on his/her performance, and reflecting on the education program itself. McCabe et al. (2009) found in their study that “Student-teachers clearly need to learn how to introspect, describe, understand, and evaluate learning and teaching processes” (p. 12). Therefore, reflective practices among teacher candidates need to be taught, modeled, practiced, and evaluated. Researchers have recognized the importance of reflective practices, specifically with preservice teachers in teacher education programs (Bates et al., 2009).
Theoretical Base

Theory to practice.

Efforts regarding the formulation and implementation of reflective practice in teacher preparation programs are systematically influenced by theoretical perspectives. Having an understanding of how reflective practice supports one’s cognitive processes and in what ways theory is linked to the practice are important components to clarify before beginning the teaching of critical reflection (Akbari, 2007; Dinkelman, 2003; Hertzog & O’Rode, 2011). Drawing on the works of Dewey’s and Schön’s theories of reflective thinking, those who practice it are engaging in the process metacognition. They are becoming aware of their thinking and their thought processes. Reflective practice provides an opportunity for transaction to occur and allows the reflective practitioner to learn through experience. There are opportunities in education to conceptualize reflective practice. Examples of these opportunities include generating knowledge on the application and extension of reflective practice in teaching, modeling reflective practice, and actively seeking out student participation (Dinkelman, 2003). Friedman and Schoen (2009) use the reflective judgment model in their study to guide teachers through reflective practices to strengthen their autonomy and their ability to react effectively in the classroom setting. In other words, linking reflection to teacher candidates’ experiences in their field placements could impact their dealing with “unstructured problems” (Friedman & Schoen, 2009, p. 62).

With the reflection-in-action and reflection-on-action distinctions made by Schön, epistemic knowledge of teachers is linked to processes of reflective practice. This process begins with a problem that the reflective practitioner makes sense of and then
determines and implements the strategies needed to resolve the problem (Akbari, 2007; Zwozdiak-Myers, 2012).

However, all too commonly, reflective practice can become reduced into a step-by-step process, which is contradictory to its purpose. In Galea’s (2012) paper, she poses the challenge for teacher educators to maintain the integrity of what she identifies as true reflective practice:

The line of thinking that pervades the reflective thinking movement is that if teachers can develop their own thinking about their own practice with the aim of changing it according to students’ needs, educational transformations would not have to necessarily adhere to some linear predetermined scheme. They would open up to the very differences in learning that could proliferate in educational possibilities. (p. 245)

She further explains that through critical thinking, teachers may be able to better express their own teaching beliefs. Her stance is supported by Dewey’s philosophy in that reflective practice needs to push through the boundaries that can make it routinized, or “enhanced through systemization of teaching into a series of measured steps” (Galea, 2012, p. 247). Being informed of such confinements is essential for those who will be partaking in reflective teaching in order to identify and deal with their restrictive outcomes. Akbari (2007) shares the importance in understanding the differences between Dewey’s and Schön’s ideas from a theoretical perspective in order to achieve effectively the concept of reflection. While Dewey and Schön both recognized a process of reflection, they each included specific components of that process. It must also be considered that reflection is not the end of a process, but a means to an end, with the end
being stronger pedagogical practices among teachers resulting in improved students’ learning and performance.

**Using reflective practices in teacher education.**

To use reflective practices in teacher education programs as a component of the curriculum, it is important to understand why such practices are necessary for teacher candidates. Klenowski and Lunt (2008) found in their study that students’ reflections (formats and descriptions) varied considerably within the program, and in order for reflective practice to enhance the learning of teachers and students, such efforts need to be taught and implemented throughout their educational courses. They state, “It is clear that the process of critical reflection needs to be built in from the start and used as a part of the process” (Klenowski & Lunt, 2008, p. 215). The findings of Hertzog and O’Rode (2011) showed that reflection on subject-specific instructional practices can “positively impact planning [and] teaching” in that it improves the student teachers’ knowledge of content and their ability to identify the best pedagogical strategies for teaching the content (p. 105). Therefore, it would deem necessary for teacher candidates to practice critical reflection *before* entering the student teaching experience to be better prepared with the skills for reflective practice. Practicing reflection in education programs can be useful when the skill is interwoven throughout multiple courses for teacher candidates (Galea, 2012). Teacher candidates should be engaged throughout their studies in learning how to develop reflective practices and to analyze actively the impact of their instruction on student learning.

The research in the study by Belvis et al. (2013), regarding the mixed methods design, evaluated a program on reflective practice with mathematics teaching through the
use of two models, a holistic model and a four-level model. The researchers focused heavily on the overall outcomes of teaching improvements and the academic learning of the students. Results showed, “Teacher education in reflective practice has generated impact, most especially at the classroom level, by improving climate and the motivation of students and teachers,” with a general note being that the program resulted in participants positively transforming their teaching (Belvis et al., 2013, p. 290). Impacts at the student level were also noted, with a general observation of improved academic performance. One of the more interesting findings from the study focuses on the students’ level of performance. They found “that reflective practice can be a useful methodology […] for increasing student performance in those key skills that are less developed” (Belvis et al., 2013, p. 290). This study is encouraging because it shows the possibility of the positive impact reflective practices may have on student achievement.

**Teaching learner diversity in education programs.**

With the growing gap between preservice teachers and their K-12 learners’ backgrounds, the increasing need for preparing these future teachers in working with divergent groups of students arises. Ukpokodu (2002) discusses this need by highlighting the importance that teacher preparation programs have on achieving quality education for all learners. Demographics, socioeconomic status (SES), and other cultural backgrounds and trends have been found to carry heavy effects on the motivations and academic achievements of students. Therefore, the goals of teacher preparation programs should include “[helping] teachers acquire the knowledge (of cultural diversity), skills (for effectively interacting and communicating with), and dispositions (attitudes/beliefs transformation) needed to work effectively with students from diverse racial, language,
gender, and class backgrounds and other exceptionalities” (Ukpokodu, 2002, p. 25).

Teacher candidates must learn that fair is not always equal.

A report from the Education Development Center (1999) gave an example of two students with different nutritional needs—one was overweight while the other was literally starving. These two students, if given the same diet, would not be getting their individual needs met. The same concept should be taught and applied towards teacher preparation courses. Within the same report, it is noted, “One of the fundamental ways in which [teachers] evaluate student tasks and teaching approaches is by the degree to which they engage and challenge students of differing abilities and backgrounds” (Education Development Center, 1999, p. 11). Therefore, teaching about learner differences does not end with simply identifying the contextual factors and backgrounds of the learners. That is the beginning. Teacher education courses should also be discussing and implementing curriculum that leads to candidates understanding instructional strategies and evaluation processes to use within their diverse classrooms.

**Mindful reflecting.**

When connecting issues of diversity and the importance of understanding learners’ backgrounds, it should come to no surprise that the idea of *mindfulness* is at play, involving reflective practice at its most personal level (Griggs & Tidwell, 2015; Kyte, 2016). O’Brien (2016) explains this theory by stating that it “requires us to consider the very purpose of education, to test our own assumptions and to be open to a paradigm shift” (p. 2). In a self-study by Griggs and Tidwell (2015), the researchers directly addressed the need for reflective practice to require reflective practitioners “to be aware of their life experiences that have influenced how they perceive and know about
the world and to step beyond the context to appreciate and understand the world knowledge of others” (p. 88). The researchers examined their own experiences through self-reflection in order to understand why and how they respond to different situations and to analyze how those responses flow into their role as teachers. They used the theory of mindfulness to direct their study. Their description of mindfulness is as follows:

It provides an approach to thinking about one’s teaching and to addressing one’s teaching actions in the field on a moment-by-moment, breath-by-breath basis. It is a phenomenon that is interwoven into all that we do as teachers. [It] is the capacity to be both present in the moment and aware of the larger context in which the present moment is taking place; it is the ability to quiet the mind, displace oneself as the center of interaction, and recognize instead the centrality of a harmonious quality in one’s interaction with others and with one’s environment. (Griggs & Tidwell, 2015, p. 88)

From the self-study, the researchers found that the use of mindfulness played a prominent role when reflecting on instructional planning, in that it encouraged critical thinking of how diversity was discussed with the students to make it meaningful and engaging while noting the significance of diversity in both their professional and personal lives. The course within the study was geared around multicultural education; therefore, the researchers noted how the trajectory of the course began with teachers’ stories and personal practical knowledge of work in and for diversity, eventually culminating with reflecting on a person’s own biases about such issues and the implications of those biases within their teaching practices (Griggs & Tidwell, 2015). Through their practice of mindfulness, the researchers reflected on the impact it had among their students. They
recognized that by modeling the use of mindfulness within their courses, their students were more apt to practice it and apply it to their own thinking. Thus, the teachers created a more affective learning environment: a noted benefit for being reflective practitioners.

In another study, Ritchart and Perkins (2000) pursued the idea of whether or not mindfulness is a worthwhile educational goal. They examined mindfulness as a disposition: being aware of and alert to occasions for engaging in specific behavior and having the motivation and ability to carry out that behavior. This is further explained as they describe the process of mindfulness:

. . . nurturing the dispositions of mindfulness in schools requires attention to the development of students’ abilities, inclinations, and sensitivities with respect to mindfulness. This means developing certain abilities such as the ability to look at the world from more than one perspective. (Ritchart & Perkins, 2000, p. 31)

Their findings from a case study within a mathematics class led to the conclusion that modeling mindfulness will encourage students to become mindful, as well. Through the math teacher reflecting while teaching, he nurtured his students’ motivation and capabilities towards reflecting on their own thinking, which, over time, developed a disposition towards mindfulness. Having a mindful classroom can open the door for more personal reflections and discourse, leading to exposure of various perspectives for students as well as teachers (Ritchart & Perkins, 2000). Moreover, through this form of critical reflection, mindfulness allows students to become active in their own construction of knowledge, which can enhance their continued practices throughout school.

For teacher candidates, mindfulness as a component of reflection could encourage the expansion of their personal beliefs to those beyond their own influences. It can lead
to a better understanding of their students’ perspectives and backgrounds. Kirylo (2016) summarized mindfulness in saying, “To that end, clarity and presence of self allows for appreciating difference, realizing the importance of recognizing individual experience, that no two individuals view things in the precise same manner” (pp. 37-38). Through practice, mindfulness can become an on-going skill that will heighten the teacher candidates’ abilities to be reflective practitioners in their future classrooms, acknowledging the differences among themselves and their students, while carrying the skill with them for the remainder of their professional and personal lives.

A form of professional development.

The ultimate goal for all involved in education should be the learning outcomes of the students. With reflective practice in the field of education being a personalized form of professional development, allowing one to learn what is effective in student achievement based on one’s pedagogical strategies, there is no question as to why this practice should be an area of further study. According to Zwozdiak-Myers (2012), “It also embraces the development of the individual teacher, the pupils and the school, affective aspects of personal growth and development driven by intrinsic motivations and explicitly makes reference to continuing professional development” (p. 9). The teacher becomes a researcher, making reflective practice a more integral part of being an effective teacher, evaluating his/her own teaching behaviors (Cruickshank, 1985). As with any reason for professional development, a goal is to be able to improve one’s own practice, increasing one’s effectiveness in his/her field (Sowa, 2009). It is through these ideas that reflective practices is not only appropriate for teacher candidates but also for novice and experienced educators.
Reflective practice can be seen as a form of professional development for teachers. As Nieto (2013) states, “Many teachers find that participating in self-directed learning such as teacher inquiry and reading groups, becoming involved in professional organizations, attending and presenting at conferences, mentoring novice teachers, taking and teaching university courses, and so on, are more meaningful and satisfying than one-shot professional development sessions” (p. 61). Also, the opportunities for teachers to collaborate within their schools are limited. They are spending very minimal time in formal conversations and planning with one another (Nieto, 2013). Without these opportunities, teachers, specifically novice teachers, are left to their own devices, not knowing who or what to use as resources for improving their practices.

Guidance and leadership are needed to assist these teachers so that they are able to find and utilize resources that should already be available within their school settings. Bates, Ramirez, and Drits (2009) noted in their study regarding the roles of university supervisors as mentors for critical reflection, “For many teacher candidates, critical reflection does not seem to be a naturally occurring trait or tendency; it needs to be introduced, fostered, reinforced, guided, and so on until the students begin to take responsibility for their reflections themselves” (p. 90). They further explain that regular feedback and modeling from mentors or teachers are needed when it comes to strengthening teacher candidates’ critical reflection skills.

In their study, and as an attempt to enhance reflective practice in a teacher education program, Lupinski, Jenkins, Beard, and Jones (2012) reformed their program’s conceptual framework by recognizing the professional development aspect of reflective
teaching. They used Dewey’s impact on reflection as a component for education programs, noting:

Reflection can be a rich source of continued personal and professional growth. This provides an opportunity for professionals to renew and revive their practice. [. . .] Through reflection, professionals develop context specific theories that further their own understanding of their work and generate knowledge to inform future practice. (p. 82)

Reflective practice as a form of professional development supports Dewey’s (1933) idea that “For anything approaching their adequate realization, thought needs careful and attentive educational direction” (p. 22). Reflective practice needs to be directly implemented into educational programs.

Lupinski et al. (2012) also noted Schön’s connection between the characteristics of a reflective transformative practitioner and an individual program’s theories and practices. Their aim was at not only providing opportunities for reflection within the program but also implementing specific tasks during the field experiences. The purpose of their study was to provide examples of reflection being used in the education field and equating such experiences with prospects for professional development.

Through developing reflective practices within education programs, the hope is that such practices will continue in the education profession. Moreover, the teacher candidates may be able to carry their reflective teaching into their future classrooms and promote, or model, the behavior to improve teacher practice.
Conclusion

Determining the effectiveness of reflective practice with teacher candidates has stemmed from observing preservice teachers in education courses and viewing their reflective abilities during field experiences. This research study addressed the various components of reflective practices mentioned within this chapter, specifically with regard to theory and practice and its implementation within education programs to promote and strengthen reflective teaching among teacher candidates. This study expands upon the current literature by examining the impact instruction geared towards reflective practices has on teacher candidates’ knowledge and application of reflective practices.

There is much to consider when studying reflective practices within education programs. One needs to look at why reflective practice is a necessary tool or skill for teachers, how it can be threaded within courses and entire programs, and what the outcomes are when teachers are reflective practitioners. Reflective teaching can and is being used in various ways throughout education programs, to introduce the role and tasks of teachers, to apply theory to methodologies, to apply instructional strategies in the act of teaching for field experiences, and to promote action research among preservice teachers based on their learners’ achievement during student teaching (Cruickshank, 1985). In providing experiences for reflective practice within this study, the teacher-researcher was able to analyze the teacher candidates’ awareness level of reflective practices as well as their ability to make inferences on their students’ achievement.

By addressing the meaning of reflective practice and using theory-based evidence to support the study, this research study can lead to immediate application of this educational tool within education courses and throughout teacher preparation programs.
Theories shared by Dewey, Schön, and others have been examined to determine the place for reflective practice in such programs. There should be guidance and strategies provided for teacher candidates as they participate in reflective practice, especially as they move into student teaching in order to increase knowledge transfer into their careers.
CHAPTER THREE

ACTION RESEARCH METHODOLOGY

Statement of the Problem of Practice

The essential problem of practice for which this study has been designed derives from the teacher-researcher’s conclusion that teacher candidates’ provided relatively weak reflections on their planning, instruction, and assessment during student teaching. After having been an evaluator of the long-range plans and teacher candidate work samples in the student teaching semester, the teacher-researcher noted consistent weaknesses and low scores in the areas of reflective practices. The teacher candidates’ answers to guiding questions regarding their instructional strategies, assessments, and analyses of learners’ performances appeared to be superficial and generic. They struggled in providing specific examples from their field experiences to support their justifications of instructional strategies, forms of assessments, and results of their learners’ unit post-tests.

Research Question

The research question for this study is, “What impact will a Reflective Practice Series (RPS) have on the awareness level of six teacher candidates enrolled in a field experience course within an education program at a public university in the southeast?” Again, RPS is defined as an eight-week program involving and encouraging discourse about reflective practices among teacher
candidates while providing opportunities for reflective teaching during their field experience course.

**Purpose of the Study**

The purpose of this study was to determine if teacher candidates are incorporating reflective practices in their educational field experiences, and if so, to understand to what degree they are able to reflect on their planning, instruction, and assessment.

This teacher-researcher sought to examine if including the RPS in a field experience course would strengthen the teacher candidates’ abilities to implement reflective practice during their instruction as the course progressed. By the end of the RPS and with multiple opportunities for reflection throughout the semester, it was thought that the teacher candidates’ self-ratings and responses on the reflection questions from their SLO unit project would show that their instruction had improved.

As the previous objectives were accomplished, the teacher-researcher worked towards using the RPS as a more applicable process of reflective practice for future teacher candidates and teacher educators. Throughout this study, the teacher-researcher also focused on identifying the qualities and characteristics that make an effective reflective practitioner. Along with this objective, a consideration of the extraneous variables present has been examined. For example, the teacher candidates’ eagerness to change/improve, the time spent on reflecting, and the mindset of the teacher candidates were all variables that can affect their ability to be effective reflective thinkers.

**Action Research Design**

A mixed methodological approach was modeled in this research study. This research design is becoming more common. It combines both quantitative and qualitative forms of data collection and analysis. Caruth (2013) states, “Mixing the methods can
complement each other, offer richer insights, and result in more questions of interest for future studies. The objective for combining quantitative and qualitative research designs is to preserve the strengths and reduce the weaknesses in both quantitative and qualitative designs” (p. 120). By combining qualitative and quantitative methodologies in an action research study, the teacher-researcher is increasing the opportunity for data collection. Hoepfl (1997) notes, “Some researchers believe that qualitative and quantitative research can be effectively combined in the same research project [giving] insights that neither type of analysis could provide alone” (p. 48). Furthermore, the structure of mixed methods research (MMR) provides more leeway for action researchers to allow the development of new approaches while the study is underway.

The many paradigms of qualitative research, including but not limited to, case studies, participant observations, and oral histories, provide narratives that strengthen the relevance of the data. As an observer, the researcher’s role becomes more partial and empathetic (Yilmaz, 2013). For this study, the qualitative measures utilized through teacher candidates’ responses from pre- and post-questionnaires, class discussions, reflection assignments, and the teacher candidates’ SLO unit projects. These various instruments were used for the triangulation of data. These instruments are described later in this chapter.

Quantitative measures were implemented through self-ratings. The self-ratings were used in determining the teacher candidates’ perceptions of their reflective practices and their effects on their student learners. To determine the effectiveness of the reflective practices among the teacher candidates, the teacher-researcher also examined their learners’ achievement during the teacher candidates’ unit of teaching in their field
experiences and compared the results to the teacher candidates’ analyses of their instruction within their SLO unit projects.

**Setting and time frame of study.**

This study was conducted during the Fall 2016 semester at a public university in the southeastern United States with a yearly enrollment of approximately 4,500 students. The School of Education at the university offers Early Childhood Education, Elementary Education, Middle Level Education, Art Education, Secondary Math, and Secondary English as areas of licensure in the undergraduate program. Teacher candidates are provided with ample experiences through a variety of placements across the region. The placements vary in the make-up of students’ backgrounds, ability levels, and SES. However, they are located in a high-poverty region, and many of the students that the teacher candidates work with are from low SES backgrounds. These contextual factors (CFs) effect reflective practices of the teacher candidates.

The teacher-researcher chose to use her field experience course, which falls towards the end of the professional education program, typically the semester prior to the teacher candidates’ student teaching block. The course was a 15-week two-credit-hour course, with four weeks being allotted to teacher candidates’ field experiences. The other 11 sessions were held on campus once a week for two hours each. The RPS began during the second class session of the semester and was continued for a total of eight on-campus sessions.

To protect the identity of the participants and setting, pseudonyms are used throughout the study. Participants signed a consent form prior to the use of their work being involved within the research study (See Appendix A). Overall, the ethical
foundation that guided the study is rooted in the principles identified by Glatthorn (1998): equity, honesty, and humane consideration. The process and findings have been, and will be, shared openly and as necessary.

**Participants in the study.**

The participants of this study were teacher candidates enrolled in the teacher-researcher’s combined Clinical Experience in Early Childhood (EDUC 391), Elementary (EDUC 392), and Middle Level Education (EDUC 394) courses. The teacher-researcher chose to use this particular course because teacher candidates would subsequently move into their student teaching block if all other requirements permitted and they would be encouraged to complete projects during student teaching similar to assignments in the current course. These projects emphasized that teacher candidates reflect effectively on their instruction through the analysis of their students’ assessments. There were no foreseen challenges with having participants from the various programs of early childhood education, elementary education, and middle level education. All teacher candidates in this course had a minimum of 60 hours of field experience from previous courses. These former field experiences took place in settings of various grade levels and content areas within classrooms made up of diverse groups. Each teacher candidate had also been in a separate field experience for specific observations of learners with exceptionalities. They completed the same assignments in the course and participated in the same class discussions.

The teacher-researcher selected two teacher candidates from each major in order to compile the six participants of the study. There were a total of 19 teacher candidates
from which to choose out of the combined courses. A profile of each participant is provided below:

- **Lora** is a White female teacher candidate pursuing a degree in Early Childhood Education. She is soft-spoken, rarely asking questions aloud during class discussions. She shared her passion for also working with students with special needs. She originally majored in chemistry but switched to education after beginning her college courses.

- **Alice** is a Latina female teacher candidate in the Early Childhood Education program. She is a non-traditional teacher candidate, married with children. Prior to attending the university, she had been a teacher’s assistant. She is always prepared with questions and regularly meets with her course instructors to receive feedback on work and other experiences throughout the program.

- **Sharon** is a Black female teacher candidate in the Elementary Education Program. She is another non-traditional teacher candidate who also has children. She is very thorough in her work and consistently receives positive recommendations from her cooperating teachers in previous field experience courses.

- **Ashley** is a Black female teacher candidate enrolled in the Elementary Education Program. She works two jobs, one in a local daycare with PreK children and the other as a waitress.
• **Carmen** is a White female teacher candidate enrolled in the Middle Level Education Program. The two content areas for which she is seeking licensure are math and social studies. Carmen is also a student in a statewide teacher scholarship program which consists of additional professional development and educational leadership opportunities on and off campus for its participants.

• **Steve** is a White male teacher candidate in the Middle Level Education Program. His two content areas are English language arts and social studies. He was a student athlete in previous semesters. Steve is capable of producing high quality work but has to be pushed into doing so.

**Research Methods**

Teacher candidates’ responses to reflection questions such as those from their SLO unit project were used as qualitative data. Reflective conversations were also encouraged throughout the RPS. Time was allotted during each class session for these conversations, in which responses were recorded by the teacher-researcher using field notes. Through these conversations the reflective practices among the teacher candidates were heightened by challenging and reaffirming ideas, individually and collaboratively (Zwozdiak-Myers, 2012).

Additional qualitative data stemmed from questionnaire responses in efforts to define reflective practice, along with prior studies, and to analyze the teacher candidates’ understanding of the effectiveness of reflective practice in instruction. The questionnaires identifying the teacher candidates’ personal knowledge of reflective practice were administered at the beginning and ending of the course. The self-rating
assignment was administered at the completion of the participants’ unit of instruction during their field experience.

In congruence with completing reflection responses on their SLO projects, previously noted as the replacement of the Teacher Candidate Work Sample and Long-Range Plan, the teacher candidates were responsible for analyzing their K-8 learners’ assessment data and affective responses during their field experiences. These data were used to determine the correlated effects of reflective practice among the teacher candidates and their learners. The culminating course project was also utilized to collect reflective responses.

Data collection and instruments.

Pre- and Post-Questionnaires (See Appendices B and C): These were used to collect demographic data and to assess teacher candidates’ views and understanding of reflective practice. They were submitted via Blackboard outside of class time at the beginning and ending of the course. One item required the participants to select their major. Five items utilized a four-point Likert scale in order to assess the participants’ opinions of reflective practice and its place in teaching practices. One item required the participants to identify and rank 5 out of 15 components of reflection from the least important to the most important. These data were used in determining any changes or patterns of opinions and attitudes about reflective practice after the candidates participated in the RPS during their class time and field experiences.

Reflection Assignments: Throughout the course, teacher candidates participated in five reflection assignments. These assignments were discussed in class and then completed through the online link in Blackboard. The assignments consisted of the following:
• Reflecting on Personal Influences (See Appendix D)- This assignment included four exercises which require the participants to write about their most important educational experiences, characteristics of their most successful and unsuccessful teachers, their categorization of their most and least important subjects throughout their educational careers, the most influential people and events in their lives, and their overall explanation for reflecting on these items. This instrument was used to encourage participants’ practice of mindfulness as they addressed their own biases.

• Reflective Practices (See Appendix E)- This assignment consisted of three questions that asked the participants to determine the differences between reflection-before-action, reflection-in-action, and reflection-on-action and to identify times they participated in one or more of these forms of reflection. Participants were also asked to respond to each other’s entries and share their insight or personal experiences as they relate to reflective practices.

• Reflection on Students’ Actions and Feedback (See Appendix F)- For this assignment, participants responded to five questions that asked about their observations and experiences with students while teaching the SLO unit to K-8 learners. They had to provide specific examples from their experience.

• Classroom Observation Record (COR) (See Appendix G)- Participants recorded one of their taught lessons and completed this assignment regarding their observations of how they planned the lesson, implemented instructional strategies, practiced classroom management, and created an affective learning environment.
They evaluated their lesson by rating 24 areas, or indicators, and providing evidence to support those ratings using the COR rubric.

- Self-Reflection on Instruction and Student Learning (See Appendix H)- This assignment consisted of nine questions that were connected to the state’s teacher evaluation process which had the participants reflect on their lesson planning, instruction, and formative assessments.

Field Notes Observation Record (See Appendix I): During facilitated class discussions, participants’ responses were observed and recorded for additional qualitative data.

Student Learning Objective Template (SLO) (See Appendix J): This assignment was completed by the teacher candidates and involved their analysis of student achievement and the effectiveness of their instruction. Participants were required to teach an instructional unit and analyze the pre- and post-test data of their learners. Within the SLO template, there were specific questions which asked the teacher candidates to reflect on the organization of their unit, their assessments (both formative and summative), as well as their learners’ academic feedback. The teacher-researcher used the responses of the reflective questions as qualitative data. The students’ pre- and post-test results from the units were used as the quantitative data of the study. The SLO has already been established as part of the state’s evaluation process for induction teachers.

**Procedure**

Each weekly class session was two hours. During this time, one hour consisted of the implementation of the RPS. Each RPS session built on the prior and is outlined in
Table 3.1. For each session, the teacher-researcher completed field notes while observing class discussions.

Table 3.1. Reflective Practice Series (RPS) Outline

<table>
<thead>
<tr>
<th>RPS Session</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Before RPS</strong></td>
<td>Participants completed the Pre-Questionnaire (see Appendix B) and submitted it online via BlackBoard. This was done to provide the teacher-researcher insight regarding the participants’ prior knowledge and skills of reflective practices. Their responses were used to guide the RPS sessions.</td>
</tr>
<tr>
<td></td>
<td>1. The teacher-researcher discussed the components of instructional planning with the participants.</td>
</tr>
<tr>
<td></td>
<td>2. Participants completed a self-rating of a written lesson plan they prepared before the session. The self-rating is the same lesson plan rubric utilized in all education courses that include lesson planning assignments.</td>
</tr>
<tr>
<td></td>
<td>3. Participants were required to identify the strengths and weaknesses of their written lesson plans.</td>
</tr>
<tr>
<td></td>
<td>4. Participants were asked to note their steps for making improvements on future plans.</td>
</tr>
<tr>
<td></td>
<td>5. Discussion was held as a class regarding the reflective practices of which the participants had just experienced.</td>
</tr>
<tr>
<td></td>
<td>2. The teacher-researcher had the participants discuss their opinions of the information from the text with one another, specifically whether or not they viewed reflective practice as an important part of teaching.</td>
</tr>
<tr>
<td></td>
<td>3. Participants worked together to develop their own definition of reflective teaching.</td>
</tr>
<tr>
<td><strong>One</strong></td>
<td>1. Participants were required to read “Chapter 4: Personal Influences on Perspective,” from Posner’s <em>Field Experience: A Guide to Reflective Teaching</em>.</td>
</tr>
<tr>
<td></td>
<td>2. The teacher-researcher guided the participants in a</td>
</tr>
</tbody>
</table>
| Four | class discussion regarding the impact personal experiences have on methods of teaching and personal philosophies.  
3. Participants completed the Reflecting on Personal Influences assignment (see Appendix D) through the BlackBoard using prompts from the text.  
1. Participants read together “Chapter 11: The Cooperating Teacher,” from Posner’s *Field Experience: A Guide to Reflective Teaching*. This activity was completed the week prior to the participants beginning their field experiences.  
2. Using guiding questions from the text, the participants worked in pairs to complete mock introductory meetings. One participant acted as the teacher candidate while the other acted as the CT. The teacher-researcher allotted 10 minutes for the teacher candidate to ask what he/she viewed as important questions in understanding the CT’s perspective on education and teaching. They then switched roles and conducted the activity again.  
3. After the activity, the participants had to reflect on their personal perspectives as well as their CT’s and share their thoughts with the class. They were encouraged to determine how well their perspectives aligned with one another and how those opinions could affect their roles during their field experiences.  

| Five | 1. After returning from a week in their field experience classrooms, participants shared with the class their observations of the classroom and the CT’s interaction with the students.  
2. Participants sketched the layout of the classroom they visited and discussed how the physical environment can be used as a classroom management tool.  
3. Participants completed portions of their SLO assignment (see Appendix J), including the classroom management plan.  

| Six | 1. The teacher-researcher guided class discussion on the impact that individual interactions with students
has on student learning. Together, the participants shared additional observations of their CTs’ interactions with students. They also discussed the students’ actions and feedback that guided the CT during instruction.

2. The teacher-researcher showed video examples of different forms of reflection (reflection-before-action, -in-action, -on-action) and discussed the differences with the class.

3. Participants completed the Reflective Practices assignment (see Appendix E).

<table>
<thead>
<tr>
<th>Seven</th>
</tr>
</thead>
</table>
| 1. After completing their instructional units, participants completed the Reflection on Students’ Actions and Feedback assignment (see Appendix F).  
2. Participants then completed the COR, a self-evaluation of one of their lessons (see Appendix G). They video recorded and observed a lesson they taught during their unit. Along with each assigned rating, the participants provided supporting evidence from their lesson.  
3. Participants shared with their classmates the overall experiences including their instructional strategies, assessments, and student performance. |

<table>
<thead>
<tr>
<th>Eight</th>
</tr>
</thead>
</table>
| 1. Participants conducted peer reviews of their final SLOs. They reflected on the overall performance of their students by comparing students’ pre- and post-tests and shared their findings with the class. Participants assisted one another by asking probing questions as to why each believed the students performed the way they did for the unit.  
3. The participants completed the Self-Reflection on Instruction and Student Learning assignment (see Appendix H) and made their final revisions to their SLOs. |
1. Participants completed the Post-Questionnaire (see Appendix C)

**Data Analysis**

The teacher-researcher used various instruments in order to triangulate data. For the questionnaires, the teacher-researcher used the responses initially to guide the implementation of the RPS and then compared participants’ responses to the pre- and post-questionnaires to determine if any differences were noted among the teacher candidates’ knowledge and perception of reflective practices. For the self-rating instrument, the teacher-researcher compared the participants’ ratings with their assigned rating to assess the reliability of the participants’ reflections on their particular assignments (i.e. their lesson planning and instruction). The teacher-researcher used the variances between the participants’ self-rating and their assigned rating to interpret the narrative data from the participants’ reflection assignments responses and discussions during the RPS sessions.

The teacher-researcher initially categorized data, which included the observational field notes and the responses to the participants’ reflection assignments and questions within the SLO and COR. They were then coded and tallied. To code the data, the teacher-researcher searched for repeating terms and/or phrases by the participants. Recurring terminology were separated by themes, or categories. The teacher-researcher used the coding to interpret the data per participant and then as an overall analysis. Synthesized data, specifically participants’ direct responses, will be displayed through narrative text in Chapter Four.
Plan for Reflecting with Participants on Data

With this study focusing on reflective practices, it was not only fitting but crucial for the teacher-researcher to reflect on the process and findings with others, including the participants and fellow education instructors. As Mertler (2014) states, “by sharing and disseminating your action research, you also encourage others to engage in these types of activities in their own classrooms” (p. 249). With the teacher-researcher, encouraging others to be reflective practitioners was an important piece of this action research study.

Upon the completion of the study, the teacher-researcher was able to share the findings with the participants. While the course in which the study took place concluded at the end of the Fall 2016 semester, all participants returned in the Spring 2017 semester to complete their student teaching block. The teacher-researcher met with the participants as a group on campus approximately three weeks into their student teaching semester. The teacher-researcher shared the process by which the data had been collected and analyzed. The teacher-researcher then shared the findings of the study. Special consideration was taken in order to maintain the privacy and anonymity of each participant by removing names from data records and omitting descriptions of participants. Together, the participants and teacher-researcher discussed their experiences of the study and their thoughts on the findings. The teacher-researcher requested informal feedback regarding the instruments used throughout the study. The participants shared their thoughts on the applicability of this study for additional courses within the education program. During the conversations, the teacher-researcher made anecdotal notes that could be beneficial for future studies. These are discussed in Chapter Five.
After the follow-up meeting with participants, the teacher-researcher has planned to prepare a PowerPoint presentation with additional handouts for her colleagues and her Dean within the School of Education for the Fall 2017 semester during the first faculty meeting. Within the presentation, the teacher-researcher will outline the purpose of the study, its process, and the findings. The teacher-researcher also plans to organize and share information received from the participants during their follow-up meeting. The handouts for faculty members will include graphic representations along with narratives of the findings. The teacher-researcher plans to request that the faculty forward any suggestions they may have in terms of implementing reflective practices within the program’s curriculum in a cohesive manner.

**Plan for Devising an Action Plan**

At the beginning of each semester, the program committees (i.e. Early Childhood, Elementary, and Middle Level) meet to discuss programmatic issues, teacher candidate data, and additional information for their accreditation reports. The teacher-researcher has scheduled time at the beginning of the next Fall’s meetings with each committee to review the information gathered from the study, the follow-up meeting with the participants, and the discussion with other faculty members. The teacher-researcher plans to use the feedback from colleagues to identify the strengths and weaknesses of the individual programs regarding their implementation of reflective practices with their teacher candidates. The purpose of these meetings will be to continue reflective practices among the teacher educators so as to model such practices throughout the professional education program.
Conclusion

The purpose of this action research study was to examine the impact of a Reflective Practice Series (RPS) on the awareness level of six teacher candidates enrolled in a field experience course within an education program at a university in the southeast. This was done while promoting on-going collaboration and support among the teacher candidates with regards to reflective practice, implementing reflective practice during field experiences, and determining if reflective practices student achievement among their K-8 students. Along with these focal points, the teacher-researcher examined the characteristics of a strong reflective teacher and hoped to formulate an applicable model of reflective practice for other teacher education courses.

While the teacher candidates used their learners’ pre- and post-tests in analyzing their instruction through the quantitative data, the focal point of the data collection included qualitative research through the candidates’ questionnaires, reflections, and self-evaluations. In the next chapter, the data from the instruments that were used to analyze the teacher candidates’ understanding of reflective practice will be provided. Narratives of the participants will be given and research to support the findings will be discussed.
CHAPTER FOUR

FINDINGS FROM THE DATA ANALYSIS

Introduction

This study’s focus was to examine the impact of a reflective practice series of six teacher candidates’ awareness level regarding reflective practices in their field experiences. Through assessing the teacher candidates’ long-range plans and work samples, two of their program’s requirements, at a public southeastern university, it appeared that teacher candidates had difficulty reflecting on the impact of their planning and instruction, even after analyzing their learners’ pre- and post-test results. Teacher candidates were unable to articulate clearly the reasons for their learners’ performances, not being able to identify whether students’ performance was due to planning, instruction, and/or assessments. The teacher candidates provided generic responses for explanations with little to no specific examples from their unit of instruction or other experiences in the K-8 setting. This lack of awareness was observed during field experience courses, including the student teaching semester, through the teacher-researcher’s notes and analysis of student teachers’ projects for multiple semesters.

In his study regarding student teachers’ awareness of reflective practice, Liou (2001) recognized that while teaching reflection and reflective practices is not a systematic process, the skill does need guidance and can be learned. Therefore, the implementation of a program similar to the RPS was thought to be helpful in teacher
education programs and courses; thus, the RPS was practiced for the purpose of this study.

**Research Question**

The research question that guided this study was as follows: What impact will a reflective practice series (RPS) have on the awareness level of six teacher candidates enrolled in a field experience course at a public university in the southeast? This study’s data, highlighted the differences between Dewey’s (1933) and Schön’s (1987) ideas from a theoretical perspective in order for teacher candidates to achieve effectively the concept of reflection. It must also be considered that reflection is not the end of a process but a means to an end, with the end being stronger pedagogical practices among teachers. These stronger practices could result in improvements among students’ learning and performance.

This chapter is organized in terms of three themes that emerged as a result of the analysis: (1) teacher candidates’ acknowledgement of reflective practice and its impact on student achievement, (2) teacher candidates’ ability to relate theory to practice, and (3) teacher candidates’ understanding of the reflection process. Each theme is examined using data from the study followed by the teacher-researcher’s interpretation of the results.

**Purpose of the Study**

The purpose of this study was to examine the impact of a Reflective Practice Series (RPS) on the awareness level of six teacher candidates in a field experience course within an education program at a public university in the southeast.
Findings of the Study

Throughout the course of the RPS, the teacher-researcher collected data through pre- and post-questionnaires, reflective assignments, classroom observations, and the participants’ SLO unit projects (for definition of SLO see page 12). Upon reviewing the data collected from the various instruments used, the teacher-researcher identified three dominant themes: (1) teacher candidates’ awareness of reflective practice and its impact on students’ academic improvement, (2) teacher candidates’ acknowledgement of the relatedness of theory to practice, and (3) teacher candidates’ changes in their awareness of the reflection process during their clinical experience.

Theme one: Reflective practice and its impact on student achievement.

Prior to beginning the RPS with the participants, the teacher-researcher administered a pre-questionnaire (see Appendix B) to gauge the teacher candidates’ prior knowledge and awareness of reflective practices. The responses given to one of the items particularly resounded with the teacher-researcher. The item required the participants to rank 5 characteristics out of 15 that they found to be most compatible with or most critical to reflective practices. All participants included among their top five characteristics at least one of the following: the importance of collaborating with peers/colleagues on instructional strategies or best practices, having colleagues/peers observe their teaching, and/or self-rating their instruction. A significant percentage of the participants’ responses focused on their instructional strategies, with little attention paid to analyzing students’ performance.

Additionally, during Session 3 of the RPS, the participants were asked to reflect on their past experiences and past teachers (see Appendix D) and given prompts to guide
their reflections. When asked, “Why is it important for you to reflect on your personal influences?,” and, “How can you use this information as you move forward as an intern, student teacher, and teacher?,” the participants focused exclusively on teaching strategies. They narrated how their influences, positive and negative, guided them into knowing how to teach and what will work with regards to their level of comfort in the classroom. The participants’ responses focused largely on their personal strengths and weaknesses, with little emphasis on students’ academics. For example, Lora stated that reflecting on her personal influences allowed her “to have a personal connection with the topic” and it gave her strategies to reference for the students “instead of them just listening to [her] talk.” Sharon also noted that through reflecting on personal influences, including those teachers who she considered to be ineffective, she learned what not to do and what to do. Sharon stated, “...to make sure I’m answering the ‘why’ questions when modeling. I also need to make sure I create an environment that makes all students feel more comfortable asking questions.” These reflections portrayed the “self” perspective of the participants rather than their consideration of their students.

However, as the participants progressed through the RPS, with class discussions and associated texts about the purposes of reflective practice in teaching, their perceptions began to shift towards the learner. During Sessions 7 and 8 of the RPS, the participants completed the COR form (See Appendix G) and the Self-Reflection on Instruction and Student Learning assignment (see Appendix H). For these two instruments, the participants provided evidence of various instructional strategies and student performance from one of their lessons taught during the SLO unit. The participants began to share how they were reflecting before, during, and after instruction
in order to improve student learning. For example, several of the participants discussed the need for additional reviews before they administered their summative assessments to their students. When discussing a particular lesson, Lora reflected on her reasoning for providing an additional review:

I made the decision to review before the post-assessment after this lesson. I did this because I knew I had many students who needed the review based on the wide variety of results on the exit slip and[,] for the ones who didn’t really need the review, it would still be interesting and extend their learning of the material. This example of reflection showed that Lora was noticing the importance her reflections can have on students’ academic performance. Another example was Sharon’s reflection on the types of adjustments she had to make with her lesson:

The cooperative learning jigsaw activity took longer than expected. [...] Because this activity took a longer amount of time to complete[,] students did not get an opportunity to complete the compare and contrast independent activity. I felt it was more important for students to complete the formative assessment because I needed to know what information should be focused on during the final review activity.

As the participants shared these reflections during the RPS sessions, the teacher-researcher noted those days’ Field Notes Observation Records (see Appendix I) that several participants were sharing their thoughts on how they impacted the students’ learning by thinking about instruction on a regular basis: during planning, teaching, and after each day’s lesson. Consider the reflections of the following participants:
**Carmen:** I think that when I realized how much time was being wasted and that my time management was not strong, it made me better plan for the next lesson. I noticed in the next lesson that the students performed better on their formative assessment because of this. Had I not considered working on my time management, the students might not have improved that next day on their math sheet.

**Ashley:** Well, I reflected during one of my lessons. It was kind of in the moment. I realized some of the students were not understanding the concept. Half-way through I stopped and told them to take out their white boards and show me their drawings. We were working on fractions. Seeing all the students’ answers at once allowed me to show the entire class the correct way to draw their visuals. Then[,] on their unit test, I noticed they were using the strategy that I showed them. It made me happy to see that!

**Steve:** When I reflected on the students’ CFs, specifically what I gathered from the interest inventory that I administered before beginning my SLO unit, I knew to make sure that my relevance given for each lesson should be intertwined with their responses. I was able to relate back to a majority of the students who in their leisure time pursue sports. This got their attention and motivated them on their assessments, which enhanced their learning. Most did well on the unit post-test, and I would connect that to their motivation because I considered what they liked and put that into the lessons and assessments.
Upon completion of the RPS, the teacher-researcher conducted the post-questionnaire (see Appendix C). The teacher-researcher compared the responses of participants’ to their responses on the pre-questionnaire, with a particular focus on how they ranked the characteristics of reflective practice. As noted previously, on the pre-questionnaire participants gave more recognition to the ideas of collaborating with colleagues and self-evaluations as the important components of reflective practices in teaching. However, their outlook changed according to their post-questionnaire responses. All participants included the items “reviewing students’ work, tests, homework, etc.” and/or “participating in frequent data analysis of students’ results on formative and summative assessments” within their top five characteristics they found most compatible with or most critical to the process of reflection. What this change perhaps indicates is that the teacher candidates began to see a correlation between their reflective teaching and their students’ learning. Teacher candidates began to shift their focus from solely their instructional strategies to their students’ academic feedback.

Along with the items from the pre-questionnaire, the teacher-researcher added several open-ended questions to the post-questionnaire. For example, the question, “What benefits, if any, derive from reflective practices in teaching?,” allowed the participants to share their awareness of any correlating benefits to reflective practices they may have experienced during the RPS and their field experiences. A few of the participants discussed the benefits they saw among their students:

**Sharon:** . . . you are able to help your students grow more, as well. During a recording, you not only want to watch what you are doing, but also be aware of
what the students are doing and how they are reacting to the lesson. This is the time you can see if students really are engaged in your lesson and are learning.

**Lora:** By having reflective practices, you can go back and see how effective your lesson was for your students. Did they grasp the material? Did they improve from the previous lesson or unit?

**Alice:** It allows for a teacher to see what works and does not work with the set of students they have at the particular time. If students are not growing academically, then you will know that different instructional strategies may be needed, and by reflecting you can see which one works best for the student(s).

**Carmen:** A benefit of reflective practices in teaching is that I am more frequently analyzing students’ results and can determine ways to improve my quality of instruction. This in turn makes an impact on the students’ learning[;] because I am improving my teaching, they are improving.

With each of these examples, it is noticeable how the RPS assisted in the participants’ awareness of reflective practices and its impact on K-8 student achievement. The participants’ viewpoints moved from a greater focus on their own strengths and weaknesses to their observations and analyses of their students’ learning. In doing so, they began to note how practicing reflective teaching played a positive role with their students’ academic performance. From the pre- to the post-questionnaire, the teacher
candidates’ mindsets regarding the components of reflective practice clearly changed. They saw improvements in their students’ work and were able to connect those improvements to changes they made within their pedagogical practices based on their reflections throughout the RPS.

**Theme two: Relatedness of theory to practice.**

The second emerging theme from the data was that of the participants’ ability to relate theory to practice, meaning that they were able to note and apply theoretically-based practices to being reflective teachers. For one of the RPS sessions, the participants were encouraged to research the terms reflection-before-action, reflection-in-action, and reflection-on-action, along with reading about Schön’s theoretical views of reflective practices. When participants completed the Reflective Practices assignment (see Appendix E), they discussed a time when they felt they were reflecting on a teaching moment. Each teacher candidate was able to identify the type of reflection in which they participated. They were able to align their practice with Schön’s theory and were also able to discuss the theory throughout the remainder of the RPS in class and on additional assignments.

Ashley noted how she thought that reflection-before-action, -in-action, and -on-action should all take place as a reflective teacher:

Before teaching [my] lesson, I had to think about *how* I was going to teach in order to reach all learners, how long to spend on each section, etc. During the lesson, I found myself reflecting on the students’ interactions and I had to think of additional examples to better help them. And after the lesson, I took the time to critically think about what worked and what I should do next time to make the
lessons better. So for just one lesson, I used Schön’s ideas and applied them to my reflective practices.

The teacher-researcher recorded similar comments from other participants within the field observation notes, specifically on days six, seven, and eight of the RPS. Steve discussed how he needed to do more reflection-in-action. He stated that one of his weaknesses was not being able to “think on [his] feet” during a lesson but that he would later wish he had done or said something differently. He noted that he struggled analyzing students’ feedback and work while he was actively teaching, and he never really tried to reflect “in action.” Alice discussed her time reflecting on a math lesson with the group. She aligned her reflective practices to reflection-before-action and reflection-in-action. Alice explained how she used her class observations to reflect before her unit lessons, specifically with regards to one student she saw struggling academically. Then, Alice discussed how she adjusted her ways of explaining while she was teaching the lesson: “Once I found where the student’s comprehension was breaking down, I tried to provide strategies to help and offered a different way to explain it, which I think was reflection-in-action.” These examples signify the ways in which participants were able to articulate and apply Schön’s ideas to their teaching practices.

Each participant appeared to be able to note the importance of supporting pedagogical practices with theory. As the RPS continued for the remainder of the semester, the teacher-researcher observed the participants and took notes on their conversations. The participants not only focused on the theory behind reflective practices, but they also began to make connections to other theoretical philosophies that had been discussed in previous education and psychology courses to their field
experiences. Some of the notes recorded by the teacher-researcher included comments about Dewey’s (1933) ideas of critical thinking and Kolb’s (1981) concept of the four stages of the learning process, one being “reflective observation” (p. 236). Carmen actually brought in one of her textbooks from the educational philosophy course and shared it with the class to show that reflective practice was noted within it. She made a comment that when she took the philosophy class more than a year prior to her field experience course, she really did not give reflective practice much thought; instead, she focused on the more “well-known” theories, such as Piaget’s stages of development. However, now she “can see a thread from those well-known theories to the idea and usefulness of reflective practice.” For the teacher-researcher, that moment was profound, especially when the other participants agreed.

Lora and Sharon solidified the notion that the teacher candidates were making connections to theory and practice through their responses and reflections on their SLO projects (see Appendix J). Not only were they connecting the theory of reflective practice to their own teaching, but they also began to show an understanding of other theoretical perspectives. For example, when asked to identify best practice instructional strategies used to maximize instructional time during the SLO unit, Lora and Sharon made note of aspects to other educational theories:

Lora: I would say that one of my best instructional practices that I did in my unit was getting students to work together throughout the daily lessons. With my unit being a math unit, I found it easy to incorporate ways to get students socially active in their learning. I implemented active learning within many of the activities that I provided throughout my lessons. During my second day’s lesson,
I had the students use dominos[,] where they added dots on each side to get their third number in their fact family while working in groups to make meaning of new ideas. Giving them hands-on activities and time to discuss with one another helped them better conceptualize the content of solving and identifying related addition and subtraction facts. Just as we have discussed about peer tutoring, sometimes a student will learn better from a classmate than their teacher. I saw this happening during their time working together. Sometimes I had to be hands-off, and just listen to the students discuss their own learning strategies as they talked through problems. Only when there were major misconceptions or errors would I feel the need to jump in and get them back on track. This form of teaching has been covered a lot in my educational philosophy and methods courses, but it was fun being able to actually implement it with my second graders and to see that it works! They all did really well on the formative assessments each day.

**Sharon:** With my unit being a social studies unit, one of the best practices I incorporated was culturally responsive teaching. At the time, I didn’t even realize this is what I was doing, but now being asked to explain my choices for how I taught the unit, I looked back at instructional strategies that were discussed earlier in my program and noticed that this is what I did. I took into account the different backgrounds of my fourth grade students. There were a variety of CFs I had to consider. As part of my SLO unit, the students had to be able to compare and contrast the African Americans and women of the American Revolution, so I used
the information I had gathered about my students to incorporate relevant text and activities during the unit. I also found that I, too, had to acquire more details about the two cultural groups from that time period. Being an African American woman, I thought that I would not have to research as much, but I found that I did and that there was much to learn about how different (and surprisingly how similar) the cultures were to today’s. Then[,] to make my unit interesting to my students, I had to determine the most important pieces to include with my daily lessons. By being culturally responsive, I think my students found a deeper appreciation for the diversity among the groups from the American Revolution as well as within their own class.

Lora’s acknowledgement of social constructivism within her field experience displayed an awareness of the use of theory to practice. She was able to articulate how she incorporated active learning, which stems from the constructivist theory. Also, within her response, she subtly addressed how she used scaffolding within her practice by noting when she was “hands-off” and would only “jump in” when necessary. Watson (2001) also found this theoretical practice among teachers in her study on social constructivism in the classroom:

My research on classroom reflection showed that two teachers were exceptionally responsive to pupils’ ideas and interests, and interviews revealed their conviction that their teaching should be guided by their pupils’ responses and the priority they gave to scaffolding understanding in their practice. (p. 142)

Additionally, Sharon’s response reflected her understanding regarding theoretical connections to one’s teaching practices. Her response displayed acute awareness of the
meaning and purpose of culturally responsive teaching. She based her teaching on the assumption that when the curriculum and content knowledge are connected to the backgrounds of students, instruction can be more meaningful and more motivating for the students (Gay, 2010).

These examples from the participants’ reflections indicated that the RPS had positive impact on their ability to relate theory to practice. Not only were participants articulating the relation of theoretical-based practices to reflective teaching, but they also began to display a stronger sense of connection among other educational theories and pedagogical practices.

**Theme three: Process of reflection.**

Notably, participants either recognized or discussed the process of reflection throughout the RPS. Some participants noted that there is a process to reflective practices, but that it is not a systematic process with a clear step-by-step outline (see Table 4.1). Others saw it as a systematic process, yet later contradicted themselves through their answers on various reflection assignments and the post-questionnaire. The teacher-researcher also observed inconsistencies among participants’ awareness of the reflection process during RPS class discussions. These inconsistencies were noted as an emerging theme from the study.

The following items on the pre- and post-questionnaires were used in assessing the participants’ understanding of the process of reflective practices:

1. I believe there is a set, systematic process for being a reflective teacher.
2. I consider “reflective practice” to be simply thoughtful of what you have done with your instruction/performance with your students.
(3) During my internship, I discussed my teaching practices with others.

(4) As part of my reflective practice, I made notes on how to improve my lessons.

(5) During my internship, I observed my cooperating teacher during instruction, which helped me to reflect on my teaching.

(6) During my internship, I used my students’ written/verbal feedback to reflect on my teaching.

The corresponding responses are displayed in Table 4.1. Items 3, 4, 5, and 6 were only on the post-questionnaire.

Table 4.1. Participants’ Responses to Pre- and Post-Questionnaire Items

<table>
<thead>
<tr>
<th>Participant</th>
<th>Pre (1)</th>
<th>Post (1)</th>
<th>Pre (2)</th>
<th>Post (2)</th>
<th>Post only (3)</th>
<th>Post only (4)</th>
<th>Post only (5)</th>
<th>Post only (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lora</td>
<td>Agree</td>
<td>Agree</td>
<td>Agree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Agree</td>
<td>Agree</td>
<td>Agree</td>
</tr>
<tr>
<td>Alice</td>
<td>Disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Agree</td>
<td>Agree</td>
<td>Agree</td>
<td>Agree</td>
<td>Agree</td>
</tr>
<tr>
<td>Sharon</td>
<td>Disagree</td>
<td>Agree</td>
<td>Agree</td>
<td>Agree</td>
<td>Agree</td>
<td>Agree</td>
<td>Agree</td>
<td>Agree</td>
</tr>
<tr>
<td>Ashley</td>
<td>Strongly Agree</td>
<td>Disagree</td>
<td>Strongly Agree</td>
<td>Disagree</td>
<td>Strongly Agree</td>
<td>Strongly Agree</td>
<td>Strongly Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>Carmen</td>
<td>Disagree</td>
<td>Agree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Agree</td>
<td>Agree</td>
<td>Agree</td>
<td>Agree</td>
</tr>
<tr>
<td>Steve</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Strongly Agree</td>
<td>Strongly Agree</td>
<td>Strongly Agree</td>
<td>Strongly Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

The participants’ views of the process of reflection were divided, with three noting that there is a systematic process and three disagreeing. However, two of the three who noted reflective practice as being systematic gave contradictory feedback during RPS sessions. For example, Lora noted on her COR that she utilized and guided instructional decisions based on her students’ achievement to address their strengths and weaknesses by grouping them according to their needs and abilities, but also that she would reflect on her lessons’ effectiveness but would be indecisive in making new adjustments. Her
conversations during the sessions indicated that she actually saw reflective practices to be more of trial and error instead of a one-way method.

Carmen, however, remained consistent in considering the process of reflection to be systematic. On several occasions, she noted the “method” of reflecting. On her COR, Carmen stated, “I reflect on every lesson and make notes of what worked and what I can improve on next time. This system has helped me to plan better, to teach better, and to understand my students’ feedback better.” She also stated on her post-questionnaire that the assignments throughout the RPS helped her organize and be more reflective, so that her own reflections were not just “speculative.” She noted, “I can feel myself going through the process of planning and teaching and then purposefully reflecting on the process.”

The other participants who disagreed with there being a systematic process for being a reflective teacher gave similar notes or feedback to that of Carmen’s throughout the RPS, which were contradictory to their original responses. Steve, who “strongly disagreed” with the systematic process, shared his thoughts during session two of the RPS when he and some other participants worked together to develop a definition of reflective teaching to share with the class. The teacher-researcher recorded his statement and the conversation with his group members on the field observation notes:

**Steve:** I would say that reflective teaching is the on-going process of thinking about what you’re going to do with your students, trying it, and then re-evaluating it.

**Alice:** So do we want to say there are steps to take in being a reflective teacher and add that to our definition?
Steve: Yeah. I think we could identify steps, but then show that those steps can be repeated.

Sharon: I agree. I think there is a method to reflective teaching, but like Steve said, it’s on-going.

The participants continued with similar conversations throughout the RPS. Their responses on the post-questionnaire and in class raised concerns for the teacher-researcher. These contradictions made the teacher-researcher question if the participants still struggled in understanding the meaning of reflective teaching. However, every participant either agreed or strongly agreed to the item on the post-questionnaire, “I understand what it means to be a ‘reflective teacher’.” They also provided logical responses to the open-ended question, “What benefits, if any, derive from reflective practices in teaching?” Sharon, Lora, and Alice’s responses were noted previously regarding the positive impact reflective practice had on their learners (see page 53). Below are the responses from the remaining participants:

Ashley: Reflective practices allows [sic] the teacher to identify problem areas. Once the problem areas have been identified, corrective actions can begin. Problem areas can include anything from classroom management to student learning or misconceptions. By reflecting, the teacher can determine whether or not changes should be made to instruction, rules, procedures, or even the types of assessments given to the students. On the other hand, reflective practices also helps [sic] to identify the strong areas within a classroom, like if the teacher is able to effectively plan for the students or if the teacher is aware of the students’ needs.
Carmen: A benefit of reflective practices in teaching is that the quality of instruction will improve because when I reflect on my teaching there is always an aspect or strategy that I could have done better or manipulated in a way that would help the students. I was more mindful of what I was doing during my unit and why I was choosing to do things the way that I did.

Steve: I realized that I need to work on my time management and also my classroom management during my reflections. So I would say that a benefit to reflective practices is that it encourages the teacher to look at his strengths and weaknesses and it gets us thinking about what we need to do better. There were times when I was recognizing that I needed to be more present in the classroom and I was lacking “with-it-ness” because I wasn’t catching disruptions when I should have. These are things I know to work on before student teaching.

From looking back at the benefits of student learning to strengthening their own research skills by trying new strategies and assessing the effects, the participants were all able to note that implementing reflective practices has some sort of process and a positive influence in the classroom.

**Interpretation of Results of the Study**

The results of the study indicate that the RPS did have a positive impact on the awareness level of reflective practices among the teacher candidates enrolled in the field experience course. They recognized positive effects reflective teaching had on student learning and achievement. The participants also were able to identify and relate theory to
reflective practices, among other teaching practices. In addition, the third emerging theme from the study showed how participants were aware that reflective teaching does have a process, although they did not all appear to be able to clearly identify whether or not the process was systematic or had clear defined steps.

**Interpretation of theme one.**

Based upon the teacher candidates’ analyses of their students’ achievement during their unit of instruction, the participants were able to note a correlation in the impact their reflective practices had on their students’ achievement. It is possible that this correlation was stronger among those candidates who more effectively implemented systematic reflective practice. Belvis, Pineda, Armengol, and Moreno (2013) examined reflective practice in teacher education and how its effects of reflective practice should flow into the preservice teachers’ field experience classrooms, in that improvements in their learners’ performance should be evident. In alignment with this report, the implementation of the participants’ reflective practices in the current study appeared to result in improvements in their own students’ achievements.

When referring to their analyses of student work from their SLO units, all participants acknowledged the growth of their students’ learning from their unit pre-tests to their unit post-tests, including references to specific student examples from the daily lessons within the units. Sowa (2009) also noted this correlation in the study among her participants: “Teacher satisfaction and confidence in their teaching, especially with respect to student learning are other dispositions [the participants] noted [. . .] who found an improvement in student learning” (p. 1031). Students benefit academically when their teachers are consistently involved in learning and professional development (Canniff &
Shank, 2003). Similar to the results found by Stuart and Thurlow (2000), the teacher candidates in this study displayed a stronger awareness to how reflecting on their beliefs and actions within the classroom encouraged them to make necessary adjustments in their planning, instruction, and assessments. This awareness, in turn, “sharpened the sense of the powerful impact of those practices on student learning” (Stuart & Thurlow, 2000, p. 119). The discourse, which occurred throughout the RPS and teacher candidates’ participation in their assignments, indicated an increase in their understanding of the impact reflective teaching has on students’ academic achievement.

**Interpretation of theme two.**

It is logical to think that teachers who actively participate in staying knowledgeable on theories and practices will bring innovation and effective teaching to their classrooms. Therefore, when the participants began to recognize the connection between the theory behind reflective practices and what they were actually implementing within their field experience courses, it was a rewarding experience for the teacher-researcher. In the beginning stages of the RPS, the participants were more focused on *what* they were doing concerning reflection on their planning and instruction but not *why* they were doing it. The dialogue during the sessions did not refer to theory-based practices or supporting literature. It was not until time was spent discussing Schön’s ideas of reflection-before-action, -in-action, and -on-action that the participants began to make connections to other theories and were able to explain how some theories meshed together to influence the idea of reflective teaching.

With the various dynamics and philosophies of reflective teaching teacher candidates can approach the application of reflective practices in different ways (Akbari,
Therefore, it was important for the teacher-researcher to provide opportunities for the participants to review literature about reflective practices during the RPS in order to be able to make connections and to aim to increase their level of awareness of theory to practice. Akbari (2007) noted, “A reflective teacher [. . .] is one who critically examines his practices, comes up with some ideas as to how to improve his performance to enhance students’ learning, and puts those ideas into practice” (p. 194). When Carmen and several other participants noticed how they were doing just that in their field experiences, they made reference to Schön’s (1987) distinctions between the types of reflections and went even further to relate it to Dewey’s (1933) formulation of reflection. Also, as Steven critiqued his need to be “more present” in the classroom and his lack of reflecting in-action, he acknowledged Schön’s (1987) notion of needing to reflect for a time “during which we can still make a difference to the situation at hand” (p. 26). Steve recognized the need to strengthen his skills of reflective practices, especially that of reflection-in-action. He noticed that it was important to reflect while teaching to provide immediate assistance to his students during instructional time.

The connections made to additional theories were also prevalent from the participants’ responses and interactions with each other throughout the RPS. Within their reflections, the participants acknowledged influences from other educational philosophies to their practices during their field experiences. As previously noted, Sharon became aware of how she was being a culturally responsive teacher during her social studies unit, from planning to assessing her students. Though her students’ academic achievement could be accredited to Sharon’s other pedagogical practices, she noted that her reflective teaching had a positive impact on her students’ achievement. It was through reflecting
that Sharon became aware of her other practices during the SLO unit lessons, specifically the practice of being culturally responsive. Gay (2002) identified that culturally responsive teaching can positively impact students’ learning: “As a result, the academic achievement of ethnically diverse students will improve when they are taught through their own cultural and experiential filters” (p. 106). Therefore, as Sharon reflected on her teaching and choices of strategies, she became more aware of how theory and reflective practice were related.

Similarly, Lora’s response was another example of how the participants connected theory to practice. Throughout her unit of instruction, Lora incorporated the fundamental idea of social constructivism: “collaborative social interaction” (Applefield, Huber, & Moallem, 2001, p. 38). Lora’s reference to active learning also directly reflects the constructivist views of Bruner (1966) with regards to discovery learning and Vygotsky’s (1987) concept of zone of proximal development, specifically when Lora used cooperative learning groups as a means for peer tutoring. As Lora reflected on her instructional strategies, she identified these additional educational theories within her practices. Moreover, she recognized that her reflective practices contributed to her realization of the application of theory-based teaching.

Throughout the class discussions, reflection assignments, and the participants’ analyses of their instructional units from the SLO projects, participants applied theory to practice in multiple ways. Their participation in the RPS appeared to heighten their awareness of how reflective practice derives from various theoretical views as well as how other practices they began to incorporate into their planning, instruction, and assessment were clearly theoretically-based and supported by research.
Interpretation of theme three.

Prior to the implementation of RPS in this study, the teacher-researcher wanted to determine the teacher candidates’ awareness and understanding of the process of reflective practice. The results of the study lending to the third theme showed that, while the participants noted reflective teaching does involve a process, the results did not clearly indicate that the participants had clear understanding of the format, whether or not it is a cyclical or step-by-step process. They all appeared to understand that reflective practice is not spontaneous but that it does in fact allow for teachers “to act in deliberate and intentional fashion to achieve what is needed” (Posner, 2005, p. 21). However, their contradictory statements showed participants did not grasp the complete process of reflective practice.

While some may argue that reflective teaching does not have a defined process, literature supports that it is a process; in fact, it is a process of inquiry and research (Dewey, 1933; Posner, 2005; Schön, 1987). Dewey (1933) recognized it to be a psychological process that has logic and reason. Schön (1987) recognizes reflective practice as being unique in that there are specific components to the process of reflecting (e.g. reflecting-in-action and reflecting-on-action, etc.) but that those do not occur in a specific order; instead, they occur within a cycle of reflection. In addition, according to Posner (2005), “Reflective teachers actively, persistently, and carefully consider and reconsider beliefs and practices” (p. 21). Therefore, with these different aspects or descriptions of reflective practice, it can be understood that the participants in this study struggled in narrowing down their ideas of the method of reflection.
During the RPS, the teacher-researcher did not guide the participants to identify a set outline of reflective practices. While most of the implementation of the RPS utilized Schön’s (1987) theory of the cycle of reflective practice, there was no direct instruction introducing the teacher candidates to one theorist’s process over another. Instead, various texts were provided along with the reflective assignments throughout the series in order to encourage participants to determine on their own what they considered to be the process of reflective practice. During discussions in class, the teacher-researcher observed that most participants were cohesive in viewing the process of reflection as ongoing and reoccurring. The participants shared their experiences of thinking back to what was done and reconsidering what should have been done, to looking ahead at how they would plan and teach differently, and so forth. However, when comparing their responses to their pre- and post-questionnaires, some participants still noted that reflective practice is a set, systematic process. Ossa Parra, Gutiérrez, and Aldana (2015) concede “that there is no singular right way to engage in reflective practice,” but that there is a necessity to embrace a process which leads to exploratory learning about one’s practice and its impact on students (p. 17). Thus, the teacher-researcher concluded that the participants’ level of awareness regarding the components and procedure for reflective practice was not fully developed by the end of the course; however, it is possible with additional instruction and modeling, if given more time, that their understanding could increase.

**Conclusion**

Alice, Ashley, Carmen, Lora, Sharon, and Steve actively participated during the RPS sessions through their discussions, reflection assignments, course projects, and the
questionnaires. Through the analysis of the data, this study ultimately led to some evidence of the positive impact the RPS had on the teacher candidates’ awareness of reflective practice in their field experience settings and in their knowledge of theory-based instruction. The participants recognized the benefit of teachers participating in reflective practice to their respective learners, as they reflected on their pedagogical practices and student data from their specific SLO units of instruction. The participants were also able to relate theory to practice, not solely to the theory behind reflective practice but also to other theoretical standpoints and instructional methodologies. And while the six participants could express that there was some type of process to reflective practice, they did not display clear understanding of that process. They acknowledged certain components and benefits of reflective teaching but contradicted themselves when attempting to articulate the method of reflective practice. Further instruction and exposure to reflective teaching practices may bring clarity to this process and could benefit from further research.
CHAPTER FIVE
DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

Overall, this study revealed that participants moved towards reflective practice and that various activities throughout the RPS seemed to foster this practice. The findings of this study revealed three themes addressing the participants’ level of awareness of reflective practice in their teaching experience: the impact it has on students’ academic achievement, the connections of theory to pedagogical practices, and the knowledge of a process for reflection. These themes suggest that the RPS did have a positive impact on the participants’ understanding and implementation of reflective practice which stemmed from their class discussions, reflection assignments, and their analyses of student work from their SLO units of instruction.

Through the findings of this study, the teacher-researcher determined a basis of effectively implementing reflective practices in the field experience course through the application of the RPS while also noting suggestions for additional instruction and future studies.

This study may benefit education programs by highlighting possible routes for implementing the instruction of reflective practices. Teacher educators will be able to determine the reflective practice skills among their own preservice teachers. Specifically,
teacher educators will be able to see examples of the outcomes when reflective practices become part of the curriculum during field experience courses.

**Research Question**

The teacher-researcher of this study sought to answer the question: What impact will a Reflective Practice Series (RPS) have on the awareness level of six teacher candidates enrolled in a field experience course within an education program at a public university in the southeast? Through observations, reflection assignments, the participants’ course project, and pre- and post-questionnaires, the teacher-researcher collected data to analyze if, and what, impact the RPS had on the six participants’ awareness of reflective practices.

**Purpose of the Study**

The purpose of this study was to determine if the RPS had an impact on teacher candidates’ ability to incorporate reflective practices in their educational field experiences, and if so, knowing to what degree they were aware of their ability and knowledge of reflecting on their planning, instruction, and assessment. As a reminder, for the purpose of this study, reflective practice is defined as how one considers his/her specific action and instructional practice objectively, analyzing the effects of those practices, and implementing changes necessary to lead to improvement in student learning.

**Overview and Summary of the Study**

This study involved six teacher candidates during a field experience course as they participated in a Reflective Practice Series (RPS): an eight-week program which provided opportunities for critical reflection through class discussions, course
assignments, and questionnaires based on the participants’ planning and teaching during their time in a K-8th grade setting. Throughout this action research study, the teacher-researcher used the RPS as an applicable model of the reflective practice process for future teacher candidates and teacher educators. Along with answering the research question, the teacher-researcher focused on identifying the qualities and characteristics that make an effective reflective practitioner.

Several implications can be derived from this study:

(1) Through the practice of reflective teaching, teacher candidates believe that student achievement is affected;

(2) Teacher candidates may become more apt at making connections among theory and practice;

(3) There remains an unclear understanding of the process of reflective practices among teacher candidates; and

(4) Teacher educators can and should foster reflective practices with their teacher candidates.

Eggen and Kauchak (2013) make mention of the importance of reflective practice by stating, “Reflective practice can help [teachers] become more sensitive to individual student differences (Berrill & Whalen, 2007), and it can make [teachers] more aware of the impact of [their] instruction on learning (Gimbel, 2008)” (p. 12). This was shown to be accurate as the participants were aware of the effects their reflective teaching had on learners during their field experiences. From their discussions and written reflections, the participants acknowledged that their students benefited in some way because their teacher consistently reflected and analyzed their various aspects of lesson planning, instruction, and the students’ assessments.
The participants were also able to show a better understanding of how theory and practice were related. Through the connections they made among reflective theories to what they implemented during their field experiences, the teacher candidates accredited the ideas of Dewey, Schön, and others. They also recognized how additional teaching practices were theoretically-based as they reflected on their SLO units of instruction. This acknowledgement was also noted in the study by Khan (2015). In researching the impediments to reflection in teacher education by student teachers and their mentor teachers, “no theoretical and/or definitional issues were pointed out as possible hindrances” (Khan, 2015, p. 28). Instead, findings showed that the knowledge and application of theory to practice were strengths among his participants (Khan, 2015).

However, findings of the current study indicated that there remains an unclear understanding of the process of reflective practices among the teacher candidates. In Khan’s (2015) case study, it was found that most mentor teachers and student teachers identified the process of reflection as having an emphasis on memory, using Schön’s (1987) idea of reflection-on-action but limiting the process to the development of intuitive imagination. In retrospect, this obstacle was also the paradigm of this study as participants’ responses to the pre- and post-questionnaire items contradicted their responses on assignments and in class discussions. These contradictions left the teacher-researcher still questioning the level of awareness the participants had on the process they used for reflective practices in their respective field experiences.

Overall, the implementation of the RPS resulted in what the teacher-researcher found to be positive feedback from the teacher candidates. With this study being influenced by the teacher-researcher’s examination of the lack of thoughtful discussions
and analyses from former teacher candidates, it was rewarding to see more in-depth reflections from the participants. Their analyses of student learning were more astute and included attentive details, or evidence, from their reflections to support the evaluations of their students’ performances. Therefore, it is the teacher-researcher’s belief that teacher educators can and should foster reflective practices within their courses for their teacher candidates, with the hope that the skill will continue in their professional careers.

Suggestions for Future Research

The teacher-researcher noted two specific areas that could lend for further research regarding reflective practice in education:

(1) the method of assessing it within teacher education programs; and
(2) its impact on student achievement.

While there are many advocates for reflective practice in teacher preparation programs, school districts, and other educational settings, the term reflective practice is still a vague concept across the social sciences, including education. Rieger, Radcliffe, and Doepker (2013) note that “effective teachers constantly evaluate their practice, assess their decision making, and seek alternative teaching methods to ensure student learning in light of the current context of time” (p. 185). However, the teacher-researcher of this study still questioned how to best assess reflective teaching within education programs.

Assessing reflective practice in the course posed a threat in the data collection within this study. Hargreaves (2003) notes, “As a consequence[,] students at best are obliged to choose only those reflections that fall within a professionally acceptable frame, or to fictionalise [sic] events” (p. 200). Considering that “through reflective dialogue it may be argued that students have the opportunity to safely explore the boundaries of acceptable practice,” one who is evaluating reflective practice among teacher candidates
should do so with an understanding that personal narratives can be difficult to assess (Hargreaves, 2003, p. 200). As the teacher-researcher observed, narratives from participants remained subjective, initiating additional questions that could not be answered during this study’s timeframe, such as the contradictions the participants displayed regarding the reflective process. Another means of assessing teacher candidates’ knowledge and application of reflective practices is needed.

Young, James, and Noy (2016) examined the use of a rubric for assessing reflective practice among learners in internship or practicum settings. They sought to validate a set of criteria for evaluating interns’/practicum students’ reflections through journaling by implementing the use of a rubric. They noted that “a rise in empirical evidence pertaining to effective assessment tools for pinpointing standards of reflective practice [. . .] has not been seen” (Young et al., 2016, p. 135). What they found from their quantitative data was that discrepancies continued to occur among the assessors’ ratings; yet, the qualitative data showed the assessors found the rubric logical and useful. It was concluded that while there was still room for subjectivity, a fully valid and reliable assessment instrument would be difficult to assimilate for the evaluation of reflective practice. The teacher-researcher of this study found this to be true. Because reflections are focused on personal narratives and viewpoints, additional research is needed to determine a stronger method for analyzing how well teacher candidates are able to understand the purpose and apply the skill of reflective practice.

The second suggestion for further research is aimed at reflective practice and its impact on student learning. The assumption that reflective practice results in higher student achievement came to surface during the course of this study. However, there was
no direct evidence to show that by practicing reflective teaching, the students with the
teacher candidates improved academically because of their teachers’ reflective practices.
Through the review of the literature, the teacher-researcher of this study found that
studies focusing on reflective practice in education has the possible benefit to learners,
there was little empirical support to be able to pinpoint a clear link (Akbari, 2007;
reference to this lack of evidence:

   . . . it is quite possible that there are pieces of evidence documented by teachers
   related to improvement of students’ learning resulting from reflective practices
   which have not found their way to academic journals due to publication policies
   or the discourse community standards of representation (p. 198).

Therefore, it is the teacher-researcher’s suggestion that with the appropriate study and
data collection, one could determine whether or not reflective practices among teachers
can directly lead to higher student achievement, creating a new theory stemming from
such findings.

**Action Plan**

The results of this action research study showed that the implementation of a
Reflective Practice Series in a field experience course had a positive impact on teacher
candidates’ knowledge and application of reflective practices. With the focal point of
this study being reflective practices, it was evermore fitting that the teacher-researcher
develop an action research plan in order to continue the process of reflective practice.
According to Mertler (2014), “Action planning is an extremely appropriate time for
professional reflection” (p. 214). Using Mertler’s approach to action planning, the
teacher-researcher has devised an action plan for continued and future research, not only
in the teacher-researcher’s classroom, but throughout the education program. The ongoing plan consists of continued reflection while following these phases (see Figure 5.1):

1. Sharing the findings of the study with colleagues;
2. Conducting and sharing additional research through implementing the RPS within a field experience course, using a controlled and experimental group of participants; and,
3. Conducting future research throughout the education program with colleagues.

Figure 5.1. Action Research Plan

The teacher-researcher wants to continue examining reflective practices within education course and teacher education programs. Recently, the state where the study was conducted adopted a new teacher evaluation rubric to be used with induction...
teachers. The rubric is structured using a four-point scale and 24 indicators of measuring teacher performance. As part of the evaluation system, the induction teachers are required to participate in pre- and post-conferences with their evaluators. These conferences are conducted using questions that encourage reflective practices. During the pre-conference, the teachers must be able to justify their chosen instructional strategies and assessments and articulate their plan for addressing students’ needs. They then participate in a formal observation, during which their evaluator observes a full lesson in the classroom. Following their observation, the teachers must submit a reflection on their lesson to their evaluator. The teachers’ reflections are used in organizing the post-conference between the evaluators and the teachers. During the post-conference, the teachers must be able to discuss their thoughts and analyses of the lesson. They also are required to address any instructional modifications they may have made during their lesson and explain why those adjustments were necessary. With this evaluation system in place, the teacher-researcher finds it important to enhance reflective practices within education courses and programs in order to better prepare teacher candidates for their future careers.

In order to continue the study and implementation of reflective practices in education courses, the teacher-researcher plans to first share the findings of the current study. Through a presentation for colleagues and the Dean within the School of Education for the next Fall semester during the first faculty meeting, the teacher-researcher will outline the purpose of the study, its process, and the findings. The teacher-researcher also plans to organize and share information received from the participants during their follow-up meeting, as discussed in Chapter Three. Handouts for
faculty members will be provided and will include graphic representations along with narratives of the findings. The teacher-researcher plans to request that the faculty share any suggestions they may have in terms of implementing reflective practices within the program’s curriculum in a cohesive manner. Collaboration with faculty is a key component for the teacher-researcher to interpret and address new ideas and strategies which could improve the implementation of reflective practices within the education courses (Mertler, 2014). Frequent conversations among colleagues is another piece of being a reflective practitioner, a noted role of the teacher-researcher.

The second phase of the action research plan is to conduct another study using two groups of participants within a field experience course. The teacher-researcher wants to tighten the results of the study by implementing a controlled experiment, with one set of teacher candidates participating in the RPS and the other set of teacher candidates participating only with the assignments and course projects, without direct instruction of reflective practices. It is the teacher-researcher’s belief that this form of action research study will provide more concise evidence to whether or not the RPS has an explicit impact on the awareness levels of the teacher candidates. Also during the study, the teacher-researcher aims to examine more closely the academic performance of the teacher candidates’ K-8 learners, comparing their results among the two groups of participants. In doing so, the teacher-researcher may be able to better answer the research question: Do students’ academic performances improve when their respective teachers participate in reflective practices? Again, the findings of these studies will be shared with colleagues in order to gain additional perspectives and to strengthen the collaborative efforts among the teacher educators in the program.
The third phase of the action plan heavily involves the teacher-researcher’s colleagues. The goal is to plan and conduct additional research on reflective practices throughout the education program, not only in the teacher-researcher’s field experience course. Possible research questions for the future studies include: (a) Do teacher candidates continue reflective practices in their student teaching block after participating in the RPS during the field experience course prior to student teaching?, (b) Are teacher educators implementing reflective practices in a cohesive manner throughout the education program?, and (c) Are teacher educators effectively assessing reflective practices among their teacher candidates throughout the education program, and using what instrument(s)?

The first two questions derived from the follow-up meeting conducted with the participants of the current study. As the participants shared their thoughts about the instruments used during the RPS and the findings from the study, the teacher-researcher made note of their feedback. They each stated that they planned to continue reflective practices, but that they were concerned about time constraints with regards to their hours in the classroom and the amount of lesson plans, etc. for student teaching. Some participants discussed that while they had been exposed to the theory of reflective practice, they had not been encouraged to be reflective teachers in other courses. Other participants, however, stated that their methods courses required them to participate minimally in reflective practices.

The third research question came from suggestion for future research. While Young et al. (2016) examined the use of a rubric for assessing reflective practices, they found that it was still difficult to determine the reliability of such an instrument. With
reflective practices among teacher candidates consisting of narratives or other subjective matter, there does not seem to be a fully valid and reliable method of assessing this skill. However, in order to better examine the effects of reflective practices on teacher candidates’ planning and instruction, the teacher-researcher hopes to work with colleagues in researching and possibly creating an instrument that can assess what makes a reflective teacher. If this can occur, other teacher educators could use the study and the instrument as a model within their programs to strengthen reflective practices among their teacher candidates.

The teacher-researcher has created this action plan with the notion that it will be a cyclical process. This plan will be consistently explored, examined, and reassessed so that teacher-researcher regularly reflects on its effectiveness (Mertler, 2014). While the plan is initially for the individual teacher-researcher, the ultimate goal is to expand it to the education program by collaborative efforts with colleagues.

**Conclusion**

This study examined the impact of the implementation of a Reflective Practice Series on teacher candidates’ awareness levels of reflective practice. Reflective practice has continued to be a topic among education programs and professional development staff. However, with varying degrees and understandings of reflective practice found in literature, the development of reflective practice remains an area of concern. There are noted benefits of reflective practice which have been discussed throughout this study, but identifying a set way of implementing or teaching reflective practice among preservice teachers and assessing their reflective practices does not have a one-way approach. However, as found throughout the study, providing opportunities and examples of
reflective teaching, specifically during field experience courses, can heighten teacher candidates’ mindfulness to the importance of being reflective practitioners.

With continued fostering of reflective practices in education programs and throughout future in-service training for novice and veteran teachers, it is possible to research the effects reflective practices have not only on student learning but on the professional growth of teachers. This study has presented examples of what those results may indicate along with what future studies could bring forth to support the reflective practice theory. There were several implications discussed in this chapter that should be considered among teacher educators and others who want to infuse reflective practices with their teacher candidates and current educators. The cultivation of reflective practice should continue in order to examine the positive impact it has on teacher and student growth.
REFERENCES


McCabe, M., Walsh, S., Wideman, R., & Winter, E. (2009). The" R" word in teacher
education: Understanding the teaching and learning of critical reflective practice.

International Electronic Journal for Leadership in Learning, 13(7), n7.


Ritchhart, R., & Perkins, D. N. (2000). Life in the mindful classroom: Nurturing the


Volkman, B. K., & Others. (1992). Enhancing preservice teachers' self-efficacy through a field-based program of reflective practice.


APPENDIX A – CONSENT FORM

RESEARCH CONSENT FORM

PURPOSE OF THE STUDY:

As a doctoral student in the Curriculum and Instruction program at the University of South Carolina and as an instructor at a southeastern university, [redacted] is studying the reflective practices of teacher candidates in Education 391, Education 392, and Education 394 courses. The results of this study may help other teacher educators to effectively implement instruction on reflective practices among their teacher candidates. In order to determine the knowledge and affects of reflective practices among the teacher candidates in these courses, the [Southeastern University] School of Education teacher candidates are being asked to participate in a study by completing surveys and responding to discussion prompts in class and as written assignments within the courses. While the material of the study is embedded within the courses, the teacher candidates’ participation is voluntary, meaning the teacher candidates can choose to not have their course materials and assignments included with the findings that will be reported.

PARTICIPANT’S CONSENT

As a teacher candidate enrolled in one of these courses, please read the items below and sign your name at the bottom of the page if you agree to these terms:

✓ I understand that my participation in this study is completely voluntary, and I can choose to have my assignments to be included in the data collection purposes of this study.
✓ I understand that I will not be identified by name on the surveys or within any reports related to this study.
✓ I understand that my willingness to allow my course materials to be used for the study will not affect my course grade.
✓ I understand that any course materials or other personal information I share and submit related to this study will be kept confidential.
✓ I understand that there are no known risks or immediate benefits as a participant in this study.
✓ I understand that I have the right to withdraw my participation at any time from this study and retract my allowance of my course materials to be used for this study.
✓ I understand that the findings of this study will be published in [redacted] dissertation at the completion of her program.
✓ I understand that if I have any questions about this research study and its procedures, I can contact [redacted] or her U.S.C. faculty supervisor, [redacted].

I voluntarily give my consent as a participant in this study and to allow any course assignments related to this study to be used by [redacted] in determining the effects of reflective practices in teacher education courses.

Signature _______________________________ Date ______________
APPENDIX B – PRE-QUESTIONNAIRE

This questionnaire was used with the teacher candidates to assess their views and understanding of reflective practice. It was administered in online format at the beginning of the study.

1. **Select the best response. I am a/an:**
   a. Early Childhood Education major.
   b. Elementary Education major.
   c. Middle Level Education major.
   d. Secondary or Art Major.

Select the response “Strongly Agree,” “Agree,” “Disagree,” or “Strongly Disagree” for the following statements:

2. I understand what it means to be a “reflective teacher.”

3. I am currently involved in “reflective practices” as I participate in my field experiences within the public school settings.

4. I consider “reflective practice” simply to be thoughtful of what one has done with his/her instruction/performance with his/her students.

5. A “reflective teacher” must have the willingness to change his/her instruction.

6. I believe there is a set, systematic process for being a “reflective teacher.”

7. Out of the 15 items listed below, please rank the top five (5) items you find the most compatible with, or most critical to, the process of reflection, with 5 being of higher importance to 1 being of lower importance.

   a. Reviewing students’ work, tests, homework, etc.
   b. Reviewing strategies you have used to teach a concept
   c. Questioning individual students regarding the effectiveness of your strategies
   d. Asking students to tell you about the highlights of your teaching
   e. Asking a group of students to critique your instruction in a given area
   f. Having a colleague/peer observe your teaching regularly/informally
   g. Having a colleague/peer observe your teaching with a printed list of important objectives
h. Having a colleague/peer observe your teaching using a rubric focused upon specific qualities of instruction
i. Reviewing a video/recording of your instruction/performance
j. Re-teaching a unit of content differently and analyzing differences in results
k. Self-rating your instruction/performance with a checklist of areas to have been covered
l. Self-rating your instruction/performance after observing colleagues/peers teaching similar content
m. Self-rating your instruction/performance as it related to factual vs. affective values for students
n. Collaborating with your colleagues/peers prior to and following the instruction of similarly taught content/units
o. Participating in frequent data analysis of students’ results on formative and summative assessments
APPENDIX C– POST-QUESTIONNAIRE

This questionnaire was used with the participants to assess if their views and understanding of reflective practice had changed throughout the course. It was administered in an online format at the end of the study.

1. **Select the best response. I am a/an:**
   a. Early Childhood Education major.
   b. Elementary Education major.
   c. Middle Level Education major.
   d. Secondary or Art Major.

Select the response “Strongly Agree,” “Agree,” “Disagree,” or “Strongly Disagree” for the following statements:

2. I understand what it means to be a “reflective teacher”.

3. I am currently involved in “reflective practices” as I participate in my field experiences within the public school settings.

4. I consider “reflective practice” simply to be thoughtful of what one has done with his/her instruction/performance with his/her students.

5. A “reflective teacher” must have the willingness to change his/her instruction.

6. I believe there is a set, systematic process for being a “reflective teacher”.

7. During my internship, I discussed my teaching practices with others.

8. As part of my reflective practice, I made notes on how to improve my lessons.

9. During my internship, I observed my cooperating teacher (or other teachers) during instruction, which helped me to reflect on my teaching.

10. During my internship, I used my students’ written/verbal feedback to reflect on my teaching.

11. Using a recording of my lesson helped me to reflect on my strengths and weaknesses in teaching.
12. I plan to continue reflective practices during my student teaching experience.

13. Out of the 15 items listed below, please rank the top five (5) items you find most compatible with, or most critical to, the process of reflection, with 5 being of higher importance to 1 being of lower importance.

   a. Reviewing students’ work, tests, homework, etc.
   b. Reviewing strategies you have used to teach a concept
   c. Questioning individual students regarding the effectiveness of your strategies
   d. Asking students to tell you about the highlights of your teaching
   e. Asking a group of students to critique your instruction in a given area
   f. Having a colleague/peer observe your teaching regularly/informally
   g. Having a colleague/peer observe your teaching with a printed list of important objectives
   h. Having a colleague/peer observe your teaching using a rubric focused upon specific qualities of instruction
   i. Reviewing a video/recording of your instruction/performance
   j. Re-teaching a unit of content differently and analyzing differences in results
   k. Self-rating your instruction/performance with a checklist of areas to have been covered
   l. Self-rating your instruction/performance after observing colleagues/peers teaching similar content
   m. Self-rating your instruction/performance as it related to factual vs. affective values for students
   n. Collaborating with your colleagues/peers prior to and following the instruction of similarly taught content/units
   o. Participating in frequent data analysis of students’ results on formative and summative assessments

Open-Ended Response Items:

14. What benefits, if any, derive from reflective practices in teaching?

15. What hindrances, if any, may keep you from being a reflective teacher?

16. Do you feel that the various assignments in this course helped you in becoming a more reflective teacher? Why or why not?

17. Additional comments (optional):
APPENDIX D – REFLECTING ON PERSONAL INFLUENCES

Instructions: Using Posner’s text (Field Experience: A guide to reflective teaching, Chapter 4), complete this template and upload it under “Reflection Assignment_2” in the “Assignments” link in BlackBoard.

Exercise 4.1 (pp. 34-35): Your three most potent and significant learning experiences you can recall (Use the questions on page 37 to assist you in analyzing/describing those experiences.)

1. ____________________________________________________________

2. ____________________________________________________________

3. ____________________________________________________________

Exercise 4.2 (pp. 38-39): Most Successful and Unsuccessful Teachers (Don’t identify names! Respond to the three prompts from the text.)

2 or 3 Unsuccessful Teachers:

(Teacher A) ______________________________

(Teacher B) ______________________________

(Teacher C) ______________________________

2 or 3 Successful Teachers:

(Teacher D) ______________________________

(Teacher E) ______________________________

(Teacher F) ______________________________
Exercise 4.3 (p. 40): Most and Least Important Courses

<table>
<thead>
<tr>
<th>Most Important</th>
<th>Least Important</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Consider the criteria for selecting these courses/subjects using the information on pp. 40-41. Share any insights on your reasons for valuing certain ones over others.

Exercise 4.4 (p. 41): Key Events and People

<table>
<thead>
<tr>
<th>Events</th>
<th>People</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Why is it important for you to reflect on your personal influences? How can you use this information as you move forward as an intern, student teacher, and teacher?


APPENDIX E—REFLECTIVE PRACTICES

This assignment is submitted online via BlackBoard.

Instructions: Open this assignment and click “Create Thread.”

Think about any recent experience you have had teaching or instructing someone to do something (either in a clinical experience or outside of your education courses).

Then answer/respond to the following with clear examples/descriptions:

1. Did you think through how to help before doing anything, or pause mid-action, or mull over later how you were explaining, demonstrating or encouraging the learner?
2. Could you align this contemplation to reflection-before-action; reflection-in action; reflection-on-action? (research those terms, if necessary)
3. And, if you were to reteach this skill, would you do it the same or differently next time? How? Why?

Once you have posted your responses, reply to a classmate’s post with suggestions/tips, general comments, and/or a similar experience.

APPENDIX F—REFLECTION ON STUDENTS’ ACTIONS AND FEEDBACK

**Instructions:** Title your journal entry with your last name. Copy the following questions into your journal entry. Respond to each question. Provide specific examples from your clinical experience in your responses.

1. Did the relationships that you made with your students help or hinder their ability to learn?

2. Was your demeanor and attitude towards your class effective for student learning? Explain.

3. Can you explain at least *SOMETHING* about each of your student’s personal lives?

4. What verbal responses or feedback from your students showed that they were academically successful from your instruction?

5. Do you think your reflective practices affected your students' learning? Why or why not? (Give clear examples from students' daily work and post-tests to support your response.)
Teacher candidates used this form to rate themselves on their recorded lesson and to identify evidence to support these ratings.

<table>
<thead>
<tr>
<th>PLANNING DOMAIN</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicators</td>
<td>Evaluator Score</td>
<td>EVIDENCE</td>
<td></td>
</tr>
<tr>
<td>Instructional Plans</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INSTRUCTION</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicators</td>
<td>Evaluator Score</td>
<td>EVIDENCE</td>
<td></td>
</tr>
<tr>
<td>Standards and Objectives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivating Students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenting Instructional Content</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesson Structure and Pacing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activities and Materials</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questioning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Feedback</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grouping Students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Content Knowledge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Knowledge of Students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thinking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem Solving</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ENVIRONMENT</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicators</td>
<td>Evaluator Score</td>
<td>EVIDENCE</td>
<td></td>
</tr>
<tr>
<td>Expectations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managing Student Behavior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respectful Culture</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PROFESSIONALISM</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicators</td>
<td>Evaluator Score</td>
<td>EVIDENCE</td>
<td></td>
</tr>
<tr>
<td>Growing and Developing Professionally</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflecting on Teaching</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Involvement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Responsibilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Demeanor and Behavior</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Possible Ratings: Exemplary (4 points), Proficient (3 points), Needs Improvement (2 points), or Unsatisfactory (1 point)
APPENDIX H—SELF-REFLECTION ON INSTRUCTION AND STUDENT LEARNING

This form was completed by teacher candidates after one of their lessons from their instructional unit during the field experience.

Candidate’s name__________________________________________
District_________________________School______________________
Course__________________________Date of Observation__________
This lesson was part of which unit?_______________________________

At what approximate point in the unit did this lesson fall? □ Beginning □ Middle □ End

Instructions to the teacher candidate: Please reflect on teaching and learning that occurred while you were being observed. Responses to each of the following nine sets of questions should average approximately 100 words or less. Examples may be attached, if appropriate and available.

1. What were the objectives of this lesson? How well do you think your students understood the overall purpose and relevance of the lesson? (APS 4.A–C)
2. What effect did your teaching strategies have in terms of promoting student learning and keeping your students meaningfully engaged? (APS 5.A–C)
3. Why was the content of the lesson appropriate for the students, and how effectively did you organize the content? (APS 6.A–C)
4. How did you assess student learning during the lesson? What were the results? (APS 7.A)
5. Did you need to make any adjustments during the lesson? Why or why not? (APS 7.B) What types of feedback did or will you provide to the students regarding their performance, and why? (APS 7.C)
6. In what way(s) and to what extent did the classroom environment impact your instruction and student learning, either positively or negatively? (APS 8.A–C; APS 9.A–C)
7. What decisions did you make regarding subsequent instruction for these students, and why? (APSs 4–9)
8. What did you learn as a result of teaching this lesson? (APSs 4–9)
APPENDIX I—FIELD NOTES OBSERVATION RECORD

Example of the Field Notes Observation Record Template

<table>
<thead>
<tr>
<th>Observation # and Date/Time</th>
<th>Observations/Verbal Comments from Participants</th>
<th>Observer’s Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX J—STUDENT LEARNING OBJECTIVE (SLO) TEMPLATE

Administration and Purpose of this Assignment: This assignment was given to candidates in the EDUC 390 series of courses (clinical experience prior to student teaching) and again during the EDUC 490 series (student teaching). The purpose of the assignment was to measure candidates’ proficiency with ADEPT Performance Standards (APSs) 1, 2 and 3 and the SLO process, which are required evaluation components of induction teachers in a southeastern state.

Minimal Level of Proficiency: Candidates must meet the “expectations” for all indicators in the SLO Scoring Rubric in order to successfully complete the assignment.

Directions: Candidates should complete each section of the SLO template below with sufficient detail and accuracy. To do this, candidates should refer to the SLO scoring rubric and any relevant training/directions provided to candidates during the EDUC course.

<table>
<thead>
<tr>
<th>Teacher Candidate Name:</th>
<th>Click here to enter text.</th>
<th>Teacher Candidate School:</th>
<th>Click here to enter text.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLO Evaluator Name:</td>
<td></td>
<td>SLO Evaluator Position/Role:</td>
<td></td>
</tr>
<tr>
<td>SLO Content Area:</td>
<td>Click here to enter text.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade Level: Click here to enter text.</td>
<td>SLO Approach:</td>
<td>Choose One</td>
<td></td>
</tr>
<tr>
<td>SLO Type: Choose One</td>
<td>☒ Individual</td>
<td>(written by an individual teacher)</td>
<td></td>
</tr>
<tr>
<td>☐ Team</td>
<td>(team of teachers focus on a similar goal but are held accountable for only their students)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☒ Class</td>
<td>(covers all of the students in one class period (i.e., 2nd period Biology, 4th period Beginning Pottery, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Course</td>
<td>(covers all of the students enrolled in multiple sections of the course (i.e., all of a teacher’s Biology 2 students, all of a teacher’s Beginning Pottery students, etc.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SLO Interval of Instruction

Choose One

☐ Year
☐ Semester
☒ Other (1 three-day unit per FMU EDUC 391/2/4 course)

Assessment Dates

Pre-Assessment Date: Click here to enter text.
Post-Assessment Date: Click here to enter text.

I. Student Population

A. Provide a detailed description of the student population by completing the table below. Information (“Contextual Factors”) should include, but is not limited to, the following: the number of students in the class, a description of students with exceptionalities (e.g., learning disability, gifted and talented, English language learner [ELL] status, etc.), gender/race, reading levels, lunch status, family status, learning styles, common interests of the students, etc… (Key Element 1.A)

<table>
<thead>
<tr>
<th>Important Student Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contextual Factor</td>
<td>Description (in terms of your students)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B. Provide a description of academic supports provided to students (e.g., extended time, resource time with ELL teacher, any classroom supports that students receive to help them access the core curriculum). (Key Element 1.A)

C. Using at least one research based article, provide an explanation of the relevance of the student information to guiding instruction. (Key Element 1.A)

II. SLO (Student Learning Objective)

A. Create a Student Learning Objective. (Think in terms of what students will be able to do at the end of the SLO Interval.) (Key Element 1.B)

B. How does this Student Learning Objective align with grade-level content standards and curriculum and/or course goals that are most important for students to achieve? (Key Element 1.B)

C. Provide a description of the instructional plan for the unit. Include a list of materials and technology based resources that will be used during the unit. (Key Element 2.B)

D. Explain how you will balance the required grade level standards with the student’s needs, abilities and developmental levels. (Key Element 2.B)
III. Course Content and Pacing Guide
   A. For the semester, include a description of the major course units (of three weeks). Identify the SLO interval in this description. Use the table below. (Key Element 2.A)

<table>
<thead>
<tr>
<th>Major Course Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Topic</td>
</tr>
<tr>
<td>(i.e., approximate dates.)</td>
</tr>
</tbody>
</table>

   B. Provide a description of the instructional units (Pacing Guide) used in this course or class. (Key Element 1.C)

IV. Instructional and Behavior Management Strategies
   A. Describe three “best practice” instructional strategies you will use to maximize instructional time during the unit. (Key Element 1.E)

   B. Describe the expectations for students during instructional and non-instructional times. (You may copy/use your CT’s classroom management plan.) (Key Element 1.E)

V. Historical and Trend Data
   A. Describe, using applicable past data for the students, a description of the students’ level of knowledge prior to the unit. Include the source(s) of data (e.g., formative and summative assessments, anecdotal data gathered from collaboration with other educators) used to determine this level of knowledge. (Key Element 3.B)

VI. Baseline Data and Post Assessment
   A. Describe and attach the pre- and post-assessment(s) that will be used to measure student mastery at the beginning of the unit and after the unit. (Key Element 1.D)

   B. Describe and/or attach the appropriate assessment grading scale and rubric/key used to score the assessment(s). (Key Element 3.C)

   C. Define validity and reliability and then describe how the pre- and post-assessment is both valid and reliable. (Key Element 3.A)

VII. Progress Monitoring
   A. Describe what assessment data you will collect in order to monitor student progress during the unit. (Key Element 1.D)

   B. How will you record grades during the unit and semester? (Key Element 1.D)

   C. How will you communicate assessment information to students and parents during the unit and semester? (Key Element 1.D)

VIII. Growth Targets
   A. Choose One (“Individual” has been chosen for you.)
   □ Tiered (All students but at varying degrees of expected growth.)
   ☒ Individual (All students have individualized growth targets based on previous
performance and expectations.)

☐ Targeted (Sub population(s) of students are the focus of the SLO goal. Appropriate for course approach as a second SLO when the first includes all students.)

B. Considering all available data, identify the growth targets the students are expected to reach by the end of the SLO interval. Complete the table below or on an attached spreadsheet. (Key Element 3.C)

<table>
<thead>
<tr>
<th>Student Name (Do not use names…initials or numbers.)</th>
<th>Pre-Assessment Result</th>
<th>Growth Target</th>
<th>Post-Assessment Result</th>
<th>Growth Target Met or Exceeded?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C. Provide an explanation regarding the process used to determine the growth targets for students in the table above. Explain why these growth targets are appropriate. (Key Element 1.B)

D. Based on the data results, what aspects of the instruction need to be modified? Provide a solid rationale for these modifications. (Key Element 2.C)

E. Reflect on the students’ performances in terms of whether the students met your expectations? In other words, was the unit successful? Why or why not? (Key Element 3.C)