Boots on the Ground: A Participant-Oriented Approach to Program Evaluation

2018

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BOOTS ON THE GROUND: A PARTICIPANT-ORIENTED APPROACH TO PROGRAM EVALUATION

by

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A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Education in the School of Teaching, Learning, and Leadership in the College of Education and Human Performance at the University of Central Florida Orlando, Florida

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Major Professor: Thomas Vitale
ABSTRACT

Despite best efforts to fully prepare pre-service teachers (PSTs) with the knowledge and skills they will need as educators, many universities nationwide fall short of doing so. Poor or unrelated pre-service preparation of education majors prior to graduation creates disconnects between college coursework requirements and real-world expectations of educators, which decreases the value of these education programs. It also leaves many PSTs entering internship and subsequent first-year employment ill-prepared to handle all of the classroom responsibilities expected of them, which contributes to another nationwide problem: low retention of novice teachers. To address comprehensive preparation of PSTs, professors at one large metropolitan university in the southeastern United States initiated the Boots on the Ground (BotG) program, which exposes PSTs to direct instructional opportunities with K-12 students concurrently with early coursework. Multiple studies have found that closely integrating field experience with coursework is highly influential in increasing both the preparedness of PSTs and their self-efficacy as educators. This study is a mixed methods, participant-oriented program evaluation of the BotG program, meant to explore stakeholders’ perspectives on the program’s influence and inform improvement. It looks at the affect the BotG program has on perceived preparedness and self-efficacy of PSTs as well as its impact on different stakeholder groups. Study findings indicate that the early exposure to the profession and experience working with K-12 students provided to pre-service teachers who participated in the Boots on the Ground program may provide them with a means to increase perceptions of preparedness and self-efficacy for teaching. Findings also detail the program’s influence on other stakeholders, including provision
of extra support for the academic and behavioral support of K-12 students. The researcher also suggests implications for education and recommendations for further research.
DEDICATION

In hopes of continued and increased excellence in education, this dissertation is dedicated to the future educators committed to making a difference in the lives of K-12 students and to the current K-12 teachers and university professors who support their growth and embrace the role of mentor.
ACKNOWLEDGMENTS

First and foremost I would like to thank my committee chair, Dr. Vitale, for his on-going support and feedback. Thank you for taking on the task of being my chair and for always making yourself available to answer questions, offer advice, and provide untimely sarcasm meant to calm my nerves. Thank you also to each of my dissertation committee members—Dr. Boote, Dr. Cox, Dr. Goodman, and Dr. Swan—for your guidance, suggested readings, difficult yet necessary questions, and willingness to help in any fashion needed. I would not have been able to work through the dissertation process without each of you.

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LIST OF ABBREVIATIONS

BotG: Boots on the Ground

K-12: Kindergarten through twelfth grade

PST: Pre-Service Teacher
CHAPTER ONE: INTRODUCTION—THE PROBLEM AND ITS CLARIFYING COMPONENTS

Introduction

Effective small group instruction is a daunting challenge for classroom teachers. For interns and novice teachers with limited experience in the field, this task can be even more demanding. Disconnects between college coursework and real-world requirements of PSTs decrease the value of university-based education programs. PSTs must be provided with the skills, competencies, and applications of learning necessary to succeed as educators. In education, especially, this is vital, as expectations of first-year teachers are the same as veteran teachers. Similarly, increased K-12 student achievement has been linked to having high-quality teachers who possess effective teaching skills (Goldhaber, Walch, & Gabele, 2014).

L’Allier and Elish-Piper (2007) stated that one of the most impactful ways of helping PSTs “understand, value, and thoughtfully apply research-based practices in their student teaching and ultimately in their own classrooms is to have them experience and apply strategies in the coursework” (p. 339). Similarly, Johnston (1994) contended that “the more experience one has in the classroom, the more one will automatically learn about teaching” (p. 199). Without early exposure facilitating instruction with K-12 students, PSTs will not receive the opportunities necessary to implement concepts taught in coursework.

PSTs’ perceptions of preparedness and self-efficacy as educators influence their success in the teaching profession (O’Neill & Stephenson, 2013; Brown, Lee, & Collins, 2015). There is a “need for teachers to experience a pedagogical approach from the standpoint of learner before they are able to implement this approach” (Grossman, Smagorinsky, & Valencia, 1999, p. 20).
Low self-efficacy in beginning teachers is linked to both higher attrition rates and lower K-12 student achievement (Torres, 2012). To increase PSTs self-efficacy as educators, researchers encourage university professors to incorporate hands-on field experiences in authentic educational settings, declaring these to be “one of the most critical elements in the development of a pre-service teacher’s pedagogical skills and his or her socialization in the profession (Spooner, Flowers, Lambert, & Algozzine, 2008, p. 254).

The most influential field experiences for PSTs are ones which are closely integrated with coursework (Linek, Nelson, Sampson, Zeek, Mohr, & Hughes, 1999). This increases both the preparedness of PSTs and their self-efficacy, which collectively contribute to the formation of a positive teacher identity (Schepens, Aelterman, Vlerick, 2009). Through hands-on applications of learning, “student participants typically experience personal and professional development, begin to think and work like researchers, hone academic skills, clarify and refine their career and educational pathways, and become better prepared” (Sangster, Loy, Mills, & Lawson, 2016, p. 3). Researchers also emphasize that isolated experience is not sufficient in supporting PSTs’ growth; these experiences should be on-going throughout coursework, embedded into multiple courses to provide authentic opportunities to apply class-based learnings, and diverse in nature to be encompassing of different experiences educators face (Beijaard, Meijer, & Verloop, 2004). The resulting decrease in teacher attrition, increase in preparedness and self-efficacy, and increase in K-12 student achievement are just three of the benefits that may result (Lee, Tice, Brown, Smith, & Fox, 2012).

Despite the available research, many university-based teacher preparation programs continue to be under national scrutiny for falling short of preparing PSTs for real-world success (Campbell & Dunleary, 2016). The BotG program offered to PSTs enrolled in early coursework
led by certain professors at one particular university in the southeastern United States seeks to offset the aforementioned nationwide concern of PSTs graduating without being fully prepared to become first-year educators by providing PSTs hands-on instructional opportunities with small groups of K-12 students in authentic classroom settings during early coursework. At this point in time, the program is in its early stages of induction, with little evidence to support the extent of its influence. This study is a mixed-methods program evaluation of the BotG program, meant to determine if it affects PSTs’ perceptions of preparedness and self-efficacy. Furthermore, the study looks at the program’s influence on the K-12 schools as well as participants’ satisfaction. The focus of this study is to determine the influence and inform improvement for the program. In completing the study, the researcher chose to use a participatory approach to program evaluation, which allows multiple groups of stakeholders to provide feedback and experience on the program, including the benefits of coursework in relation to practical experience.

This study is grounded in literature describing beginning teachers’ abilities to transfer theory into classroom practice. “Numerous scholars have addressed the disconnect between the perceived idealistic and theoretical perspectives of the university courses in contrast with the practical (and realistic) needs of the beginning teacher in practice (Smith, Basmadjian, Kirell, & Koziol, 2003, p. 17). In short, the ideals PSTs hold of the profession and the preparation they receive in university coursework may not be sufficient in preparing them to handle the realities of the profession (Anderson & Olsen, 2006).

**Statement of the Problem**

Despite best efforts to fully prepare pre-service teachers (PSTs) with the knowledge and skills to increase their preparedness and self-efficacy as educators, many universities nationwide
fall short of doing so (Hoffman, Wetzel, Maloch, Greeter, Taylor, DeJulio, & Vlach, 2015; Borko & Mayfield, 1995; O’Neill & Stephenson, 2013). Poor or unrelated preparation of PSTs at universities is a nationwide problem plaguing the education system today, with many PSTs entering internship ill-prepared to handle all of the classroom responsibilities expected of them (Arnup & Bowles, 2016). These senior interns then graduate unready to fully take over classroom responsibilities (Borko & Mayfield, 1995; Greenberg, McKee, & Walsh, 2013). Inability to manage behaviors, for example, is three times more prevalent in inexperienced teachers; furthermore, many beginning teachers state that they do not possess the skills and competencies needed to succeed as educators (Torres, 2012; Ediger, 2013). Consequently, over 10% of new teachers leave the profession within one year and nearly 46% of teachers leave the profession within five years (Kopkowski, 2008). With 40% of current teachers over the age of 50 and another 20% under the age of 30, preparation and retention of high-quality teachers is of paramount importance (Williams, 2011).

This study is a program evaluation of Boots on the Ground (BotG), a program that certain education professors at one large metropolitan university in the southeastern United States have begun implementing in early coursework to provide PSTs with hands-on experience in K-12 schools to support earlier exposure to and experience in the teaching profession. The primary goal of BotG is to increase PSTs preparedness and self-efficacy as educators. Subsequent goals include supporting local K-12 schools and providing authentic experiences in the profession for PSTs to help them determine if the career track they are on is right for them or not. Because ill-prepared education majors become ill-equipped interns who will either be unsuccessful in internship and not graduate or will pass internship but enter the workforce at a disadvantage, the
problem of practice that this Dissertation in Practice will address is the impact that the Boots on the Ground program has on participants.

**Conceptual Framework for the Study**

Nationwide, a recurring finding of education programs is that there is a significant gap between coursework required of PSTs and real-world tasks educators must be able to perform to be effective (Chelsey & Jordan, 2012). The quality of opportunities provided to PSTs influence their perceptions of preparedness and self-efficacy as educators, which in turn impacts K-12 student learning (O’Neill & Stephenson, 2013). In particular, the lack of hands-on learning experiences that education majors are exposed to prior to internship is a problem for the PSTs, the universities, and the nation as a whole.

Prior to graduating, PSTs should be exposed to coursework requirements that support learning and application of the skills and competencies they need as educators, including content delivery, engagement tactics, and differentiating instruction for diverse learners. This is because, upon graduating, they are trusted and expected to enter the work force able to lead students to academic success. First-year teachers are not exempt from the demands other educators face; all teachers, regardless of years of experience, are responsible for balancing requirements of the profession and providing meaningful instruction to K-12 students. While the culminating internships are meant to provide PSTs with real-world experiences that align to what they can expect to encounter as first-year teachers, poor or unrelated preparation prior to internship prevents PSTs from being fully prepared for interning and, in turn, for their first year of teaching. In fact, the majority of senior interns do not complete their internships prepared to take over all classroom responsibilities (Borko & Mayfield, 1995; Greenberg et al., 2013). This leads to low
retention rates of first- to fifth-year teachers as well as negative impacts on K-12 student achievement.

Settled knowledge among researchers supports the argument that hands-on interactions with K-12 students expose PSTs to authentic professional learning, making field experience a vital component of university-based education programs (Goodwin, Cunningham, & Eagle, 2005). According to Sanderson (2003), “Student teaching is considered the most important experience in the professional preparation of teachers” (p. 1). Barnett, Shoho, and Copland (2010) support this argument, saying that hands-on learning opportunities should be the backbone of any college education program, with coursework supporting and adding to that learning. The literature also indicates that student teaching experiences lead to positive changes in PSTs’ beliefs, attitudes, and practices (Tschannen-Moran & Woolfolk Hoy, 2001). By senior year, PSTs should have enough real-world experience to demonstrate high levels of preparedness and self-efficacy as educators. However, many PSTs entering internship nationwide lack the preparation and self-efficacy to manage all of the classroom responsibilities expected of them (Hoffman et al., 2015). Collectively, the research supports the claim that there is a disconnect between college coursework and real-world expectations.

For the large metropolitan university in the southeastern United States using Boots on the Ground (BotG), the nationwide trend of education majors being ill-prepared for both internship and their first year of teaching was the problem that professors sought to address by implementing the BotG program. Within this university’s College of Education, the K-12 education programs are the largest, placing over 600 interns into schools each semester (Institutional Research, 2016). All major-related coursework and experiences should prepare PSTs for their future teaching careers. Without hands-on learning experiences prior to internship,
PSTs may not get sufficient exposure leading instruction to prepare them to take over all
teaching responsibilities in senior year internships. In turn, lack of preparation at the internship
level leaves PSTs more susceptible to being unready to assume the role of first-year teacher.
Graduating PSTs who become ill-prepared teachers reflect poorly on their alma mater
universities. More significantly, first-year teachers who struggle to balance the many facets of
teaching are disadvantageous to K-12 students, whose academic development is very much
contingent upon the quality of teacher they have.

Who is affected?

At this large metropolitan university, the PSTs in the College of Education and Human
Performance (CEDHP) program who are majoring in education are the ones directly affected by
this problem. However, the problem is not limited to just this university. The National Center for
Education Statistics (NCES, 1999) found that, nationwide, only 20% of beginning teachers
graduate feeling prepared to teach culturally diverse students and that beginning teachers feel
less prepared to manage discipline, curriculum, and engagement issues than more seasoned
teachers. This problem carries over to obtaining and keeping teaching jobs after graduation. In
fact, nearly 50% of teachers leave the profession within five years, attributing their departure to
an inability to effectively balance all requirements of the teaching profession (Jalongo & Heider,
2006). With this in mind, the population affected includes the college students nationwide who
are majoring in education, many of whom graduate without the preparation or self-efficacy
needed to equip them to enter the workforce and effectively take over all classroom
responsibilities (Warren, 2005). Consequently, K-12 students who have these teachers will also
suffer from inferior instruction.
Improving teacher practice and student achievement are two crucial goals of current educational reform acts including the nationwide *No Child Left Behind Act* of 2001 and, more recently, the *Race to the Top* initiative. Schools require strong first-year teachers in order to support these goals.

**Purpose of the Study**

Goodwin et al. (2005) found that many educational leadership scholars encourage multiple field-based experiences to better prepare PSTs as future educators. This is because field experiences expose PSTs to authentic realities of the profession rather than scripted situations in textbooks or ideals held from their own childhood educational experiences (Harfitt, 2015). The purpose of this study is to determine the influence of Boots on the Ground, a hands-on field experience embedded into certain professors’ coursework that is meant to support learning and provide early service-learning opportunities to PSTs at a large university in the southeastern United States. The framework for the program is that PSTs enrolled in early coursework will complete a minimum of fifteen hours working with small groups of students in K-12 classrooms as opposed to the state requirement of observing for fifteen hours. The PSTs become active rather than passive, delivering instruction and working with small groups of K-12 students in academic settings. This program focuses on maximizing student contact time and experiences for PSTs rather than having the PSTs merely observe the K-12 educator working with students. This program’s purpose is to increase the pedagogical skills of PSTs and better prepare them for employment as K-12 educators.

Three main stakeholder groups will be incorporated into the program evaluation: university professors, K-12 educators, and pre-service teachers. The affect that the Boots on the Ground program has on PSTs preparedness and self-efficacy will be the main focus of the study,
as measured by survey, interview, and focus group data. Additionally, the study will analyze the program’s impact on different stakeholder groups and each group’s overall satisfaction with the program. Furthermore, the researcher hopes to lay the foundation for future studies that can help bring the program to a wider audience and ensure sustainability over time, again under the presumption that the program will be viable and beneficial.

The study will take the form of a participant-oriented approach to program evaluation, with particular focus on implementation and outcome evaluation.

**Exploratory Evaluation Questions**

Figure 1, below, illustrates the questions that will be used when evaluating the BotG program. The included questions are intended to provide the evaluator with the necessary answers for discerning if the program is working. Furthermore, they are aimed at helping to determine the affect the program has on PSTs as well as its influence on other stakeholder groups. Consequently, research gathered will include self-reported data from PSTs at the beginning and end of the semester as well as interview and focus group responses from multiple stakeholder groups, including PSTs, K-12 educators, and university professors. Collectively, the evaluation questions are:

1. Does participation in the Boots on the Ground program affect pre-service teachers’ perceptions of preparedness and self-efficacy?
2. What are stakeholders’ perceptions regarding the influence of the Boots on the Ground program?
3. Did the program contribute to the intended outcomes? (Were there any unintended outcomes, good or bad, on program participants?)
4. Are participants satisfied with what they gain from the program?
Definition of Terms

Though there are many possible definitions for many of the terms used in this study, the following have specific application and meaning for this evaluation.

Pre-Service Teacher (PST): A college student enrolled in education coursework in a university with the intention of pursuing a degree in education (Anderson & Stillman, 2011).

Intern: A PST who is in the culminating coursework in which he/she is enrolled in a university’s education program and in the final year prior to graduating with a degree in education. During this time, the PST is working directly in a K-12 classroom, assuming teaching responsibilities under the direct guidance of a K-12 educator (Anderson & Stillman, 2011).

Field Experience: Hands-on, real-world opportunity in which PSTs are exposed to authentic teaching experiences (Goodwin et al., 2005).

Participant Responsiveness: The extent to which recipients of an intervention engage in the expected activities during implementation, or “how well the program appears to stimulate the interest and hold the attention of participants” (Durlak & DuPre, 2008, p. 334).
Teacher Self-efficacy: “A teacher’s belief that he or she can reach even difficult students to help them learn, it appears to be one of the few personal characteristics of teachers that is correlated with student achievement” (Woolfolk Hoy & Hoy, 2009, p. 167-168).

Rationale for Proposing a Participatory Approach to Program Evaluation

The main purpose of program evaluation is to determine the quality of a program, including its effectiveness and influence (Shackman, 2012). As is true in many disciplines, education is an ever-changing and multidimensional field. Educators must, therefore, be both able and willing to adapt (Ross, 2010). Preparation of future educators must similarly be able to confront traditional practices that may no longer be relevant and enact change accordingly. An education program’s success or failure is dependent upon “the willingness of faculty, students, and administrators to confront and challenge existing paradigms and methods and to change and rearrange the various components of a program” (Ross, 2010, p. 482). Adapting allows education programs to remain relevant and ensure that only qualified teacher candidates matriculate. Strong evaluations bring together multiple stakeholders to do this. Thus, participant-oriented evaluation approaches, which rely on multiple stakeholders to provide meaningful feedback, are beneficial to education programs.

Abma and Stake (2001) report that different stakeholder groups possess different values as well as different expectations of programs. A strong program evaluation acknowledges the main stakeholder groups and incorporates their values and expectations. The participant-oriented approach to evaluation accounts for these stakeholders and seeks to obtain perspective from each group. This, in turn, increases the validity of results and encourages program improvement, as no single group is emphasized over another (Cousins & Earl, 1992). Ross (2010) expounded on the importance of recognizing multiple stakeholders, saying that “collaboration with key
stakeholders is fundamental to making substantive program changes that support the
development of successful school leaders” (p. 487). Given these findings, the researcher deemed
a participant-oriented approach to be most fitting for this program evaluation.

In this study, the stakeholder groups include university professors utilizing the BotG
program in their coursework, the PSTs completing coursework that requires them to participate
in the BotG program, and K-12 educators who allow the involved PSTs into their classrooms.
The inclusion of PSTs gives voice to an often overlooked but important group that is capable of
shaping and changing the direction of education preparation programs.

**Implementation Evaluation**

Within the participant-oriented approach, this study will focus on implementation
evaluation in particular. Implementation evaluation is “the generation and analysis of data to
examine how an intervention is put into practice, how it operates to achieve its intended
outcomes, and the factors that influence these processes” (Humphrey, Lendrum, Ashworth,
Frearson, Buck, & Kerr, 2016, p. 9). Implementation evaluation seeks to determine whether
target populations are being reached and whether they are receiving the intended services and
experiences. Literature on implementation evaluation states that this approach is particularly
beneficial in the development and refinement stages of a program, including pilot studies in real-
world settings. Through the incorporation of multiple stakeholder groups (as emphasized in
participant-oriented evaluation), implementation evaluation helps improve future use and scaling
of the program as well as promoting fidelity and understanding for both the formative and
summative pieces of the program (Humphrey et al., 2016; Rossi, Lipsey, & Freeman, 2004). For
this study, implementation evaluation is particularly helpful because it enables the researcher to
“examine and test the intervention theory of change, provide feedback on feasibility, clarify
causal mechanisms, and identify critical components, detect moderating factors, and inform future dissemination and on-going quality improvement of interventions” (Humphrey et al., 2016, p. 10).

Implementation evaluation is beneficial to researchers seeking to identify aspects of a program that are most and least impactful while also providing relevant information on how to improve the program, including when and by whom (Humphrey et al., 2016). Implementation evaluation also helps researchers and stakeholders understand barriers to and facilitators of implementation. Results ascertained in implementation evaluations help support a program’s merits and provide guidance for improvement in addition to evaluating the program’s effectiveness. For this study in particular, implementation evaluation will be applied in an effort to better understand the program’s components, its influence on pre-service teachers, and aspects that contribute to overall satisfaction of stakeholders.

Organizational Context

Early exposure to facilitating learning in a classroom environment does one of two things for pre-service teachers: (1) provides opportunities to practice instructional teaching, accommodation, and classroom management techniques learned during college coursework or (2) helps PSTs realize that they have chosen the wrong career path, providing them time to switch majors before they get too far into the college’s education program (Lattuca & Stark, 2009). Without such experiences, PSTs enter internship with little to no exposure supervising classroom instruction and interacting with K-12 students in an academic setting. Recent studies indicate that 25% of new teachers feel unprepared to use curriculum, 41% of new teachers do not feel prepared to handle classroom management situations, and 80% of new teachers feel incapable of helping students who either do not speak proficient English or are from a diverse
background (Nahal, 2010; Cleveland, 2008). Much of this stems from a lack of hands-on experiences with K-12 students that require simultaneously balancing diverse student needs, teaching grade-level standards, and managing student engagement and behavior. Borko and Mayfield (1995) observed that interns were often overwhelmed by the complex expectations of them in the classroom and that the need to effectively address all aspects of the teaching process resulted in gaps. Consequently, upon graduating, PSTs entered the workforce having successfully completed all college requirements, but ill-prepared for success in their own classrooms. In fact, “Beginning teachers frequently state that they cannot deal effectively with all the problems related to teaching,” which is a strong contributing factor to why nearly 46% of teachers nationwide leave the profession within five years (Kopkowski, 2008, p. 22). Problems such as not being prepared for the first year of teaching and not being prepared for internship all stem from the lack of hands-on interactions PSTs have with K-12 students prior to their senior year (Lee et al., 2012).

At the university of focus for this project—and many other universities throughout the United States—there are four education courses prior to internship that require PSTs to enter K-12 classrooms: EDF2005, EDF2085, EDG4410, and EDF4467. Both EDF2005 and EDF2085 are survey courses used as pre-requisites to admission into college education programs and the state standard is for students to complete 10-15 hours of observation in each course. While some colleges and universities require PSTs to actually work with K-12 students, this is not mandatory. In EDG4410, no explicit guidelines exist for the number or type of service learning hours students must complete. As an example of discrepancies in requirement, Chipola College in Marianna, Florida, requires PSTs to complete 10 observational hours while another Florida university requires PSTs to complete 15 hours, but those hours can include supervising fieldtrips,
observing parent-teacher conferences, or leading a Junior Achievement lesson. Nowhere in the state guidelines is it stated that students must supervise instructional activities in a K-12 school setting. For EDF4467, PSTs are required to work with individual or small groups of K-12 students. However, this course is often not taken until junior year. Collectively, this shows that PSTs are exposed to very little, if any, mandatory direct interaction with K-12 students in an academic setting, particularly in the first two years of coursework, when college students should be getting opportunities to determine if a particular major is right for them or not (O’Neill & Stephenson, 2013).

For PSTs who may not be fully set on their career path, early exposures working with K-12 students will provide opportunities to see if they have chosen the correct major. “Internship experiences can change interns’ role conceptions and can affect career decision making” (Barnett et al., 2010, p. 2). Scheduling hands-on learning opportunities for Education majors early on helps students determine if they want to continue in the field of study or not (Lattuca & Stark, 2009, p. 150). Furthermore, field experiences are “one of the most critical elements in the development of a pre-service teacher’s pedagogical skills and his or her socialization in the profession” (Spooner et al., 2008, p. 254). Without early exposure to working in a classroom setting, it may not be until senior year internships that many education majors realize that they do not want to be teachers, in which case it is often too late to change majors.

A long-standing mentality in education is that being a teacher is an inherent skill. Phrases such as, “She was born to be a teacher” encourage the continuation of providing only coursework and observational experiences to PSTs and then expecting them to flourish in their senior year internships (Borko & Mayfield, 1995). In reality, PSTs need additional exposures to working with K-12 students to understand and practice the many facets of teaching or to determine that
their career path is not actually a good fit for them. Particularly in education, where first-year teachers are held to the same standards of effectiveness and under the same pressure to positively impact K-12 student achievement as their more veteran counterparts, early exposure to the profession and thorough preparation of PSTs is critical.

**History and Conceptualization of the Problem**

**History of the Problem in the Organization**

Poor or unrelated pre-service education is a significant problem, as ill-prepared education majors become ill-equipped interns who will either be unsuccessful in their internships and not graduate or will pass internships but enter the work force at a disadvantage. In turn, those first-year teachers will likely struggle with classroom management, small group instruction, and engagement, three critical components to K-12 students’ academic success (Warren, 2005).

Currently, state and national expectations for education programs do not include mandatory hands-on learning opportunities during PSTs freshmen and sophomore years. Consequently, these PSTs may not receive relevant exposure working with K-12 students in an academic setting—accommodating for diversity, interacting with students of different ages, or experiencing first-hand something not go well and needing to be retaught—until junior or even senior year, when PSTs complete internships. Additionally, without these early experiences, PSTs do not have the chance during their freshman or sophomore years to determine if they are choosing the right career path and, if necessary, switch majors before they are too far into the program to do so and still graduate on time. It is important to note that many states require observation hours, where PSTs go into K-12 classrooms to watch instruction take place, but actually interacting with students and leading instruction is not a national expectation.
This problem stems from the current PST preparation requirements at universities nationwide. This large metropolitan university is one of the largest universities in the southeastern United States and, with approximately 61,000 students—52,000 of which are undergraduate students—the second largest in the nation (Institutional Research, 2016). As part of meeting all graduation requirements, education majors must complete a senior internship. Each semester, approximately 600 PSTs from this particular university are placed at local K-12 schools to complete their internships (Institutional Research, 2016). The purpose of internship is to immerse PSTs in a classroom setting, exposing them to hands-on learning experiences meant to prepare them to be successful once they begin their teaching careers. Prior to their senior year, though, most education majors nationwide have not historically been required to complete any other hands-on service learning hours as part of their pre-requisite work; they only complete observation hours. Under the observational hour setup, PSTs are not expected to interact with K-12 students in any way other than to observe them in a classroom setting. With this, it is not until senior year internships that PSTs have complete hands-on learning experiences with K-12 students as part of coursework requirements. Then, with senior internships, PSTs are tasked with taking over the instructional, engagement, and planning responsibilities of classroom teachers. This is a similar trend across most college education programs: college students majoring in education do not actually interact with K-12 students as part of their coursework until they begin their senior year internships. In essence, this is akin to explaining what driving is to your child, allowing him to watch others drive, then putting him onto a heavily populated highway during rush hour and expecting him to drive flawlessly and not negatively impact others on the road.

It is during their internships that PSTs often get their first experiences with classroom management, curriculum, dissecting standards, and adapting learning for diverse student needs.
This is an overwhelming challenge and, despite successfully completing their senior internships, over 10% of new teachers leave the profession within one year and nearly 46% of teachers leave the profession within five years, largely due to being unable to effectively deal with all of the challenges related to teaching (Graziano, 2005; Kopkowski, 2008). The problem does not lie in the senior internship alone; the problem stems from a lack of hands-on experiences prior to internship, which leaves education majors ill-prepared for the authentic challenges of teaching because they lack exposure to real-world-based applications of learning (Warren, 2005). PSTs need multiple experiences in classrooms to develop understanding of the correct balance of the art and science of teaching (Hammerness, Darling-Hammond, Bransford, Berliner, Cochran-Smith, Morva, & Zeichner, 2007). Pedagogical training should be taught in conjunction with concurrent, related field experience to best prepare future educators for the demands of the profession (Jorissen, 2002). After all, teaching does not happen in a vacuum and educators must be able to rely on content knowledge, strategies, and experience to address the challenges they face daily (Chelsey & Jordan, 2012).

Despite the available research on the importance of intertwining coursework with related field experience, many education programs nationwide are under national scrutiny for falling short of preparing PSTs for real-world success (Campbell & Dunleary, 2016). In particular, the absence of relatable field experience is an area of pre-service preparation needing improvement (The American Association of Colleges of Teacher Education, 2013). Shortcomings in early coursework lead to difficulties in internship, which in turn inhibits these PSTs from attaining the preparedness and self-efficacy to support success as first-year teachers (Kang & Berliner, 2012). Knowing that the purpose of the senior internship is to provide all opportunities possible to prepare interns for success in their first year of teaching—and the purpose of all prerequisite
courses is to prepare PSTs for their internship year and a successful teaching career—this is a serious problem. If PSTs are graduating without actually being ready to succeed in their first year as teachers, then the education programs nationwide have inherent flaws that must be addressed. Given the pressures facing education today, including high-stakes testing and college preparation, educators simply cannot enter the workforce without being fully capable of educating today’s youth from day one.

This problem is a structural organizational problem, common across education programs nationwide. Most noteworthy prior to graduation is that PSTs enter internship struggling to infuse curriculum, engage students, and provide peer collaboration opportunities (Kang & Berliner, 2012). Interns also struggle to differentiate instruction for diverse student needs and variances, particularly in classrooms where classroom management and motivation are factors (Segebrecht, 2010). According to recent literature, this problem is common nationwide—as is the problem of first-year teachers feeling unprepared and leaving the profession at alarming rates—and new ideas have been discussed to combat these problems (Harfitt, 2015; Chelsey & Jordan, 2012). At Valencia College, for example, the observational hours that PSTs must complete have been changed from 15 to 20, must all be completed with the same supervising K-12 educator throughout the semester, and require the PST to work with a specific small group of students rather than merely observe. This is the standard at Valencia, but not across all colleges or universities, including the state universities in Florida, where many Valencia PSTs transition to via DirectConnect upon graduating. While many professors nationwide acknowledge that observational hours alone are not substantial enough to help PSTs get experience working with K-12 students, a nationwide organizational change has yet to be initiated. There is also insufficient data available to support the long-term impacts of many of the small-scale changes.
Recently, increased pressure has been placed on states to produce measurable student achievement gains. With high-stakes testing and accountability systems today, it is more important than ever to provide PSTs with the education and experience needed to succeed on day one as first-year teachers.

**Change in Understanding of the Problem**

This problem originally focused on PSTs successfully completing internships yet not actually being prepared for their first year of teaching. The understanding of this problem has changed in order to acknowledge the other, previous experiences PSTs have. Now, it is more commonly noted that learning experiences must take place from PSTs’ freshmen year at college in order to better prepare them (Levine, 2006). PSTs need multiple experiences at varying grade levels and in different subject areas in order to develop understanding of the correct balance of the art and science of teaching (Hammerness et al., 2007). Culminating senior year internships are no longer considered sufficient for preparing PSTs; interns are not ready to balance all of the obligations of teaching and deficiencies they possess during internship cannot be improved in just that length of time (Borko & Mayfield, 1995). Nationwide, more and more teachers are unable to effectively balance the challenges and expectations of teaching. Consequently, one tenth of teachers leave the profession after the first year and nearly half leave within five years (Graziano, 2005; Kopkowski, 2008). Coupled with the fact that almost 40% of teachers are above the age of 50 and nearing the age of retirement, increasing teacher effectiveness and retention is critical to the success of K-12 students (Williams, 2011).

First-year teachers also struggle with classroom management, small group instruction, and engagement, three critical components to academic success (Warren, 2005). These trends have been acknowledged in the last decade and are changing the understanding of the problem.
In particular, trends show that the problem itself is significant and present nationwide. In fact, in a study of 1,130 colleges and universities that offered teacher certification programs, only 7% of schools were found to be ‘uniformly strong’ in effectively preparing graduates to be impactful first-year teachers (Greenberg et al., 2013). Fully addressing the problem means revamping the entire education program, not just internship experiences.

Another expansion in the understanding of the problem is that it is not just PSTs who struggle. Hoffman et al. (2015) found that many cooperating K-12 educators who supervise interns are unprepared for them. This affects the practices and success of PSTs during internship, which further supports the notion that the senior year internship is simply not enough; PSTs need additional exposures to direct classroom teaching under the supervision of capable K-12 educators who are willing and able to work with them to be prepared for their own classrooms upon graduating.

Further expanding the scope of the problem, insufficient pre-service preparation is becoming more commonly acknowledged across multiple disciplines. Hickerson, Taylor, and Terhaar (2016) wrote extensively about this issue in the field of nursing, stating, “A majority of nurse administrators felt that new graduate nurses were not prepared for the health care environment they would encounter upon graduation” (p. 18). Factors contributing to the gap between college preparation and real-world readiness include deficits in educational programs, limited mentorship, poor support in the workplace, a lack of exposure to diverse nursing experiences, and high stress and poor morale of novice nurses. Hickerson et al. (2016) found a distinct disconnect between what supervisors wanted interns and beginning nurses to be able to do and what they were actually confident doing. These are similar concerns addressed with education majors’ preparation. The consequential high turnover rate in nursing due to being
overwhelmed, stressed out, and ill-prepared are also similar to problems first-year teachers face. Unfortunately, much like the staggering turnover rates seen in first-year educators, nearly 60% of nurses leave the profession within their first full year on the job (Hickerson et al., 2016, p. 19). Deficits identified of recent graduates in both professions include the ability to think critically, communicate effectively, perform assessments, and demonstrate skills, all of which graduates are expected to be capable of exemplifying. In regards to college preparation, first-year nurses gave feedback that college coursework had prepared them to pass the NCLEX exam, but not for actual real-world practices, and these nurses highly encouraged earlier and more often use of residencies, clinicals, and hands-on experiences working with patients in real-world settings. These suggestions and concerns are similar to feedback trends in education.

**Efforts to Address the Problem**

To address the problem, more and more professors nationwide are acknowledging that internship alone is not enough to prepare PSTs for their first year of teaching. To account for this, many professors are supplementing the mandatory observational hours in the first two years of college classes with hands-on service learning hours. However, this change is not consistent across the large metropolitan university of focus in this study, nevertheless all universities nationwide. For example, some professors have merely required hands-on hours in any fashion, including fieldtrip supervision; others have required those hands-on hours to be with the same group of students; still others continue to only require observation hours.

Another example of an effort to address the pre-service experience problem was Friendship Elementary, a residency site for hands-on training and teaching located in Volusia County and supported by a local university. This was a focused yearlong model, with PSTs in their internship year working with a mentor teacher at the residency site. The PSTs were treated
as staff members and co-taught with their mentor teachers (Cardullo, 2012). This residency program was modeled after another one that was already in place between the same university and Volusia County Public Schools. With both, positive results for PSTs were reported, including increased intern competency and improved teaching practice. Additionally, the program was expanded to work with PSTs still completing early coursework in Elementary Education, providing hands-on experience from the start of specialization courses. While it was not wide-scale and did not address pre-service learning opportunities for all PSTs at the university, nevertheless the nation, it was impactful for those involved (Cardullo, 2012). Dr. Cardullo, the university professor who oversaw the residency program and earned a National Association for Professional Development Schools (NAPDS) Award for Exemplary Professional Development School Achievement for her efforts, acknowledged that experiences during senior year internships simply were not enough for PSTs. She emphasized that education majors needed at least mini exposures to multiple grade levels throughout all four college years: “The practice of internship is outdated. Candidates observing from afar and gradually assuming responsibility is no longer an unquestioned practice” (Bacharach, Washut-Heck, & Dahlberg, 2010).

According to Sanderson (2003), “Student teaching is considered the most important experience in the professional preparation of teachers” (p. 1). Pre-service teaching experiences should, therefore, be plentiful throughout all four years of schooling for education majors. These opportunities should also reflect the challenges and experiences that PSTs are most likely to encounter in their first years of teaching and should create opportunities for learning effective teaching and engagement strategies to support all K-12 students (Birch & Morgan, 2005).

At the university of focus for this dissertation project, students are now required to complete hands-on service learning hours in two of their 4000 level courses, which are courses
taken primarily in PSTs’ junior and senior years. However, this requirement does not mandate academic interaction with students, nor is it specific to actually working with students as opposed to observing. For example, in EDG4410, students have the choice of observing parent-teacher conferences or monitoring student fieldtrips as two of their options. Furthermore, it is not mandated by the state nor are all universities nationwide following suit.

One other effort to address the problem was to use TeachLive, a simulation experience where PSTs can practice handling different classroom scenarios. Using TeachLive creates a safe, highly controlled environment that simulates real-world teaching scenarios without impacting actual K-12 students. TeachLive also offers users the chance to try the same scenario again after receiving feedback. A major benefit to TeachLive is that it provides immediate feedback and time for reflection and improvement. This has been found to be extremely beneficial and could be repeated in real-world classrooms for interns (Garland, Holden, & Garland, 2016). However, TeachLive is a simulation experience, meaning that the level of seriousness users demonstrate towards it can vary, as no true K-12 students are actually impacted by the interactions users have with the simulation characters.

Knowing that the purpose of pre-service coursework and learning experiences is to provide all opportunities possible to prepare education majors for success in their first year of teaching, poor or unrelated pre-service experience for PSTs is a serious problem. If the education departments at universities nationwide are not fulfilling their purpose, then the structure of education programs themselves is flawed and must be modified. Given the pressures facing education today—including high-stakes testing and college preparation—educators cannot enter the workforce ill equipped to educate today’s youth.
Nationwide, college education programs have long embraced senior year internships as a method for training PSTs prior to their graduating with a teaching certification. Despite this effort, recent nationwide studies indicate that 25% of new teachers feel unprepared to use curriculum, 41% of new teachers do not feel prepared to handle classroom management situations, and 80% of new teachers feel incapable of helping students who either do not speak proficient English or are from a diverse background (Nahal, 2010; Cleveland, 2008). This problem is even more pronounced at low-income schools. In fact, “Nearly 20 percent of teachers at high-poverty schools leave every year, a rate 50 percent higher than at more affluent schools” (Seidel, 2014). Given the climbing poverty rate nationwide, this problem is becoming—and will continue to become—more pronounced.

**Conceptualization of the Problem**

Matsko and Hammerness (2013) emphasize that a context-specific approach helps aspiring teachers to “learn what it means to use knowledge about the environment affecting the child to tailor instruction” (p. 26). Given the nationwide statistics on the increasing number of ill-prepared first-year teachers and the staggering number of first- to fifth-year teachers leaving the profession, this problem is clearly an organizational one. However, it is not even simply limited to education. The lack of pre-service exposure that aligns to real-world experiences is a problem across multiple disciplines, including nursing (Hickerson et al., 2016). This shows that the problem is structural in nature, too.

It is important to note that, while models may vary, the senior internship model usually includes a scaffolded induction into teaching. During the first portion, which usually lasts two weeks, PSTs act as observers, learning about classroom procedures and observing the classroom teacher. Following this initial observation period, the PST begins to take over classroom
responsibilities, often one subject at a time or one section of the block (such as leading a small
group during rotations) at a time. This chunking of responsibilities allows the PST to ease into
the responsibilities of teaching, gaining confidence and experience along the way. Ultimately,
the goal is for the PST to assume the full range of teaching responsibilities by the end of the
semester. However, the entire internship experience is roughly sixteen weeks, meaning that very
little time is spent in full assumption of classroom responsibilities. This means that, while the
PSTs do begin to get an authentic feel for the profession, that sense of responsibility is short in
nature. Furthermore, internship is the culminating course required of PSTs, meaning that the
exposure they receive to the profession is not until senior year, which is far too late to switch
majors and still graduate on time.

**Procedures**

At the time of this evaluation, the Boots on the Ground program was still a relatively new
program and only two professors were involved in it. Thus, there was little official direction as to
which aspects should be the focus of the evaluation; the professors utilizing BotG simply agreed
that it should be evaluated. To create the evaluation framework, the researcher referenced the
state requirements of PSTs in early coursework—namely the required observation hours—spoke
with the professors on why they instead required service learning hours, and studied literature
and research regarding pre-service preparation of teachers. The literature provided certain
desired outcomes of pre-service preparation. In addition, the researcher and professors identified
a number of other outcomes they expected the program to help ascertain. This combination of
expected results can be seen in the attached logic model (APPENDIX A: LOGIC MODEL). A
logic model is a graphic representation of the theoretical frameworks between inputs, activities,
and outputs/impacts of an initiative. Connections within a logic model represent hypothesized
causal linkages between the activities participants take part in and the changes those activities are anticipated to produce (Alter & Murty, 1997). By combining findings from the literature and expected impacts desired by the researcher and professors, the logic model provides a theoretical framework for what the initiative is designed to achieve and, in turn, what this study is evaluating.

**Background of the Study**

The focus of this study is to inform improvement for the program. To do so, the researcher will utilize a participant-oriented approach to program evaluation focused mostly on implementation evaluation with an associated focus on outcome evaluation for the program’s influence on PSTs perceived preparedness and self-efficacy. The evaluation is formative in nature, aimed at understanding the fidelity of implementation, participants perceptions of the program’s strengths and weaknesses, its influence on stakeholders, and how the program can be enhanced.

In keeping with the formative nature of this study, the study relied on implementation evaluation for an evolving program and preliminary perceptions of effectiveness (Chen & Garbe, 2011). This approach is particularly beneficial in early stages of a program’s implementation because it allows program decision-makers to gain insight to inform decisions going forward with the program. Based on findings of viability and perceived effectiveness of an implementation evaluation, more rigorous evaluation methods can be applied in the future, including those aimed at scaling up the program or changing certain elements, like training orientations. For this particular study, the researcher intends to use findings to see if the Boots on the Ground program holds promise and what, if any, potential shortcomings need to be addressed.
in future implementations. It is under this understanding that certain preliminary outcomes (refer to the logic model in APPENDIX A: LOGIC MODEL became the focus of the evaluation.

**Methodology**

This evaluation took a participant-oriented approach involving three primary stakeholder groups: pre-service teachers, university professors, and K-12 educators (Humphrey et al., 2016; Rossi, Lipsey, & Freeman, 2004). These stakeholders occupy a range of power positions in the community and use of the participant-oriented approach allows each stakeholder group to be heard rather than accentuating one group’s views at the expense of the others. Given that all three stakeholders have a vested interest in seeing the PSTs succeed, the participant-oriented approach enhances the quality and relevance of the evaluation and better incorporates the multiple perspectives involved in implementing Boots on the Ground.

**Data Collected**

Successful pre-service experiences can provide invaluable learning opportunities connecting pre-service teachers’ classroom knowledge to professional “know-how” in the field (Risner, 2015, p. 60). Authentic hands-on experience allows PSTs the opportunity to increase their perceptions of preparedness and, in turn, their self-efficacy as educators (Brown et al., 2014). It also provides contextual exposure to the profession, which can help overcome discrepancies many beginning teachers report between the profession they envisioned and the reality they experience as educators (Harfitt, 2015). Despite these and other findings emphasizing the importance of early and diverse field experience for PSTs, many pre-service experiences and coursework requirements currently emphasized in university-based education programs do not align to relevant teaching needs, meaning that PSTs may successfully graduate from college yet still struggle in their first year of teaching (O’Neill & Stephenson, 2015). A
major cause of this problem is that college faculty in the education field do not “balance the program’s objectives, expected learning outcomes, and student needs with internship possibilities and resources available throughout the program to students” (Risner, 2015, p. 64). In other words, there is a disconnect between college course requirements and real-world teaching expectations.

Prior research found that depth of knowledge and understanding were limited with PSTs due to a lack of hands-on interactions with K-12 students. Similarly, PSTs struggled with and did not get exposure to accommodating for diverse student academic and behavioral needs without hands-on learning opportunities in the first two years of college coursework (Hemmerich, Hoepner, & Samelson, 2015). Shulman (1987) described effective teachers as those who possessed strong content knowledge, classroom management strategies, understanding of learner differences, and ability to work in diverse educational contexts, including small versus whole group instruction and affluent versus impoverished school types (p. 8). Despite this relatively clear understanding of what makes a teacher effective, Levine (2006) observed, “The U.S. lacks a common vision of how to prepare teachers to meet today’s new realities, leading to the rise of divergent and opposing approaches to reform” (p. 14).

The problem of insufficient teacher preparation stems from teacher preparation programs that do not prepare PSTs to be “adept at data-based decision making and proficient in utilizing research-based interventions to improve student outcomes” (Garland et al., 2016, p. 47). Garland et al. (2016) recommended that pre-service coursework focus on hands-on learning experiences supported by literature and continuous support in order to get sufficient exposure and transfer learning into practice (p. 48).
Literature Connections of Causes

Poor or improper pre-service preparation of education majors is a significant problem. A large body of available literature has found that ill-prepared education majors become ill-equipped interns who will either be unsuccessful in their internships and not graduate or will pass internships but enter the work force at a disadvantage (Brown et al., 2015). In turn, those first-year teachers struggle to balance curricular demands, classroom management, differentiated instruction, and engagement (Nahal, 2010). By not providing PSTs with hands-on learning opportunities during their freshmen and sophomore years, these PSTs do not receive exposure working with K-12 students, planning academically rigorous lessons, and accommodating for diverse educational and behavioral student needs. This is because, “By participating in teaching experiences, students develop a deeper appreciation for the relationships between classroom pedagogy, their own learning, and clinical practice” (Hemmerich et al., 2015, p. 104).

Furthermore, without these early experiences, PSTs never have the chance early on to determine if they are making the right career choice or if they should switch majors before getting too far into the university’s Education program (Lattuca & Stark, 2009).

The prerequisite experiences PSTs have working with K-12 students are intended to bridge the gap between educational theory and practice. These opportunities provide PSTs with real-world opportunities to apply the techniques and concepts they have been working on in college coursework. It does this while also granting them a temporary status, which is free from much of the politics and responsibilities of first-year teachers. In this way, service learning experiences ease PSTs into the professional world. In fact, Hebert, Hebert, and Worthy (2001) found that the alignment of a teacher’s pre-service experience and first year of teaching
contributes to the teacher’s success by helping to set realistic expectations both in the management of students and in the social and political climate of their future workplace (p. 909).

The consequences of being, or even feeling, ill-prepared with the skills and competencies needed to succeed as educators has far-reaching, negative impacts (Torres, 2012). Perceptions of preparedness in educators predict teaching ability and perseverance with difficult students and situations (Vrown et al., 2015). Similarly, whether genuine or not, these preparedness perceptions relate to persistence in teaching (Tschannen-Moran & Woolfolk Hoy, 2007).

Teacher attrition is a nationwide concern, with roughly 40% of teachers leaving the profession within the first five years (Harfitt, 2015). The resulting teacher shortage means K-12 schools are faced with the burden of filling those vacancies, training new teachers, and rebuilding school culture. It also comes with negative impacts on K-12 student achievement, as loss of experienced teachers often means replacing them with inexperienced ones (Zhang & Zeller, 2016). The nationwide high teacher turnover epidemic, nicknamed the revolving door effect, results in a cycle of decreased academic achievement of K-12 students (Ingersoll, 2004; Torres, 2012). With research showing that perceptions of preparedness for educators develop most during their time as PSTs, it is critical to provide PSTs the opportunities to positively influence these preparedness perceptions.

Linked to perceptions of preparedness is teacher self-efficacy, or one’s belief in his or her influence as an educator (Page, Pendergraft, & Wilson, 2014, p. 31). Originally stemming from Bandura’s Social Cognitive Theory, self-efficacy in teaching relates to one’s perceived preparedness as an educator and the associated confidence he or she has in teaching (Anderson & Stillman, 2011). High self-efficacy contributes to the persistence and resilience educators will exhibit (Bandura, 2012; Pajares, 1996). Research on PST field experience suggests that
meaningful exposures with K-12 students during coursework positively impact the practices and self-efficacy of both PSTs and beginning teachers (Trent, 2011; Wolf et al., 2008).

Coursework alone does not adequately prepare PSTs for internship or for being successful first-year teachers. Without hands-on learning experiences beyond just the senior year internships, PSTs do not receive enough relevant, meaningful, and varied exposures working with K-12 students to enter the workforce prepared to be successful (Richardson, 1996). Supporting this shortcoming, Graziano (2005) and Kopkowski (2008) both found that, despite successfully completing their senior internships, over 10% of new teachers leave the profession within one year and nearly 46% of teachers leave the profession within five years, largely due to being unable to effectively deal with all of the challenges related to teaching. The problem does not lie in senior internships alone; the problem stems from a lack of hands-on experiences prior to internship, which leaves education majors ill-prepared for the many challenges of teaching because they lack exposure to real-world-based applications of learning prior to internship (Duck, 2007). Early opportunities to “practice effective communication and teaching strategies have clear applications for future clinical experiences” (Hemmerich et al., 2015, p. 116).

Without multiple, varied, and meaningful experiences in authentic classroom settings, PSTs and, in turn, first-year teachers struggle immensely. A large percentage of PSTs are graduating unprepared to assume their roles as teachers, which shows that the structure of many education programs nationwide is flawed and must be modified (Levine, 2006). Given the pressures facing education today, including high-stakes testing and college preparation, educators simply cannot enter the workforce without being equipped to educate today’s youth.
The Project

What is your project?

The Boots on the Ground (BotG) program offered to certain pre-service teachers enrolled in early coursework at one particular university in the southeastern United States seeks to support authentic, meaningful learning by providing PSTs hands-on instructional opportunities with small groups of K-12 students in classroom settings. This project is a program evaluation of the BotG program to determine if it influences PSTs perceptions of preparedness and self-efficacy. The study is formative in nature, aimed at understanding the fidelity of implementation, participants perceptions of the program’s strengths and weaknesses, its influence on stakeholders, and how the program can be enhanced. The study uses a participatory approach to program evaluation, which allows multiple groups of stakeholders to provide feedback and experience on the program, including the benefits of coursework in relation to practical experience. The focus of this study is to determine the influence and inform improvement for the program.

What is the scope of the project?

This project focuses on early coursework in the education program sequence. In particular, it looks at the two survey courses required in the state of Florida, as well as many other states nationwide. Survey, or pre-requisite, courses are those required to be completed prior to being admitted into the university’s education program. These courses are EDF2005 (Introduction to the Teaching Profession) and EDF2085 (Introduction to Diversity in Education) and each course has an associated observational requirement. The project is limited to OCPS as the partnership district and the K-12 schools that allow BotG volunteers to work with K-12
students. Each college course is one semester in length and the project will encompass two semesters, meaning that the project will last from September of 2017 until April of 2018.

**Who is involved in the project?**

Those involved in the project include the K-12 educators who allow the university’s PSTs to volunteer in their classrooms, the university professors who oversee the coursework involving BotG service learning hours, and the college students majoring in education who are required (or given the option) to complete coursework involving BotG service learning. Involving these multiple stakeholder groups is beneficial on many levels. For starters, it is ethically responsible, largely because it ensures that normally marginalized groups—the university pre-service teachers—are given voice. Furthermore, incorporation of multiple stakeholders increases the likelihood of valid data and the ability to triangulate trends found in the data (Hay, 2009; Bogdan & Biklen, 2006).

**What organizational gatekeepers must provide support for the project to proceed?**

For this project to proceed, university professors in the education department who oversee the BotG program must provide support. This support is seen both in encouraging their students to complete surveys and interviews that go along with the project and also providing their input into the purpose, relevance, and benefits of the program. K-12 educators and administrators in the local school district must also provide support, allowing the PSTs enrolled in coursework requiring use of BotG to volunteer with small groups of students in their classrooms.
What is the relationship of your project to your diagnosis of the causes of the problem?

The problem itself is that ill-prepared education majors become ill-equipped interns who will either be unsuccessful in internship and not graduate or will pass internship but enter the workforce at a disadvantage (Hammerness et al., 2007). This problem stems from disconnects between college coursework and real-world requirements of PSTs, which decrease the value of university-based education programs. Levine (2006) found that only 40% of K-12 principals felt that university-based education programs were moderately or fully preparing pre-service teachers (hereby referred to as PSTs), with the other 60% saying that these PSTs graduated ill-prepared to handle the responsibilities required of them as educators. In particular, elements of classroom management and supporting diverse learners were reported as low areas of ability (Levine, 2006, p. 31). PSTs must be provided with the skills, competencies, and applications of learning necessary to succeed as educators. In education, especially, this is vital, as the expectations of first-year teachers are the same as veteran teachers. Increased K-12 student achievement has been linked to having high-quality teachers who possess effective teaching skills (Goldhaber & Walch, 2014).

Research purports that hands-on learning experiences improve PSTs’ understanding of and ability to successfully carry out the practice of teaching (Gratch, 1998). However, current teacher preparation models do not include mandatory service learning until senior year internships. This contributes to the problem of ill-prepared interns (Levine, 2006).

This project seeks to evaluate the Boots on the Ground program offered to PSTs enrolled in early coursework led by certain professors at one particular university in the southeastern United States. In particular, it looks at whether the hands-on learning opportunities provided to PSTs increase their perceptions of preparedness and self-efficacy, thereby supporting their
growth as future educators. Furthermore, the study looks at the program’s influence on the K-12 schools as well as participants’ satisfaction.

Simultaneously, a major problem for education majors is that, due to not interacting with classes of K-12 students until internship, those who begin working with students only to realize that they have chosen the wrong career path are too far into coursework to change majors without negative consequences (Barnett et al., 2010, p. 2; Lattuca & Stark, 2009). This project seeks to help offset that problem by providing early hands-on service learning experiences with K-12 students to education majors far before senior internships, thereby allowing them to experience classroom management and teaching first-hand early on.

The Plan

The plan is to complete a participant-oriented approach to implementation evaluation of the Boots on the Ground program. To do so, pre-service teachers (PSTs) will complete a beginning- and end-of-semester survey in which they rate their perceived ability with various areas of teaching competency and self-efficacy, including adapting instruction for diverse students, working with English Language Learners (ELLs), and maintaining engagement in a small group setting. The purpose of these surveys is to see if PSTs show growth in perceived preparedness and self-efficacy after participating in the BotG program. In addition, qualitative data will be collected via individual interviews and focus group sessions with PSTs who are willing to participate.

In an effort to triangulate findings, the K-12 educators who utilize the BotG program will also be asked if they are willing to participate in either a group focus session or an individual interview. The purpose is to get feedback from this stakeholder group on the preparation level and growth of PSTs throughout the semester as well as their overall satisfaction with the
program and any associated suggestions they have for enhancing it. Utilization of K-12 educators’ feedback will also help address any concerns that may arise in a self-reported determination of ability by PSTs.
Data Collection and Sources

Pre-Service Teachers
University Professors
K-12 Educators

Interviews
All three stakeholder groups involved with the BotG program will be invited to participate in individual interviews. These questions are meant to address the program’s influence, benefits, drawbacks, and suggestions for improvement as well as its impact on stakeholders and their satisfaction with the program.

Focus Groups
PSTs and K-12 educators involved with the BotG program will be invited to participate focus group sessions. These sessions will focus on three things: what went well with the program, what did not go well, and what suggestions participants have for improving the program.

Surveys
Pre/Post Survey questions: The same survey was given to PSTs at the start and end of the semester to identify their self-reported preparedness and self-efficacy in different areas of teaching. Paired Samples t-Tests were then used to determine if there were increases in mean scores and, if so, in which areas. The surveys used a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Post-Survey Questions: At the end of the semester, PSTs were also invited to respond to survey questions on a 7-point Likert scale. These questions related to satisfaction with and influence of the program. Descriptive statistics were used to report participants’ satisfaction with various aspects of the program.

Figure 2: The Evaluation Plan
CHAPTER TWO: REVIEW OF LITERATURE

Introduction

In this chapter, literature related to multiple aspects of the study is reviewed. The first section includes literature on relevant evaluation approaches, namely program evaluation, implementation evaluation, and participant-oriented approaches to evaluation. Also discussed in this section is research pertaining to the use of self-report surveys in evaluation. In the second section, literature related to the history and development of teacher preparation is presented. Next, relevant literature and research focused on current issues with teacher preparation programs is explained, with particular focus on early fieldwork experiences. Subsequently, research regarding preparedness and self-efficacy as it relates to PSTs, novice teachers, and K-12 students is detailed. Finally, the review of research will assist teacher preparation programs at the college and university level for 21st century educators.

**Figure 3: Progression of the Literature Review**

- **Evaluation Approaches**
  - Program Evaluation
  - Implementation Evaluation
  - Participant-Oriented Approach to Evaluation
  - Self-Report Surveys

- **Historical Context**
  - Literature related to the history and development of teacher preparation

- **Current Issues in Teacher Preparation**
  - Field experience
  - Perceived preparedness and self-efficacy
  - Linkages to novice teachers
  - Linkages to K-12 student achievement

- **Future Implications**
  - Qualities of successful teacher preparation programs
Evaluation Approaches Relevant to the Study

Program Evaluation

Evaluation is a practice with many purposes. However, according to Stufflebeam (2003), the most important purpose is not to prove, but to improve. This concept coincides with the Phi Delta Kappa National Study Committee on Evaluation’s stance on evaluation, which is that evaluation is not used to show whether something works. Rather, evaluation is a functional activity that identifies strengths and limitations of a program as a means of supporting the program’s improvement. This is not to say that all programs and interventions are commendable. In this regard, evaluation will at times find a program unworthy and findings will discourage future use of the program or attempts to improve it (Shackman, 2012; Stufflebeam, 2003). Understanding that evaluation helps to improve programs, the primary focus of program evaluation is to determine if, and to what extent, a program is attaining its intended goals. Simultaneously, evaluation helps to identify both strengths and weaknesses in the program as well as areas that require modification. These are formative goals, aimed at improving a program while it is still being developed. At the summative level, evaluation can help determine the merit of a program and make recommendations as to whether it should be continued or not.

As explained by Patton (1996), program evaluation is meant to incorporate multiple sources and types of information as a means of generating knowledge that can inform, define, reform, and transform the program, the participants, and the stakeholders (Reed et al., 2001). Between the years of 1960 and 1990, nearly sixty evaluation approaches were developed in response to evaluation and methodology needs (Fitzpatrick, Sanders, & Worthen, 2004). Five broad categories were named to classify the approaches: objectives-oriented, management-oriented, consumer-oriented, expertise-oriented, and participant-oriented.
Participant-Oriented Approach to Evaluation

This study focuses on the participant-oriented approach to evaluation, which emphasizes the needs of the program participants. Robert Stake, an early proponent, wrote about ‘responsive evaluation’ in the 1970s, in which he believed the participants and stakeholders all had reason to understand the effectiveness of a program (Ross, 2010). Over time, this standpoint developed from ‘responsive’ evaluation to ‘participant-oriented’ evaluation, which is similar in nature, but goes one step further in actually involving participants in the evaluation itself. Especially in the field of education, many diverse stakeholder groups have a vested interest in knowing if a program is successful (Ross, 2010). For this study in particular, the key stakeholder groups include the K-12 educators, university professors, and pre-service teachers involved with the Boots on the Ground program. It is a constructivist approach, which relies heavily on qualitative methods and involves multiple stakeholder groups (Creswell, 2003). The participant-oriented approach allows the PSTs at the university, a unique and important consumer, to become involved in the evaluation process, which better helps the university understand this stakeholder group’s needs and the influence the program has on them.

Implementation Evaluation

Implementation evaluation is a multi-dimensional approach to evaluation that accounts for fidelity, quality, participant responsiveness, impact, and adaptations amongst other things (Humphrey et al., 2016). It is used to help stakeholders understand such things as how, why, for whom, and under what conditions interventions work, with associated answers helping to increase understanding of the program’s implementation and provide support that will improve it in future instances (Humphrey et al., 2016, p. 15). Implementation evaluation can help to validate or provide insight used to modify a program.
It is important to note that implementation evaluation in education is often used for both formative and summative purposes. In formative uses, the process is documented and feedback is ascertained on what is working and what needs modification. In summative uses, implementation evaluation looks at outcomes for intended participants (Biesta, 2010). Quantitative studies tend to focus on what works. However, before this question can be answered, one must first understand what occurred, what its impact was, and how this relates to the intended goals of the activity. Implementation evaluation provides researchers with theoretical, methodological, and analytical tools to do precisely that. Tineke and Stake (2001) advocate for formative evaluation, stating that one must continually see and judge a program, refine perceptions as change occurs, and accumulate evidence of the quality of a program.

Despite the possibility of relatively clear guidelines, expectations, and directions, interventions are rarely implemented precisely as designed, largely because they are applied in real-world settings by diverse implementers rather than in a vacuum. This variability in implementation can impact the attainment of expected outcomes (Durlak & DuPre, 2008; Blakely et al., 1987). Similarly, implementers themselves may interpret the guidelines and expectations differently, making them ‘active modifiers’ and not simply ‘passive acceptors’ of the program, which can further affect a program’s implementation (Rogers, 2003, p. 180). Implementation evaluation was designed to address these realities and help determine if a program has been implemented with fidelity as well as which parts of the program have been modified and why. This evaluation type helps establish understanding of the activities incorporated in a program as well as their impacts (Forman, 2015, p. 10).

Process evaluation is quite similar to implementation evaluation and the two terms are often used interchangeably or in conjunction with one another. The main difference is that
process evaluation emerged originally in public health with an original focus on whether programs were faulty in nature or failed due to implementation/delivery issues. A main goal of process evaluation that makes it overlap with implementation evaluation is that process evaluation seeks to “see what happened in the program and how that could affect program impacts or outcomes” (Saunders, Evans, & Joshi, 2005, p. 134). Similar to implementation evaluation, process evaluation helps to identify how a program works and support refinements targeted at improving feasibility and sustainability of the program (Steckler & Linnan, 2002).

For the purpose of this study, the term ‘implementation evaluation’ will be used, merely because process evaluation has roots that differ from the purpose of the study.

At its most basic level, implementation evaluation can help to show if a program is or is not being employed. In this study, the most basic findings through use of implementation evaluation will be to determine if the BotG program is or is not being implemented by professors at the university as well as by K-12 educators who are perceived to be using the program. While seemingly trivial, it is actually quite important to establish this fact, as doing so increases internal validity (Humphrey et al., 2016, p. 35). Many evaluations do not establish that a program is truly being used, which can negatively impact future studies focused on determining a relationship between a treatment and behavior change (Gresham, 2009, p. 533). By showing that a program is being used, researchers can—at the bare minimum—lay the groundwork for future quantitative and comparative studies because they are establishing the existence of an independent variable (treatment group). Establishing that an intervention took place is often overlooked in education studies in particular. Consequently, despite enormous literature on theories and suggested interventions in education, little empirical literature is available to explain which factors affect implementation of school-based interventions.
Ultimately, implementation evaluation seeks to help evaluators develop a deeper understanding of how and to what extent intervention components work in authentic settings. Findings increase understanding of the program and, in turn, provide information that can be used to increase the fidelity and impact of the program (Durlak & DePre, 2008). Findings also help determine the methods and practices that best lead to effective implementation of a program or intervention. These methods and practices can help develop the professional development and on-going support offered to implementers.

**Use of Self-Report Surveys**

This study will utilize pre- and post-surveys with the pre-service teachers (PSTs). Surveys will use a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). The pre-surveys will help identify PSTs perceptions of what they already know and feel comfortable doing prior to partaking in the BotG program. This is commonly referred to as ‘usual practice.’ The post-surveys will be identical to the pre-surveys in regards to the perceived preparedness and self-efficacy questions, which will allow them to serve as a comparison to show changes in various aspects of PSTs perceived teaching abilities and self-efficacy. Only PSTs who complete both the pre- and post-surveys will be included in these Paired T-Test findings. The post-surveys will also include additional questions related to the program, its implementation, and its influence on the PSTs. All PSTs who respond to this portion of the post-survey will be included in the descriptive statistics portion.

Surveys are one of the main data collection methods in implementation evaluation, with direct observation, interviews, and focus groups being others. Surveys are often used in participant-oriented approaches to implementation evaluation because they require less time and money. They also take into account multiple aspects of implementation, whereas observation
offers merely a snapshot of what is occurring at one moment in time. “Teacher self-report surveys can help assess the use of general behavior management strategies…approaches to managing disruptive and inappropriate behavior, and implementation of…interventions” (Humphrey et al., 2016, p. 38). Self-report surveys allow participants to reflect on the program as a whole and provide a summative account of the program’s impacts.

Self-report surveys are, nevertheless, subject to multiple forms of bias, such as impression management, demand effects, and differences in understanding of key aspects of the requirements of the intervention (Humphrey et al., 2016). Self-report surveys rely on participants understanding the expectations of the program and being able to report back on exactly what researchers are interested in learning, which is not always feasible. In particular, self-report surveys are subject to self-report bias, which is a tendency to misjudge how much one knows or is capable of, often in a more positive direction (i.e. overstating one’s proficiency level). Qualitative implementation evaluators should account for this likelihood with self-report surveys by either directly observing or utilizing interviews of multiple stakeholders who have first-hand exposure to the program’s implementation. Though not directly the evaluator observing, utilizing interviews and focus groups of multiple stakeholder groups can offset the positive self-bias issue.

In this study, interviewing the K-12 educators who allow PSTs in their classrooms will allow the researcher to ascertain their perspective on the program’s influence on their K-12 students as well as on PSTs, particularly if the PSTs come back multiple times to complete service learning hours in the same classroom. K-12 educators are able to provide first-hand feedback of PSTs abilities, particularly in regards to classroom management, engagement, and behavioral intervention competence. This is also true of observing fidelity, i.e. are PSTs always working
with small groups (Wehby, Maggin, Moore-Partin, & Robertson, 2012). These suggestions help to offset the self-report bias common to survey usage highlighted in the literature.

**The History and Development of Teacher Preparation**

Beginning in the 17th century with the opening of the first American school—Boston Latin School—a nationwide push for preparing children for lifelong success via educational opportunities began. A major challenge that schools have faced with education is properly and thoroughly preparing teachers to be effective educators of youth students. The earliest teacher preparation programs focused on selecting instructors who would be capable of leading classroom instruction and then improving their skills over time. These instructors were known as master teachers. A common practice, still seen to a certain extent today through internship, was to work under a seasoned teacher and slowly assume his or her role as head of classroom (Darling-Hammond, 2005; Herbst, 1989). A second early method was to select a gifted individual within the community, in hopes that this person’s knowledge and skills would transfer to the students. Both methods—master teacher and gifted individual—were not based on research or best practices and, as such, were imprecise and difficult to rely upon, resulting in limited success (Lazerson, 1987).

Prior to the 1830s, there was very little formal training required to become a teacher, which further compounded the limited success of these early methods. Instead of formal teacher preparation programs, schools more commonly adopted the practice of transition, where a person who reached a certain level of education was perceived to possess the skills to then shift from pupil to teacher (Labaree, 2008). In regards to early teacher characteristics, the vast majority were predominantly male. However, with westward expansion and the establishment of cities and factories, many men left the teaching profession in hopes of greater fortunes elsewhere. This
resulted in a heavy increase in female teachers to fill vacancies. Still, no formal teacher training was required, and the practice of transitioning graduating pupil into teacher endured. Female teachers predominately stayed within their communities, becoming teachers at the same schools from which they just graduated. This element of stability was attractive to those within the community who selected teachers, as they felt it more important to have consistency in the classroom than to have expertise. Consequently, success was arbitrary (Lucas, 1997).

The 1830s marked an evolution in the teacher preparation process, with teacher candidates in most states now being required to pass a state examination—usually incorporating a comprehensive written exam, interview, and oral exam—to obtain a teacher license and begin teaching (Shulman, 1986). These licenses were probationary, valid for one year. After that time, teachers who showed success, completed additional coursework, and passed further examinations were eligible to apply for permanent teaching licenses. The 1830s is also when the first truly public school—open to all children—was established, largely due to the efforts of Horace Mann. Mann favored a public education system, believing that such a system would offset anarchy and unify the nation (Lucas, 1997). These early schools worked to unify the nation, increase literacy, and improve behavior. Of utmost importance in doing so was requiring that English be the sole language of delivery and that principles of the protestant work ethic be the main concepts taught (Herbst, 1989).

Common Schools

In 1827, the first free public elementary school, open to all, was established in the Commonwealth of Massachusetts. These free schools were supported by taxes and focused on moral and civic education (Lucas, 1997; Urban, 1990). As aforementioned, all schools used
English as the sole language of instruction so as to help build a national culture. They also taught the Protestant work ethic and focused on civic duties and obedience (Herbst, 1989).

Horace Mann, also known as The Father of the Common School, was both a lawyer and a member of the Massachusetts Board of Education in 1837 when he began advocating for all children to receive a free public education. He felt strongly that all children, regardless of social or economic class, ethnic group, religious affiliation, or background should be educated collectively within one common education system. The rationale for this collective system was that it would ease tensions between sectors of people within a region (Lucas, 1997).

By the 1850s, nearly 75% of children nationwide attended common schools, with 81,000 common elementary schools open nationwide. During the 1950s, the vast majority of teachers in these schools were still white males (Lucas, 1997). However, as more and more common schools were created, the demand for teachers rose. At the same time, industrialization began and many men abandoned their teaching careers for opportunities out west. Consequently, women filled the vacancies and, slowly but surely, common school teaching positions transitioned from being male-dominated to being female-dominated positions. Like their male predecessors, female teachers in common schools did not usually go through any formal training; rather, they graduated from the common school and, due to success as pupils, were selected to then lead as teachers in subsequent years (Lucas, 1997). In addition to being readily available and less likely to pursue westward adventures, women were also seen as nurturing and family-oriented, which were two qualities Horace Mann had originally encouraged of common school teachers. Women also worked for significantly lower salaries than their male counterparts, which further encouraged the practice of hiring female teachers in common schools (Lucas, 1997).
**High Schools**

High schools originated at approximately the same time as common schools, but their purpose and esteem were far different. For starters, the teachers in these schools were almost exclusively male and, compared to teachers in common schools, were considered much more scholarly, as they often possessed college or university degrees (Herbst, 1989). High schools themselves were more advanced in their course offerings, too, and the student population was almost entirely male. Many high school teachers did not support common schools or the notion of free public education for all.

Students who completed high school were considered educated and prepared enough to become common school teachers. Nonetheless, there was also a high school track and curriculum specifically meant to prepare students to teach in common schools. Females were allowed to participate in this program, but could not take part in any other secondary education program (Fraser, 2007). Even with perceived access to the program, only 14% of high schools actually accepted females into the teacher preparation track (Herbst, 1989). Despite these statistics, approximately ninety to ninety-five percent of graduates from high school teacher preparation programs were females, which shows how highly dominated the common school teaching system was with females (Herbst, 1989).

**Normal Schools**

In the mid-nineteenth century, normal schools emerged, constituting a significant educational initiative. Prior to this, most female teachers in common schools had little to no formal training as teachers, as they were not amongst the select few who completed the high school education track. Rather, they were merely graduates from common schools who had been particularly successful and asked to stay on as teachers upon graduating (Lucas, 1997).
As society continued to advance and leaders saw successes and failures with teaching, educational leaders such as Horace Mann once again advocated for change in the education system, this time encouraging a more formal system for training elementary teachers. The result of this was the establishment of normal schools, which served as early, teacher-specific training programs. Normal schools sought to standardize academic and pedagogical training in an effort to create prototype teacher preparation programs nationwide (Harper, 1939). Becoming a teacher was no longer happenstance; teachers did not simply graduate as student and step into the role of teacher at their same school. Instead, normal schools served as training academies for future American elementary school educators (Herbst, 1989).

The first normal school was established in Lexington, Massachusetts, with the explicit goal of training and then hiring teachers for the public schools within the greater Lexington area (Borrowman, 1965). This teacher preparation program utilized a curriculum that provided educational principles to teacher candidates and centered on teacher candidates learning to guide young children rather than imposing learning upon them (Coble, et al., 2004). It became the national example of teacher preparation programs nationwide and was credited with increasing the rigor of teacher preparation through the implementation of curricula that emphasized both content and delivery-based learning. Training for teacher candidates in normal schools lasted approximately one year and was specific to the teaching profession in that teacher candidates had to demonstrate competence in subject matter in order to graduate. In addition, teacher candidates needed to show high morals and be in good health to graduate (Herbst, 1989).

In the second half of the nineteenth century, the formal organization and governance of normal schools shifted to being city-based. Large cities primarily took control of decisions regarding content and concepts for properly preparing teachers within their cities. This was done
in an effort to prepare those teacher candidates for the skill and concepts most prominent in their particular city. For the most part, core academic discipline instruction was the foundation of coursework, with field experience in a model classroom serving as supplemental training (Harper, 1939). These model classrooms were overseen by a principal, with the teacher candidates serving as the primary teacher within each classroom and also observing other teachers and teacher candidates within the school (Harper, 1939). Normal schools were so popular that, by 1914, every city with a population of at least one hundred thousand people had either a normal school or other formal teacher preparation program.

**Teacher Colleges**

The culture of teacher education changed as liberal arts professors began teaching education coursework. At the start of the 1920s, there were 46 teacher colleges—both public and private—and, by the 1950s, teacher colleges had almost entirely replaced normal schools (Levine, 2006; Haberman, 1982). Consequently, the National Council of State Normal School Presidents and Principals was reworked and renamed the National Council of State Teacher Colleges, a symbolic act signifying the shift from normal schools to teacher colleges as the primary mode of teacher candidate preparation. Similarly, the National Education Association’s Department of Normal Schools was converted to the American Association of Teacher Colleges in 1923 (Fraser, 2007).

The change was not in name only. Teacher colleges focused more heavily on increasing pedagogical instruction, adding major field requirements, and including more general education, liberal arts, and history and foundations of teaching coursework as well as increasing pedagogical instruction (Coble et al., 2004). With the added requirements, degree completion was no longer the 2-3 years entailed in normal schools; teacher colleges were generally four-year
curricular programs. These colleges also had higher entrance standards. Similar to normal schools, though, teacher candidates still completed a capstone internship before graduating (Coble et al., 2004). Still, a divide between elementary and high school teachers continued to be evident, with teacher colleges mostly training elementary education teacher candidates and universities focusing more on high school teacher candidates (Urban, 1990). Like before with normal schools, this left high school teachers feeling and being perceived by society as superior in ability to elementary school teachers.

Normal schools, once so prevalent nationwide, gradually faded away or adopted the American Association of Teachers Colleges’ suggestions for teacher candidate preparation, transitioning to four-year models and increasing course requirements (Fraser, 2007). In time, the term ‘normal school’ became obsolete, replaced by ‘teacher college’. Meanwhile, teacher colleges worked to compete with universities, which were known for preparing high school teacher candidates. To align better with universities, teacher colleges began employing faculty with subject-specific backgrounds (Urban, 1990).

With this transition, model schools were also largely abandoned. To still provide teacher candidates with field experience, they were sent into established schools in the area, similar to how most colleges and universities organize internships today. It was during this time period that more concrete internship expectations were established, with the same general guiding principles ringing true today: internship would be a culminating activity of approximately three months of full immersion, allowing the teacher candidate to apply coursework learnings in authentic contexts (Johnson, 1968). Teacher colleges relied heavily upon behavioral psychology and cognitive organization theory in their coursework, which supports the notion that teacher colleges were placing increased emphasis on the science of teaching (Berliner, 2007).
Most of the field experience teacher candidates received in teacher colleges was through laboratory schools, which were part of the college and predominately populated with faculty members’ children (Coble et al., 2004). These schools encouraged teacher candidates to apply coursework learnings in real-world settings, while also using the school pupils to try out new teaching strategies and test pre-existing educational theories (Stallings & Kowalski, 1990). By 1970, though, these laboratory schools were deemed exclusive, not representative of general school population demographics, and fundamentally unjust, which resulted in most laboratory schools being dissolved. In turn, teacher colleges, too, began to fade out, replaced by general colleges and universities with education-specific program tracks and more uniform certification requirements (Fraser, 2007). In time, bachelor degrees in education became the norm for all teachers, not just high school teachers (Morey et al., 1997).

**Universities: The Inception**

Since their inception, universities have largely been known for focusing on the science of education and advanced research (Urban, 1990). Originally, at the university level, coursework in education looked predominately at the cognitive and behavioral sciences as well as education psychology. During the 19th century, these higher education institutions were limited almost entirely to secondary and subject-specific preparation (Morey et al., 1997). This was largely due to high schools being the step before university, which made universities want to partner with and support high school teachers, who were responsible for preparing pupils to for university coursework. Elementary school teachers were still considered inferior to high school teachers during this time period, so supporting these teachers’ efforts was of little importance to universities (Urban, 1990).
As more theoretical components began to be incorporated into even elementary teachers’ preparation coursework, universities began extending admission to these teachers (Sarason et al., 1986). The rationale for this was similar to supporting high school teachers: these teachers were responsible for providing solid foundational understanding to students who may go on to universities later on and needed to be knowledgeable contributors to society. This was particularly important with the technological innovations that were exponentially increasing. Universities, feeling superior to teacher colleges and their normal school predecessors, felt it their duty to train even elementary teachers to ensure that future generations of youth students received proper educational opportunities (Sarason et al., 1986).

At first, a specific track was created within universities for elementary education teacher candidates. These ‘colleges of education,’ as they were named, were established to “allow women to enroll but not spread their presence or their influence across the campuses” (Urban, 1990, p. 63). Societal influences like the GI Bill, drastic population increases, and new mandates in education all contributed to ever-increasing number of university preparation programs for teacher candidates (Lucas, 1997).

**Universities Today**

In the United States, approximately ninety percent of the 700,000 students enrolled in teacher preparation programs each year complete traditional university-based teacher preparation programs, though there continue to be increases in the number of teachers who attain certification through alternative methods (U.S. Department of Education, 2013). Research for this dissertation will solely focus on the university-based teacher preparation programs.

Teacher preparation programs are responsible for preparing pre-service teachers (PSTs) with the content knowledge, pedagogical understanding, and experience needed to succeed as
teachers in the work force (Henning & Eui-kyung, 2010). Nationwide, there are numerous models that universities follow to achieve this purpose. In Florida, the models are not identical, but the standards are: to earn a bachelor’s degree in education from a Florida university-based teacher preparation program, PSTs must successfully complete at least 120 credit hours and maintain a minimum 2.5 grade point average. Certain coursework related to education must be taken as part of those 120 required credit hours and PSTs must complete a student teaching experience (Statutes & Constitutions, 2016). Despite general guidelines, there is not nation-wide or state-based uniformity in teacher preparation programs. In fact, Levine (2006) went so far as to say that, “The greatest commonality among university-based teacher education programs is their diversity” (p. 15). For the most part, university-based education programs are responsible for preparing a diverse group of PSTs who plan to enter a copious number of different fields. As such, the majority of coursework is broad in nature rather than specific to one specific group, such as elementary education or middle school math (Levine, 2006). Even courses themselves, despite having state-mandated titles and expectations, vary immensely in content, assignment, and even order of requirement before graduation (Wilson, Floden, & Ferrini-Mundy, 2001).

Student teaching, often interchangeably referred to as internship, is considered the culminating requirement of most traditional university-based teacher preparation programs. It most commonly takes place after all required coursework has been completed and requires the PST to be in a school for a set number of hours under the supervision of a certified teacher. In Florida, this duration is at least ten weeks (though universities typically use the duration of a semester, which is approximately 15 weeks) and requires a full-time commitment to being in the school (Coggshall, Bivona, Reschly & National Comprehensive Center for Teacher, 2012). This internship provides the PST with the opportunity to apply coursework learnings, such as
instructional techniques, lesson planning, interacting with parents and staff, and managing student behaviors and relationships (Perry & Power, 2004; Brown, et al. 2015). It is important to note that, while models may vary, the senior internship model usually includes a scaffolded induction into teaching. During the first portion, which usually lasts two weeks, PSTs act as observers, learning about classroom procedures and observing the classroom teacher. Following this initial observation period, the PST begins to take over classroom responsibilities, often one subject at a time or one section of the block (such as leading a small group during rotations) at a time. This chunking of responsibilities allows the PST to ease into the responsibilities of teaching, gaining confidence and experience along the way. Ultimately, the goal is for the PST to assume the full range of teaching responsibilities by the end of the semester. However, the entire internship experience is roughly fifteen weeks, meaning that very little time is spent in full assumption of classroom responsibilities. This means that, while the PSTs do begin to get a feel for leading all instruction, that sense of responsibility is brief.

As increased accountability for effective teaching practices continues to be emphasized at both the university level and in public K-12 schools, it is of paramount importance to look at the experiences offered to PSTs (Meyer & Society for Research on Educational Effectiveness, 2016). This examination of the quality and effectiveness of teacher preparation programs, including the service learning experiences, will help identify facets needing to be adjusted as well as ways in which university-based traditional teacher preparation programs can improve to meet current education system demands.

Current Issues in Teacher Preparation Programs and Their Impacts

Nationwide, findings indicate that the majority of university-based teacher preparation programs fall short of adequately preparing pre-service teachers (PSTs) for success as first-year
teachers (Hoffman et al., 2015; Borko & Mayfield, 1995; O’Neill & Stephenson, 2013). In particular, coursework requirements in education programs do not align to what teachers must actually be able to do in authentic classroom settings (Chelsey & Jordan, 2012). Similarly, the quality of real-world opportunities provided to PSTs limit the influence these experiences have on PSTs perceptions of effectiveness and ability as educators (O’Neill & Stephenson, 2013).

Clark, Byrnes, and Sudweeks (2015) encouraged professors in college education programs to reflect on the influence their coursework and field experiences have on PSTs classroom readiness. Poor or unrelated requirements of PSTs leads to decreased growth in preparedness and self-efficacy, which is contributing to the low retention rates of professional educators (Zhang & Zeller, 2016). To offset this, Jorissen (2002) encouraged the combination of pedagogical training with concurrent field experiences to both prepare future educators and increase their commitment to the profession.

Field Experience

For the sake of this study, field experience is considered a coursework requirement which puts PSTs into K-12 classrooms working with students. This is different from observation, which also requires PSTs to be in K-12 classrooms but does not require them to work with students. Literature and research on field experience supports its significance in the development of PSTs, both in preparedness and in self-efficacy (Brown et al., 2014). Perceptions of preparedness develop during pre-service time, aided by coursework, but most positively influenced by field experiences (Brown et al., 2015; Lee et al., 2012).

Strong teacher preparation programs blend coursework and field experiences (Faircloth, He, & Higgins, 2011). Therefore, conscientious connections should be made between coursework learning and real-world opportunities to apply those concepts that pedagogical
knowledge (Zakeri, Rahmany, & Labone, 2016). More than just a contributing factor to the development of PSTs, field experience is actually commonly cited as the number one most influential way of improving PSTs’ preparedness and self-efficacy (Leung, Wong, & Wong, 2013). It has the potential to affect future ability of PSTs as educators and their ability to effectively educate K-12 students.

**Perceived Preparedness and Self-Efficacy**

The primary focus of this study is to determine the influence the Boots on the Ground program has on pre-service teachers’ perceived preparedness and self-efficacy. Aforementioned research has found that both perceptions of preparedness and self-efficacy in teaching for PSTs are positively developed through relevant field experience opportunities (Leung et al., 2013). This section details the influence of preparedness and self-efficacy for PSTs, novice teachers, and K-12 students.

*Perceptions of Preparedness in Pre-Service Teachers*

Teachers’ beliefs as to whether they are or are not adequately prepared with the competencies needed to succeed as educators—commonly referred to as perceptions of preparedness—begin to develop far before those teachers enter the profession; they begin to form during the first field experiences PSTs take part in. In fact, it is during that time period—between when college students first enroll in college coursework and when they graduate—that preparedness perceptions are most influenced. This is true regardless of whether that perception is legitimate or not, and perceptions of preparedness and ability relate to both persistence and teaching ability (Tschannen-Moran & Woolfolk Hoy, 2007; Brown et al., 2015). They also affect a teacher’s choice to stay in or leave the profession (Torres, 2012).
While coursework itself is a contributing factor in PSTs’ growth, field experiences in authentic K-12 academic environments have the most positive influence on PSTs’ perceptions of preparedness (Brown et al., 2015; Lee et al., 2012). According to Brown et al. (2015), perceptions of preparedness are fairly accurate forecasters of a teacher’s ability to perform teaching tasks. They also inversely correlate to attrition rates, making it quintessential to assist PSTs in strengthening these preparedness perceptions (Torres, 2012). Data collected from the National Center for Education Statistics’ (NCES) Schools and Staffing Survey currently shows that PSTs are not graduating with high perceptions of preparedness to teach (Coggshall et al., 2012). Specifically, knowledge and skills related to classroom management, differentiating curricula, and assessing students were facets in which first-year teachers felt inadequately prepared. For PSTs in particular, perceptions of preparedness connect to the ability to implement concepts taught during coursework when entering internship and other field experiences (Housego, 1990; Siwatu, 2011). At the university level, an early and on-going focus on PSTs’ perceptions of preparedness can help provide the specific support PSTs need to gain competence and succeed in both internships and their teaching careers (Henning & Eui-kyung, 2010).

Self-Efficacy in Pre-Service Teachers

Self-efficacy is “the ability of a person to judge how they will react to a situation and/or the influence they have on the outcome of a situation” (Page et al., 2014, p. 31). More simply, self-efficacy is the belief in one’s own abilities. Self-efficacy in teaching specifically is “teachers’ confidence in their ability to promote students’ learning” (Hoy, 2000). These beliefs of professional ability translate to actual success or failure in the classroom (Henson, 2001). With original linkages back to Bandura’s Social Cognitive Theory, self-efficacy in teaching is most prominently influenced by the experiences PSTs have (Hoy, 2000). Prior experiences and
training influence a person’s belief that he or she can be successful, which supports the use of field experiences in developing self-efficacy.

Research on self-efficacy is largely attributed to Bandura’s social cognitive theory (Bandura, 1986) and the associated theory of self-efficacy (Bandura, 1997). Social cognitive theory views individuals as capable of affecting their own development through their self-beliefs, which dictate their locus of control in thoughts, feelings, and actions. Adding to this is the argument that one’s skills do not solely dictate their success or development; self-beliefs do, too. For PSTs in particular, hands-on learning experiences directly and positively impact self-efficacy. Hoy (2000) found that experience is the most significant contributor to increases in self-efficacy for PSTs. Furthermore, positive beliefs in one’s abilities with classroom management, instructional practices, and student engagement in particular correlate to teacher retention, preparedness, and student achievement (Lee et al., 2012; Loreman, Sharma, & Forlin, 2013).

Bandura (1994) concluded that individual self-efficacy is derived from four primary sources: mastery experiences, vicarious experiences, social persuasion, and physiological and emotional states. Mastery experiences are hands-on instances a person has to implement learning and be successful. Vicarious experiences are experiences where a person observes others who are similar to them and see that person being successful. Social persuasion is when another person provides someone with positive feedback. The fourth source of self-efficacy—physiological and emotional states—is how one’s stress, mood, or emotional state influences his or her self-efficacy beliefs. Of these sources, mastery experiences are the most impactful in increasing self-efficacy (Bandura, 1994; Usher & Pajares, 2008). Field experiences offer PSTs the opportunity to engage in mastery experiences.
Efforts to assess teacher self-efficacy are largely linked to Tschannen-Moran and Woolfolk Hoy’s (1998) *Teachers’ Sense of Efficacy Scale* (TSES), which has proven to have high construct validity through factor analysis. This scale is also sometimes referred to as the *Ohio State Teacher Efficacy Scale* because it was developed at the Ohio State University. It is available to the general public <http://people.ehe.osu.edu/ahoy/files/2009/02/tses.pdf>. Of primary focus are aspects of efficacy in student engagement, instructional strategies, and classroom management.

*Connections between Perceptions of Preparedness and Self-Efficacy in Pre-Service Teachers*

The self-efficacy beliefs educators possess are linked to actual success or failure in the classroom (Henson, 2001). In fact, self-efficacy is one of few reliable predictors of how strong one’s instructional practices and student outcomes will be (Tschannen-Moran & Woolfolk Hoy, 2001). For teachers in particular, Bandura (1994) explained that self-efficacy results from a combination of teacher behavior, effort level, enthusiasm, planning and preparation, resoluteness, creativity, willingness to work with diverse and difficult students, and commitment to teaching (Tschannen-Moran et al., 1998). “Their effectiveness is also partly determined by their efficacy in maintaining an orderly classroom conducive to learning, enlisting resources…and counteracting social influences that subvert students’ commitments to academic pursuits” (Bandura, 1997, p. 243). Similarly, Friedman and Kass (2002) stated that a “teacher’s effectiveness is, in part, determined also by their efficacy beliefs [teacher self-efficacy] in maintaining classroom discipline that establishes an environment of learning, [and] in using resources” (p. 676). Conversely, the more prepared a teacher perceives him- or herself to be, the stronger his or her beliefs of self-efficacy in teaching will be (Anderson & Stillman, 2011). This
shows that teacher self-efficacy and perceptions of preparedness are inextricably linked, both contributing to effectiveness in teaching.

**Preparedness and Self-Efficacy: Linkages to Novice Teachers**

Pre-service teachers who successfully complete all college requirements for graduation and pass associated certification exams are able to enter the teaching profession, where they transition from student-teacher to educator. The perceptions of preparedness and self-efficacy that these novice teachers developed as PSTs carry over, influencing their success as educators, too (Friedman & Kass, 2002). Woolfolk Hoy and Hoy (2009) explained self-efficacy as “a teacher’s belief that he or she can reach even difficult students to help them learn, it appears to be one of the few personal characteristics of teachers that is correlated with student achievement” (pp. 167-168). With the understanding that self-efficacy is related to perceptions of preparedness, these two factors greatly influence a teacher’s ability to be effective in the classroom.

PSTs with high perceptions of preparedness and self-efficacy are more likely to be successful as interns and beginning teachers, possessing the grit to work through difficult situations and the confidence to know they can succeed. Common problems faced by first-year teachers include managing classroom discipline, motivating and engaging students, differentiating instruction for diverse learners, and planning meaningful coursework (Gratch, 1998). The quality of opportunities provided to PSTs as field experiences influence their perceptions of effectiveness and ability as first-year teachers as well as their ability to impact students’ learning (O’Neill & Stephenson, 2013). Without pre-service field experiences to support preparation and self-efficacy, first-year teachers may struggle believing they can support student learning, nevertheless actually supporting it.
Zhang and Zeller (2016) found connections between PST preparation and retention or attrition of novice teachers. Without relevant exposures during college, many beginning teachers report discrepancies between the profession they envisioned and the reality that they experience as teachers (Harfitt, 2015). This influences satisfaction with the profession and perceived ability to be successful in it. A common reason for teachers leaving the profession is due to believing that they are not prepared with the skills and competencies needed to succeed as educators (Torres, 2012). These perceptions of preparedness, whether legitimate or not, develop most during pre-service field experiences and relate to persistence in teaching (Tschannen-Moran & Woolfolk Hoy, 2007; Brown et al., 2015).

Studies have found that perceptions of preparedness influence teachers’ likelihood of staying in or leaving the profession as well as the level of success they will experience as teachers (Brown et al., 2015). Attrition rates of teachers continue to increase, to the point that education has become known as a “revolving door” profession, meaning teachers leave soon after entering (Torres, 2012; Brown et al., 2015). Nearly half of educators leave the profession within five years and 9% leave in the first year alone (Harfitt, 2015). Prominent in reasons for leaving are inadequate preparation from pre-service preparatory programs and feelings of inability to balance classroom behaviors and academics (O’Neill & Stephenson, 2013). Teachers who lack experience often struggle with classroom management and academic obligations. In fact, inability to manage behavior is three times more prevalent in inexperienced teachers (Arnup & Bowles, 2016). Without field experience during pre-service coursework, novice teachers may not have the experience with classroom management to support their success and confidence, which can contribute to a desire to leave the profession.
Collectively, low levels of preparedness and self-efficacy contribute to decreased success of novice teachers. In turn, this often leads to decisions to leave the profession.

**Preparedness and Self-Efficacy: Linkages to K-12 Student Achievement**

Literature findings related to perceptions of preparedness and self-efficacy of PSTs and educators thus far has focused on contributions to success in internship and as beginning teachers. However, the impact is far more significant. Perceptions of preparedness and self-efficacy of educators heavily contributes to K-12 student achievement, too. With positive teacher identify, PSTs and beginning teachers show increased influence on K-12 student achievement (Lee et al., 2012). Self-efficacy in particular is one of few reliable predictors of how strong one’s instructional practices and student outcomes will be (Tschannen-Moran & Woolfolk Hoy, 2001).

Teachers with high self-efficacy put more effort into the profession, which benefits K-12 students (Bandura, 2012; Pajares, 1996). Furthermore, positive beliefs in one’s abilities with classroom management, instructional practices, and student engagement in particular correlate to teacher retention and preparedness, both of which contribute to increased student achievement (Lee et al., 2012; Loreman et al., 2013). Authentic fieldwork opportunities provided to PSTs during college coursework support their development as future educators, which relates directly to effective instructional practices as novice teachers, which support K-12 student achievement (Smith, Stapleton, Cuthrell, Brinkley & Covington, 2016).

Perceptions of preparedness and self-efficacy correlate to teacher burnout, classroom management, and overall demeanor, which all contribute to a teacher’s desire to stay in or leave the profession (Darling-Hammond, Chung, & Frelow, 2002; Napoles & MacLeod, 2016). Teacher attrition negatively impacts K-12 student achievement, contributing to instability and decreased teaching quality (Zhang & Zeller, 2016). For students who attend schools where
stability is already a struggle, this impact is heightened (Donaldson & Johnson, 2011). The teaching profession has become a “revolving door” profession, with teachers leaving the profession soon after they enter it and retention rates continuing to decline (Torres, 2012; Brown et al., 2015). In fact, almost half of teachers leave the profession within five years of entering it and 9% leave in the first year alone, many attributing their decision to feeling unprepared to handle the many obligations of the profession (Harfitt, 2015). Schools are left with the burden of filling these vacancies, often relying on new teachers to do so. The combination of high teacher turnover and novice teachers leading instruction contributes to decreased K-12 student success (Zhang & Zeller, 2016; Ronfeldt, Loeb, & Wyckoff, 2013). This, the revolving door effect, results in a cycle of decreased academic achievement of K-12 students (Ingersoll, 2004). This is because teachers who lack experience often struggle to balance classroom management and instructional demands. Inability to manage behavior, for example, is three times more prevalent in inexperienced teachers and can decrease the time that they are able to spend on academics, which in turn decreases student engagement and achievement (Arnup & Bowles, 2016; Ediger, 2013).

High attrition rates of teachers also affect school culture. Without consistency, teachers do not develop the partnerships and trust in their fellow educators to effectively plan together for student instruction (Arnup & Bowles, 2016). This increases the possibility of isolated decision-making, which hurts both school culture and student achievement.

It is important to emphasize that education is one of the only professions where the expectations of new hires are the same as their veteran counterparts. This is because first-year teachers are responsible for providing quality instruction to K-12 students from the first day on the job. Teacher preparation programs are tasked with the responsibility of preparing PSTs
achieve this success, which means that coursework and field experiences should contribute to increases in preparedness and self-efficacy of PSTs in order to offset the climbing attrition rates of educators. Gaps between coursework requirements and real-world readiness of PSTs carry over, hindering K-12 student learning for students with novice teachers.

**Qualities of Successful Teacher Preparation Programs**

Matsko and Hammerness (2013) emphasize that a context-specific approach helps aspiring teachers to “learn what it means to use knowledge about the environment affecting the child to tailor instruction” (p. 26). Given the nationwide statistics on the increasing number of ill-prepared first-year teachers and the staggering number of first- to fifth-year teachers leaving the profession, this problem is clearly an organizational one. However, it is not even simply limited to education. The lack of pre-service exposure that aligns to real-world experiences is a problem across multiple disciplines, including nursing (Hickerson et al., 2016). This shows that the problem is structural in nature, too. Successful teacher preparation programs must incorporate more context-specific learning opportunities that align to real-world experiences.

Learning experiences must take place from PSTs’ freshmen year of college in order to better prepare them (Levine, 2006). Furthermore, PSTs need multiple experiences at varying grade levels and in different subject areas in order to develop understanding of the correct balance of the art and science of teaching (Hammerness et al., 2007). Relying upon senior year internships alone is no longer a viable option for sufficiently preparing PSTs; interns are not ready to balance all of the obligations of teaching. It is also not realistic to expect PSTs to identify, address, and overcome all deficiencies they possess during just the length of time of internship (Borko & Mayfield, 1995).
Prior research found that depth of knowledge and understanding were limited with PSTs due to a lack of hands-on interactions with K-12 students. Similarly, PSTs struggled with and did not get exposure to accommodating for diverse student academic and behavioral needs without hands-on learning opportunities in the first two years of college coursework (Hemmerich, Hoepner, & Samelson, 2015). Impactful teacher preparation programs must account for these shortcomings. Shulman (1987) described effective teachers as those who possessed strong content knowledge, classroom management strategies, understanding of learner differences, and ability to work in diverse educational contexts, including small versus whole group instruction and affluent versus impoverished school types (p. 8). The problem of insufficient teacher preparation stems from teacher preparation programs that do not prepare PSTs to be “adept at data-based decision making and proficient in utilizing research-based interventions to improve student outcomes” (Garland et al., 2016, p. 47). Garland et al. (2016) recommended that pre-service coursework focus on hands-on learning experiences supported by literature and continuous support in order to get sufficient exposure and transfer learning into practice (p. 48).

The prerequisite experiences education majors have working with students are intended to bridge the gap between educational theory and practice. These opportunities provide PSTs with real-world opportunities to apply the techniques and standards they have been working on in college coursework. It does this while also granting them a temporary status, which is free from much of the politics and responsibilities of first-year teachers. In this way, service learning experiences ease PSTs into the professional world. In fact, Hebert and Worthy (2001) found that the alignment of a teacher’s pre-service experience and first year of teaching contributes to the teacher’s success by helping to set realistic expectations both in the management of students and in the social and political climate of their future workplace (p. 909).
Aforementioned research supports the benefits field experience provide to PSTs. However, experience alone is not the element that makes the difference. While field experiences have the potential to positively impact the practices and self-efficacy of novice teachers, simply requiring field experience will not necessarily translate to increased preparation of PSTs (Trent, 2011). Often, coursework and field experience happen in isolation rather than in conjunction with one another (Capraro, Capraro, & Helfeldt, 2010). A prime example of this is the senior internship requirement, which is assigned after all other coursework has been completed. This limits the PSTs ability to apply coursework learnings in authentic situations while the learning is still fresh and memorable. Field experience that is not concurrent to coursework can result in disharmony between theory and practice, leaving both with little practical value (Anagnostopoulos, Smith, & Basmadjian, 2007).

Successful teacher education programs closely integrate coursework and field experience (Linek et al., 1999). This has been shown to increase self-efficacy and perceptions of preparedness, which in turn helps the formation of positive teacher identity (Schepens et al., 2009). Furthermore, these programs embed field experience into multiple classes, realizing that professional identity will not fully form without multiple and varied exposures to the profession (Dotger & Smith, 2009). Successful teacher education programs do not rely on internship alone, realizing that this is an isolated, single opportunity field experience and, without prior exposures to reflect upon, internship is not sufficient in helping PSTs attain or change their teacher identity. It is through multiple, relevant, meaningful, and varied field experiences that true teacher identify forms, a combination of preparedness and self-efficacy (Richardson, 1996).
Summary

Teacher education programs are entrusted with the responsibility of preparing PSTs to be successful first-year teachers upon graduating. There is, after all, no difference in teacher responsibility between a first-year teacher and a veteran teacher when it comes to providing adequate learning to students. Universities are tasked with providing preparation in lesson planning, assessment, using available technologies, and meeting the needs of culturally and linguistically diverse students, amongst many others.

Education has developed significantly in expectation of educators from its inception with common schools. Teachers must now pass proficiency exams, complete continuing education credits, and demonstrate ability in the profession. Despite the improvements made in requirements of teachers, there are still deficiencies. More and more universities nationwide are acknowledging the powerful body of data that shows increasing numbers of first- to fifth-year teachers leaving the profession, many attributing their decision to feelings of being unprepared for and incapable of handling all of the demands teachers are under. Many colleges and professors throughout the nation have taken steps to better prepare PSTs for their first year of teaching. However, a uniform effort has not yet been established to address the problem. In fact, “The U.S. lacks a common vision of how to prepare teachers to meet today’s new realities, leading to the rise of divergent and opposing approaches to reform” (Levine, 2006, p. 14). To address the changing problem, many professors nationwide are acknowledging that internship alone is not enough to prepare PSTs for their first year of teaching. To account for this shortcoming, some professors are supplementing the mandatory observational hours in the first two years of college classes with hands-on service learning hours. However, this change is not consistent across all universities—or even all of the professors within any given university—
nationwide. A common, nationwide vision that depends heavily on real-world experiences for PSTs must be formed.

As of 2012, almost 83% of teachers nationwide were white, while the students they supervised were far more culturally, linguistically, and racially diverse (National Center for Education Statistics, 2012). This emphasizes the need to furnish PSTs with the proficiencies needed to effectively reach students and overcome achievement gaps. Many first-year teachers even state that they do not feel prepared as PSTs to work with linguistically and culturally diverse students, making this task of utmost importance (Lucas, Villegas, & Freedson-Gonzalez, 2008). Field experience provides this exposure to PSTs, immersing them in K-12 academic settings that, when carefully planned and well organized, can support coursework learning (Eyler & Giles, 1999). It is important to emphasize that merely being in an academic setting is not sufficient to facilitate learning. PSTs’ tasks must be carefully planned to integrate course learning with hands-on experience (LeSourd, 1997).

Service learning serves the dual beneficial purpose of helping the PST apply coursework learning in an authentic manner while also helping the students with whom the PSTs work (Eyler & Giles, 1999). For PSTs, service learning provides the opportunity to experience diversity and authentic teaching experience without the burden of other responsibilities that teachers are tasked with, such as parent communication, data analysis, and state assessment. In early coursework, service learning provides exposure and experience in academic settings before internship and before the PST is too far along in coursework to easily switch majors. These experiences “force examination of personal beliefs, habits, and values; and force a commitment to open-mindedness” (Mahan & Stachowski, 1992, p. 506). Often, these service learning experiences also allow PSTs to challenge their social, cultural, and linguistic stereotypes (Sheffield, 2005).
Service learning is most influential when it directly connects to coursework learnings. Prior to starting, guidance and preparation should be provided to support the PSTs. Assignments given in conjunction with the service learning hours should allow for demonstration of learning and reflection on experience.
CHAPTER THREE: METHODOLOGY

Introduction

The methods and procedures used in conducting the study are described within this chapter. The purpose of the study and the evaluation questions and hypotheses that guided the study are restated. The data sources and collection methods are detailed, as are the procedures used to analyze the data.

The Purpose of the Study

This study is a mixed methods program evaluation of the Boots on the Ground (BotG) program. The primary purpose of this study is to determine the affect the BotG program has on perceived preparedness and self-efficacy of pre-service teachers (PSTs). Additional purposes of the study are to determine the program’s influence on the K-12 schools as well as participants’ satisfaction with the program, including if the BotG program is meeting its intended objectives.

The BotG program seeks to provide PSTs with hands-on service learning hours working with K-12 students in a classroom setting in pre-requisite education courses (EDF2005 and EDF2085). It differs from the state standard for these courses, which is to observe K-12 students in a classroom setting, without the requirement of having to engage in instructional activities. In essence, the BotG requirement shifts the role of the PST from passive observer to active facilitator of learning. The program focuses on maximizing contact time with K-12 students and exposure to teaching opportunities for PSTs, including leading small group instruction. This exposes PSTs to early hands-on learning opportunities working with K-12 students with the intent of increasing the pedagogical skills of PSTs to better prepare them for internship and subsequent employment as educators or to provide early opportunities for PSTs to determine that
the teaching profession is not appropriate for them. Goodwin et al. (2005) found that many educational leadership scholars encourage multiple field-based experiences to better prepare PSTs as future educators. This is because field experiences expose PSTs to authentic realities of the profession rather than scripted situations in textbooks or ideals held from their own childhood educational experiences (Harfitt, 2015).

In completing the study, the researcher chose to use a participatory approach to program evaluation, which allows multiple groups of stakeholders to provide feedback and experience on the program, including the benefits of coursework in relation to practical experience. Particular focus will be placed on implementation of the program.

Three main stakeholder groups will be incorporated into the program evaluation: university professors, K-12 educators, and pre-service teachers. The affect that the Boots on the Ground program has on PSTs preparedness and self-efficacy will be the main focus of the study, as measured by survey, interview, and focus group data. Additionally, the study will analyze the program’s influence on different stakeholder groups and each group’s overall satisfaction with the program. Furthermore, the researcher hopes to lay the foundation for future studies that can help bring the program to a wider audience and ensure sustainability over time, again under the presumption that the program will be viable and beneficial.

Quantitative data was acquired through use of pre- and post-surveys completed by PSTs reflecting on their perceived pedagogical skills and feelings of self-efficacy for teaching prior to (pre-survey) and after (post-survey) participating in the BotG program. The program spans the duration of one semester, meaning that the initial survey was given in September of 2017, with the post-survey being given in December of 2017; the process was repeated in the spring semester with January 2018 and April 2018 survey dates. The goal of these surveys was to
determine PSTs’ perceptions concerning the growth they experienced in preparedness and self-efficacy as educators by working with K-12 students.

Data was also acquired through interviews with different stakeholders, including the university professors utilizing BotG, the PSTs completing BotG service learning hours, and the K-12 educators who allowed the BotG PSTs to work in their classrooms. The goal of these interviews was to get first-hand feedback on the program, the extent to which it met its stated objectives, and ways in which it could be improved. Similarly, focus groups were held with PSTs and K-12 educators to support triangulation of data findings.

It is important to emphasize that this study focused on the implementation and influence of the BotG program at one particular university in the southeastern United States. Further studies and additional data would be needed to extend findings to a larger scale. This study only sought to determine if the program was achieving its targeted goals and what aspects should be modified for increased success in future usage at the one particular university in which it was being implemented. Results from the study do not claim to fix the current problem of practice; they merely serve as one step in the right direction for addressing the issue of poor or unrelated preparation of PSTs.

**Evaluation Questions and Hypotheses**

The following hypotheses provided overall direction for the research:

H1: The Boots on the Ground program will have a positive affect on pre-service teachers’ perceived preparedness and self-efficacy working with K-12 students in an academic setting.

H2: The Boots on the Ground program will have a positive influence on stakeholders, including the K-12 educators and pre-service teachers.
The alternative, null hypotheses, were that the program would not have a positive affect on pre-service teachers’ perceived preparedness and self-efficacy working with K-12 students in an academic setting and the program would not have a positive influence on stakeholders.

Four evaluation questions supported these hypotheses and guided the research and data analysis. Collectively, the evaluation questions are:

1. Does participation in the Boots on the Ground program affect pre-service teachers’ perceptions of preparedness and self-efficacy?
2. What are stakeholders’ perceptions regarding the influence of the Boots on the Ground program on participants?
3. Did the program contribute to the intended outcomes? (Were there any unintended outcomes, good or bad, on program participants?)
4. Are participants satisfied with what they gain from the program?

Approval to Conduct the Research

Initially, questions for the pre- and post-surveys for PSTs to complete were formulated from other, pre-existing surveys. However, no single survey was used because there was not an available survey that exactly met the needs of this study. The surveys that were referenced include Schmidt et al.’s (2009) Survey of Preservice Teachers' Knowledge of Teaching and Technology (SPTKTT), which was developed to assess growth of early childhood PSTs, with particular focus on technology. The questions on pedagogical knowledge and pedagogical content knowledge were incorporated into this study’s surveys. Applicable survey statements from the Teacher Self-Efficacy scale (Tschannen-Moran & Woolfolk Hoy, 2007) were modified and incorporated to cover concepts of student engagement, instructional strategies, and classroom management. Previous use of this scale suggests reliability ratings of around 0.93
(Tschannen-Moran & Woolfolk Hoy, 2007). Once created, the researcher worked to modify the survey in conjunction with the professors utilizing BotG, who were considered subject matter experts. These surveys were embedded into the coursework.

In creating the interview questions, the researcher looked at sets of interview questions on related topics in the literature. In particular, studies that were qualitative in nature and incorporated a participant-oriented approach to evaluation were utilized. One such study looked at stakeholders’ perceptions of early fieldwork experiences in a teacher preparation program (Peacock, 2015). Another study was a program evaluation of a “Read to Learn” model (Quinn, 2015). The third was an evaluation of a Character Education program at an elementary school (King, 2008). Questions from the interviews in each of these studies were adapted to fit the needs of this particular study and best address the evaluation questions. Once interview question sets were finalized by the researcher, they were submitted to an expert in program evaluation and feedback provided was used to modify the questions.

In creating the focus group questions, only three main questions were developed, with the understanding that open-ended conversation and clarifying questions as follow-up if necessary would help deepen understanding of participants’ perceptions. The use of only three questions was decided at the encouragement of an expert program evaluator, who explained that such questions were open-ended enough to allow meaningful discussion and feedback to occur, yet focused enough to be supportive in answering the evaluation questions that guided the study. These three questions were: Which aspects of the program were most impactful? Which aspects of the program were least impactful? What suggestions do you have to improve the program?

Next, the researcher met with her committee chair to review the purpose of the study, the surveys that had been established with the subject matter expert professors, the interview
questions that had been created with the support of a program evaluation expert, and the focus
group questions. Finally, the researcher submitted and received approval from the University of
Central Florida’s Institutional Review Board (IRB). Approval was granted to begin the study in
the fall of the 2017-2018 academic year. IRB approval can be found in APPENDIX B: IRB
APPROVAL.

Study Design

To answer the evaluation questions, a mixed methods program evaluation was utilized. In
particular, the study implemented a participant-oriented approach to implementation evaluation.
PSTs completed self-report surveys at the beginning and end of the semester to self-rate their
competence and confidence in various facets of teaching. This survey was designed using a
combination of pre-existing self-efficacy knowledge surveys that had high reliability and validity
ratings. In particular, questions regarding pedagogical knowledge and pedagogical content
knowledge from Schmidt et al.’s (2009) Survey of Preservice Teachers' Knowledge of Teaching
and Technology (SPTKTT) and applicable student engagement, instructional strategies, and
classroom management survey statements from the Teacher Self-Efficacy scale (Tschannen-
Moran & Woolfolk Hoy, 2007) were modified and incorporated. In addition, the professors
overseeing the BotG program were solicited for input and feedback in the survey’s development.
To increase reliability of results, the PSTs and K-12 educators involved with the program were
also asked to participate in interviews and focus groups. The professors overseeing the BotG
program were also interviewed. These interviews and focus groups incorporated questions on
both the experience itself and suggestions for improvement. This form of data was used for
triangulation of results and development of overall themes. Triangulation is an essential piece in
qualitative and mixed methods studies because it “increases the likelihood that the phenomenon
under study is being understood from various points of view” (Ary, Jacobs, Razavieh, & Sorenson, 2006, p. 505). Therefore, the interviews, focus group sessions, and survey data were used in triangulation to proffer either a mutual confirmation of findings or to support a thorough understanding of the phenomenon (Rahman & Scaife, 2006).

**Target Population and Participant Selection**

**Population**

This study focused on a specific population: undergraduate students in early university coursework majoring (or planning to major) in education. Given that the problem of poor or unrelated PST preparation at universities is a nationwide one plaguing the education system throughout the United States, the population who experience this general problem is all PSTs in early coursework (Hoffman et al., 2015; Borko & Mayfield, 1995; Greenberg et al., 2013).

**Sample**

Within the larger population, the sample for this study lies within one large university in the southeastern United States. It includes the undergraduate students majoring in education who are enrolled in early coursework requiring them to participate in the BotG program. Since this study is a participant-oriented approach to program evaluation, other key stakeholders are also included as participants. These stakeholders are the undergraduate professors requiring their students to complete the BotG service learning hours and the K-12 educators who allow the PSTs to work in their classrooms. These three groups of participants are considered the primary stakeholders and main participants in the study.

The sample size for PSTs is all students enrolled in coursework requiring use of the BotG program. The sample size for university professors is all of the professors at this particular
university who implemented the program is part of their coursework. The sample size for K-12 educators is approximately 50 teachers who participated in the partnership with the university and allowed the PSTs to work with small groups of students in their classrooms.

**Procedures**

To answer the evaluation questions, qualitative data was gathered from interviews and focus groups and quantitative data was gathered from surveys. The data was collected throughout both the fall and spring semesters of the 2017-2018 school year at the university of focus for this study. Qualtrics surveys were used to collect survey data. Interview and focus group responses from the participating stakeholder groups were transcribed then coded for themes. The surveys were analyzed using SPSS and supported efforts to triangulate results to strengthen findings.

**Participant Selection**

This study was conducted at one large university and, specifically, within courses where professors used the BotG program. Two courses in particular that require observation hours, EDF2005 and EDF2085, were where most PST participants came from. In working with the professors utilizing the BotG program, it was determined that, given the size of the sample, purposive sampling would be utilized. Therefore, all PSTs participating in coursework requiring them to complete the BotG program in either the fall 2017 or spring 2018 semesters were included as participants for the pre- and post-survey comparisons. Accordingly, all PSTs in coursework utilizing BotG were given the opportunity to complete the pre- and post-surveys as part of their coursework. In total, approximately 300 PSTs were invited to participate between the two semesters.
For the focus groups, convenience sampling was utilized. All PSTs who participated in the BotG program were asked near the end of the spring 2018 semester if they were willing to participate in a focus group. Similarly, the K-12 educators who used BotG were asked to participate in a focus group, too. Those who expressed interest were contacted via email to arrange a date and time to participate in the focus group. A total of six focus groups were held: three with PSTs and three with K-12 educators.

The K-12 educators participating in the study ranged across all grade levels and across three different school sites. Collectively, they encompassed approximately 50 educators. Again, purposive sampling was utilized to obtain participants because only those K-12 educators who allowed BotG participants to work in their classroom were included in the interviews. Then, with the sample, convenience sampling was utilized to obtain interview participants. All K-12 educators were invited to participate in an individual interview at the end of either the fall 2017 or spring 2018 semesters. K-12 educators who expressed interest were contacted via email to arrange a date and time for the interview to be completed. Each interview took approximately 20-30 minutes to complete.

For the university professor interviews, both professors utilizing the program were interviewed. One chose to complete interview questions via email and the other completed a phone interview.

Protection of Participants

As part of this study, the researcher submitted and received approval from the University of Central Florida’s Institutional Review Board (IRB). Approval was granted to begin the study in the fall of the 2017-2018 academic year. Approvals are included in APPENDIX B: IRB APPROVAL. The study was considered exempt research by the IRB board. To protect
participants, confidentiality was maintained with all survey, interview, and focus group information. All names and any other identifiers were changed to protect the participants. All paper-based data was housed in a locked location throughout the duration of the study, with only the researcher having a key. In addition, all electronic information was encrypted with password protection and only the researcher knew the password.

Survey Creation

The pre/post surveys used in this study were created by the researcher, who researcher looked at other mixed-methods studies focused on program evaluation and implementation evaluation as the original foundation for creating survey questions. Initially, questions for the pre- and post-surveys for PSTs to complete were formulated from other, pre-existing surveys. However, no single survey was used because there was not an available survey that exactly met the needs of this study. The researcher instead looked at different surveys related to this study’s needs and adapted questions accordingly. Namely, Schmidt et al.’s (2009) Survey of Preservice Teachers’ Knowledge of Teaching and Technology (SPTKTT) and Tschannen-Moran and Woolfolk Hoy’s (2007) Teacher Self-Efficacy scale were used to formulate survey questions. The SPTKTT survey was developed to assess growth of PSTs majoring in early childhood education, with particular focus on technology, and questions regarding their growth in self-efficacy and preparedness were adapted in wording to fit this study’s focus. In particular, the questions on pedagogical knowledge and pedagogical content knowledge were incorporated into this study’s surveys. Applicable survey statements from the Teacher Self-Efficacy scale were modified and incorporated to cover concepts of student engagement, instructional strategies, and classroom management. Previous use of this scale suggests reliability ratings of around 0.93 (Tschannen-Moran & Woolfolk Hoy, 2007). Once created, the researcher worked to modify the
survey in conjunction with the professors utilizing BotG, who were considered subject matter experts. These surveys were embedded into the coursework.

At the suggestion of an expert program evaluator, a 7-point Likert scale was developed for each survey question. After questions had been created, they were submitted to the two university professors who utilize the BotG program. They are considered content area experts both within PST preparation and with the program of focus. Feedback ascertained from these professors was incorporated in the final development of the survey questions.

For the interview questions, the researcher looked at other studies focused on participant-oriented approaches to program evaluation and implementation evaluation as the framework for the questions. One such study looked at stakeholders’ perceptions of early fieldwork experiences in a teacher preparation program (Peacock, 2015). Another study was a program evaluation of a “Read to Learn” model (Quinn, 2015). The third was an evaluation of a Character Education program at an elementary school (King, 2008). Questions from the interviews in each of these studies were adapted to fit the needs of this particular study and best address the evaluation questions. After developing a set of questions appropriate for the study at hand, the questions were sent to a program evaluator to obtain feedback. All suggested feedback was incorporated in the final development of the interview questions.

For the focus group questions, only three main questions were asked. This was determined at the encouragement of an expert program evaluator, who explained that such questions were open-ended enough to allow meaningful discussion and feedback to occur, yet focused enough to be supportive in answering the evaluation questions that guided the study. These three questions were: Which aspects of the program were most impactful? Which aspects of the program were least impactful? What suggestions do you have to improve the program?
Data Collection

The purpose of this evaluation was to review the BotG program during its use in the 2017-18 school year. The primary focus of this study was to understand the perceptions of three primary groups of stakeholders—PSTs, K-12 educators, and university professors—regarding the influence the BotG program had on participants, with particular focus on the perceived preparedness and self-efficacy of PSTs. Subsequent goals included determining if the stated program goals were being met and to determine if stakeholders were satisfied with the program and its various components. As such, the researcher used three data types support triangulation of findings and amplify participant voices regarding those perceptions. Detailed descriptions of the data sources follow along with an explanation of how the data was collected. For the K-12 educators in particular, the interviews provided an observational perspective to complement the self-report results PSTs provided on such areas as classroom management, engagement, and being utilized appropriately.

The sources of data for this study include surveys, interviews, and focus groups.

Survey Procedures

For surveys, the undergraduate PSTs enrolled in courses requiring utilization of the BotG program were included. The surveys (APPENDIX C: PRE-SURVEY FOR UNIVERSITY PRE-SERVICE TEACHERS and APPENDIX D: POST-SURVEY FOR UNIVERSITY PRE-SERVICE TEACHERS) were designed to determine self-reported growth in various facets of teaching, including following lesson plans, using technology, accommodating for diverse student needs, and working with non-English speakers. The pre-surveys were administered at the beginning of both the fall 2017 and spring 2018 semesters in conjunction with coursework by
professors utilizing the BotG program in their course assignments. Similarly, the post-surveys were sent out at the end of each semester. Each survey took approximately 10-15 minutes to complete. It is important to note that the pre-survey in the fall 2017 semester was completed in class, whereas the post-survey was sent out as an email link for PSTs to complete. Consequently, the response rate was much higher with the pre-survey than with the post-survey. For the spring 2018 semester, both the pre- and post-survey were incorporated into the Webcourse assignments of professors to support data collection.

The surveys themselves were setup according to a 7-point Likert scale, ranging from (1) ‘strongly disagree’ to (7) ‘strongly agree’ with (4) ‘neither agree nor disagree’ as the middle point. PSTs were asked to candidly respond to a set of statements about their perceived preparedness and self-efficacy as educators. In order to make direct comparisons and identify individual growth, the surveys were not anonymous. However, to protect participants, pseudonyms were established and all identifiable information was eliminated.
Interview Procedures

For interviews, the PSTs and university professors utilizing the BotG program, and the K-12 educators who allowed PSTs completing BotG service learning hours were included. Those who agreed to be interviewed were contacted with a date, time, and location for the interview. During the interview, questions were asked of participants and anecdotal records were hand written by the researcher in addition to the interview being audio recorded. Participants were selected by convenience sampling, with those who agreed to participate being interviewed. Each interview took approximately 20-30 minutes to complete. Participant names were changed and other identifiable information was removed to protect the identities of participants. All paper-
based records were kept in a locked storage cabinet, with only the researcher having a key. All electronic information was encrypted in a password protected file known only to the researcher. As stated in the IRB application, records will be kept for a duration of five years, after which the information will be destroyed. The interview questions for each of the three stakeholder groups are provided in their entirety in APPENDIX E: INTERVIEW QUESTIONS FOR UNIVERSITY PROFESSORS APPENDIX F: INTERVIEW QUESTIONS FOR K-12 EDUCATORS and APPENDIX G: INTERVIEW QUESTIONS FOR PRE-SERVICE TEACHERS.

**Focus Group Procedures**

In the 2018 spring semester, focus groups were incorporated into the study. The focus group questions, asked of both PSTs and K-12 educators, are provided in APPENDIX H: FOCUS GROUP QUESTIONS. All PSTs who participated in the BotG program were invited to take part in a focus group. Those who agreed to participate were contacted via email to arrange a date, time, and location for the focus group. A total of three focus groups were held with PSTs, including 12 total PSTs. Each focus group met one time each for approximately 30 minutes to discuss three questions that relate back to the goals of the study. During the focus groups, questions were asked of participants and anecdotal records were hand written by the researcher in addition to the session being audio recorded. All paper-records were kept in a locked storage cabinet, with only the researcher having a key and all electronic information was encrypted in a password protected file known only to the researcher. Participant names were changed and other identifiable information removed to protect the identities of participants. As stated in the IRB application, records will be kept for a duration of five years, after which the information will be destroyed.
Three focus groups were held with K-12 educators as well. All K-12 educators who participated in the BotG program during the 2017-2018 school year were invited via email to participate in a focus group. Those who responded and showed interest in participated were then given options of dates, times, and locations and focus groups were organized accordingly. A total of 13 K-12 educators participated across three focus groups. Again, questions were asked of participants and anecdotal records were hand written by the researcher in addition to the session being audio recorded. All paper-records were kept in a locked storage cabinet, with only the researcher having a key and all electronic information was encrypted in a password protected file known only to the researcher. Participant names were changed and other identifiable information removed to protect the identities of participants. As stated in the IRB application, records will be kept for a duration of five years, after which the information will be destroyed.

Data Analysis

“An ill-thought-out analysis process can produce incompatible outputs and many results that never get discussed or used. It can overlook key findings and fail to pull out the subsets of the sample where clear findings are evident” (Approaches to the analysis of survey data, 2001, p. 5). For this reason, data analysis should be purposeful and carefully planned out. To do so, the researcher utilized the Statistical Services Center *Modern Methods of Analysis* to determine how to analyze the data collected in this study (Approaches to the analysis of survey data, 2001). In addition, multiple other studies of pre- and post-survey comparisons were referenced as well as studies involving the analysis of interview data. The researcher also worked with both quantitative and qualitative data experts to both support SPSS statistical analysis of quantitative survey data and support proper qualitative data analysis via thematic content analysis.
The purpose of this evaluation was to review the BotG program during its use in the 2017-18 school year. The primary focus of the study was to understand the perceptions of three groups of stakeholders—PSTs, K-12 educators, and university professors—regarding the influence the BotG program had on participants, with particular focus on perceived preparedness and self-efficacy of PSTs. Subsequent goals included determining if the stated program goals were being met and to determine if stakeholders were satisfied with the program and its various components. To do so, the data from the surveys, interviews, and focus groups was analyzed from three primary stakeholder groups to support triangulation of findings. The evaluation was conducted over the course of two semesters, from September of 2017 to April of 2018. At the conclusion of the evaluation, data was dissected, analyzed, and used to both answer the evaluation questions and to make recommendations. The evaluation questions can be found in their entirety in Figure 1.

Survey Analysis

The pre- and post- survey comparisons looked at self-reported growth from the beginning to the end of the semester in pre-service teachers. All survey data was analyzed using SPSS statistical software. The evaluation questions required evaluation of whether PSTs’ self-reported perceptions of preparedness and self-efficacy changed from the beginning to the end of a semester as a result of participating in the BotG program. Paired Samples t-Tests were used to determine changes in mean scores between pre-survey and post-survey. Paired Samples t-Tests assess the same individuals over time, meaning that the surveys are not independent. For this reason, only those who completed both the pre- and post-surveys were incorporated in the Paired Samples t-Tests. Overall mean score changes as well as mean score changes within the subsets of perceived preparedness and self-efficacy were calculated. Mean scores, also sometimes referred
to as change scores, are the difference between a pre-survey and a post-survey (Ary et al., 2006; Newman & Newman, 1994). The null hypothesis was that there would not be a statistically significant difference between the means of the pre-survey and the post-survey. The alternative hypothesis was that there would be a statistically significant difference between the means of the pre-survey and the post-survey. The researcher also computed correlation coefficients of the data set in SPSS to examine possible relationships between the pre-survey and post-survey. Data was computed for overall correlation coefficients as well as for perceived preparedness and for self-efficacy. In addition, the researcher calculated statistical significance using SPSS at a 95% confidence interval for all three overall findings as well as the subsets of perceived preparedness and self-efficacy. Finally, the post-survey questions were analyzed as descriptive statistics, with all PSTs who completed the post-surveys being included in the analysis. The Likert scale of 1-7, with 7 being strongly agree, was used to determine the mean score for each post-survey question. The means for each question were also analyzed to identify any outliers.

Interview Analysis

For interview data, all interviews were first transcribed in their entirety. Transcriptions were then analyzed using thematic content analysis, which is a common method used to analyze qualitative data findings. This type of analysis seeks to find themes, or recurring patterns, within the data, with a focus on rich description and inclusion of quotations from participants. seeks to explain how things work (the theory) based on trends that emerge in data analysis. In particular, the six-phase coding process described by Braun and Clarke (2006) was followed.

Part of thematic analysis is a focus on phenomenology, or participants’ perceptions, feelings, and experiences. As such, interviews were participant-driven, allowing each participant to answer the question, expand upon it, or add their own thoughts and suggestions. This also
meant acknowledging participants’ unique opinions and perspectives, even if they were not common, and including them within the themes. The sequence used to code data using thematic content analysis is seen below, in Figure 5, as well as in Figure 6.

**Phase 1**
Reading the Transcriptions

*After transcribing each interview, the researcher read each in isolation and in its entirety multiple times to increase familiarity, taking notes, highlighting information, and recording first impressions. The researcher also read them with a focus on identifying phenomena, concepts, principles, and features of experiences to help identify any possible patterns in the data.*

**Phase 2**
Initial Coding

*The researcher began extracting relevant information from the complete interview transcriptions, including--relevant words, phrases, concepts, and statements--into individual sections (Excel tabs) based on interview question asked. Then, the researcher looked at the patterns noted in phase 1 and the extracted information and began taking short notes of possible concepts or codes within that information. Information that was repeated multiple times, was surprising, or was stated as important by the interviewee was coded. This helped to develop concepts, identify properties of concepts, and determine any possible relationships between concepts. The researcher also relied on inter-rater agreement at this point, asking a second rater to complete the same process.*

**Phase 3**
Combining Codes

*Once this process was completed for each interview question by both raters, the two raters looked at the codes established in phase 2 and began collapsing and combining codes into overarching themes as well as verifying similar findings and changing codes and themes as needed. Included in this is additional noting of combinations, such as in “professionalism” as a theme, with ‘dress code’ and ‘cancelations’ documented as different sub-focuses within that theme (Coffey, Atkinson, & Omarzu, 1997).*

**Phase 4**
Connecting to the Evaluation Questions

*The codes and themes identified in phase 3 were then compared to the evaluation questions to determine which evaluation question the information best addressed, including if this was different from what the researcher originally felt each interview question would answer.*

**Phase 5**
Thematic Analysis

*The researcher looked at the themes and the evaluation questions they addressed, defining each theme and explaining how each contributed to the study, including powerful quotes to support this analysis.*

**Phase 6**
Writing It Up

*First, the researcher applied member checking with participants who were willing to participate. This involved asking the participants if their responses seem to reflect what they were trying to say and if the theme applied seems appropriate. Then, the researcher wrote up findings into chapter four, explaining the themes as they addressed each evaluation question, with particular focus on Evaluation Questions 2-4, which were primarily qualitative.*

*Figure 5: Thematic Content Analysis*
As part of increasing validity of findings with thematic content analysis, the researcher relied on an additional person to check for inter-rater agreement. For this study, the researcher first transcribed each interview in isolation and extracted relevant information from all interviews into Excel tabs identified by interview question number. Each interview participant was labeled as a number and the transcription section related to answering a particular interview question was pasted into a box for each participant, with all relevant information for all participants of a given stakeholder group being housed collectively within one Excel document, separated by tabs for each interview question. Then, the researcher and the second rater each read through an Excel tab specific to answering one interview question, independently taking notes on main findings and important content. Each rater then identified preliminary codes for analyzing the data. Then, the two raters compared their findings and determined the final code names. For the most part, similar findings were identified, but code names were slightly different, meaning that the two raters just worked together to create the most appropriate theme titles.

**Focus Group Analysis**

For focus groups, the research again analyzed responses using thematic content analysis. Again, the six-phase coding process used by Braun and Clarke (2006) was applied. The sequence of this analysis can be seen in Figure 5 and Figure 6.
Looking at the categories, the researcher prepared the written analytic report, which gave a sense of the frequency of each theme, how many participants mentioned the same theme, the details within each response, the emotion behind the response, and whether participants explicitly stated that the concept was important. This was all done using the Classical Content Analysis method (Onwuegbuzie et al., 2009). Each category of focus group—pre-service teachers and K-12 educators—was analyzed separately.
Variables

The dependent variable was the PSTs’ growth in preparedness and self-efficacy from the beginning to the end of the semester. The independent variable was the use of the BotG program as part of the PSTs’ coursework. Significant extraneous variables were the PSTs, the K-12 classrooms and associated characteristics, and the tasks assigned by the K-12 educators.

Limitations

Limitations are variables that could inhibit the effectiveness of the study. Acknowledging limitations allows the researcher and those reading about the study to better interpret the results, their implications, and further applications of the project. Additionally, limitations can also serve as the foundation for future studies.

It is important to note that this study is specific to the Boots on the Ground program and its implementation at one particular university. More research is needed to see if the results are generalizable to other education programs nationwide. The study also relies heavily on qualitative data and, despite much research on the validity of qualitative data, the scientific world still tends to give priority to quantitative studies. In addition, the quantitative data collected from pre-service teachers is self-reported and relies upon honest self-reflection and reporting by participants. It is possible that PSTs over- or under-estimate their abilities. However, since they determined their level of expertise both before and after completion of the program, both surveys could and likely would be impacted by this factor. Furthermore, it is assumed that the PSTs genuinely want to improve the program and also understand their level of expertise so as to improve accordingly as educators, which contributes to more honest estimates of ability. Self-report surveys are, nevertheless, subject to multiple forms of bias, such as impression management, demand effects, and differences in understanding of key aspects of the
requirements of the intervention (Humphrey et al., 2016). The results of the surveys should, therefore, be viewed in relation to this self-report limitation, acknowledging that they capture participants’ perceptions of preparedness and self-efficacy and not the actual preparedness and self-efficacy observed in the classroom as they teach. Thus, findings in inclusive classrooms may not be congruent with PST survey responses.

The study was delimited to a single, large university in the southeastern United States. It was further delimited to the courses that require observation hours, primarily EDF2005 and EDF2085. Furthermore, it was delimited to just the professors within these courses that required students to complete BotG hands-on service learning hours rather than observation hours in K-12 classrooms.

The researcher did not seek to determine or compare the effectiveness of pre-service coursework requiring only observation hours. In future studies, PSTs who did not participate in the intervention program could be surveyed at the end of the semester as well. This would help to establish the counterfactual, or what happens in the absence of change, which is important for showing causal effects (Durlak & DuPre, 2008). Many education programs have already adapted their course requirements to exceed the state mandated ones of 15 observational hours, yet data does not currently exist to support the scaling up of any given change. It is therefore important to acknowledge the ‘no treatment’ control group as well as other usual practices, as overlap likely occurs in treatment groups and, from increased research, a better program can be built. This trial can lay the foundation for future studies, including comparative and quantitative ones.
CHAPTER FOUR: PRESENTATION AND ANALYSIS OF DATA

Introduction

Teacher preparation programs are tasked with the responsibility of training pre-service teachers (PSTs) in such a way that they will be prepared with the skills, strategies, confidence, and competencies needed to succeed as first-year teachers. This is of high importance given that the academic achievement of the K-12 students they supervise as first-year teachers hinges on their abilities as educators. Despite this demand, many university-based teacher preparation programs are falling short of effectively preparing PSTs for real-world success (Campbell & Dunleary, 2005). While PSTs report confidence in their knowledge of curricula, they struggle to apply coursework learnings to authentic experiences in the classroom as interns and first-year teachers (Grisham et al., 2015). This results in low perceptions of preparedness and self-efficacy, which in turn results in high attrition rates amongst first- to fifth-year teachers as well as associated negative impacts on K-12 students’ academic achievement.

L’Allier and Elish-Piper (2007) state that one of the most impactful ways of helping PSTs “understand, value, and thoughtfully apply research-based practices in their student teaching and ultimately in their own classrooms is to have them experience and apply strategies in the coursework” (p. 339). Boots on the Ground (BotG), a program used by certain education professors at one large university in the southeastern United States who teach early coursework classes for education majors, seeks to provide these meaningful experiences to apply coursework learnings. The program is integrated into early coursework as a hands-on learning requirement that replaces state-mandated observation hours in the pre-requisite education courses, EDF2005 and EDF2085. The BotG program intends to provide hands-on learning experiences for PSTs to
apply coursework learning and gain exposure working with K-12 students during early required education classes, with anticipation of increasing their self-efficacy and overall perceptions of preparedness as future educators. This study seeks to investigate whether participation in the BotG program increases PSTs’ perceived preparedness and self-efficacy for teaching. Additionally, the researcher sought to identify stakeholders’ perceptions on the program’s influence on participants as well as their overall satisfaction with the program.

The Data

In chapter four, the qualitative and quantitative data that was gathered so as to answer the four proposed evaluation questions will be discussed. The qualitative data includes interview and focus group data from both PSTs and K-12 educators as well as interview data from the university professors utilizing BotG as a coursework requirement. The single open-ended post-survey question is also included as qualitative data. Interview and focus group questions are listed in APPENDIX E: INTERVIEW QUESTIONS FOR UNIVERSITY PROFESSORS. All interviews and focus groups were audio recorded and transcribed exactly as they were recorded. Many of the same themes were garnered from both the interviews and the focus groups.

Quantitative data includes the pre/post survey Paired Samples t-Tests as well as the post-survey descriptive satisfaction questions. The pre-survey can be found in its entirety in APPENDIX C: PRE-SURVEY FOR UNIVERSITY PRE-SERVICE TEACHERS. The post-survey can be found in its entirety in APPENDIX D: POST-SURVEY FOR UNIVERSITY PRE-SERVICE TEACHERS.
Participants

Participants in the study included three primary groups of stakeholders: pre-service teachers (PSTs) completing service learning hours with the Boots on the Ground (BotG) program; K-12 educators utilizing the BotG program in their classrooms, and the university professors requiring their students (the PSTs) to use the BotG program.

Participant Summary: Pre-Service Teachers

All PSTs enrolled in coursework requiring completion of BotG service learning hours in either the fall 2017 (n=130) or spring 2018 (n=140) semesters were invited to participate in this study. A total of 183 PSTs (68% of the sample) participated by completing at least the post-surveys. Only those that completed both the pre- and post-surveys (n=131; 49% of the sample) were included in Paired Samples t-Test comparisons, though any PST who completed the additional post-survey satisfaction statements was included for analysis of descriptive statistics (n=183). The pre-post survey matching statements focused on collecting information on self-efficacy of teaching and perceptions of preparedness to teach. This survey used a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Each survey statement and its associated item-specific mean is presented in Table 1.

Table 1: Item Specific Means and Standard Deviations

<table>
<thead>
<tr>
<th>Items</th>
<th>Pre-Survey</th>
<th>Post-Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M  SD</td>
<td>M  SD</td>
</tr>
<tr>
<td>My coursework thus far has prepared me to independently supervise</td>
<td>4.66 1.65</td>
<td>5.80 1.50</td>
</tr>
<tr>
<td>small groups of K-12 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am ready to independently work with small groups of K-12</td>
<td>5.05 1.76</td>
<td>5.91 1.34</td>
</tr>
<tr>
<td>students.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am capable of differentiating instruction for groups of</td>
<td>4.93 1.47</td>
<td>5.87 1.08</td>
</tr>
<tr>
<td>students with diverse academic needs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Items</td>
<td>Pre-Survey M</td>
<td>Pre-Survey SD</td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td>--------------</td>
<td>---------------</td>
</tr>
<tr>
<td>I am capable of differentiating instruction for students with varying social-behavioral needs (ex: defiant, selective mute, ADHD, Emotional-Behavioral disorders, etc.).</td>
<td>4.50</td>
<td>1.68</td>
</tr>
<tr>
<td>I am comfortable working with students who have various special needs (ex: gifted, dyslexia, specific learning disability, etc.)</td>
<td>5.20</td>
<td>1.54</td>
</tr>
<tr>
<td>I am capable of following a lesson plan that is provided to me for small group instruction.</td>
<td>6.15</td>
<td>1.16</td>
</tr>
<tr>
<td>I am comfortable using a repertoire of strategies to maintain engagement while working with small groups of students (ex: Kagan strategies, etc.).</td>
<td>5.02</td>
<td>1.50</td>
</tr>
<tr>
<td>I understand what is expected of me as a volunteer in the classroom.</td>
<td>6.39</td>
<td>0.97</td>
</tr>
<tr>
<td>I understand the professional expectations that teachers must adhere to.</td>
<td>6.55</td>
<td>0.91</td>
</tr>
<tr>
<td>I am comfortable working with students in any grade level (within the grade levels my degree is preparing me to teach).</td>
<td>6.18</td>
<td>1.14</td>
</tr>
<tr>
<td>I am comfortable using technologies available in K-12 schools (ex: SmartBoard, Doc Cam).</td>
<td>5.62</td>
<td>1.50</td>
</tr>
<tr>
<td>I am able to adapt for cultural differences when working with small groups of students (ex: religion, values, social norms, etc.).</td>
<td>6.17</td>
<td>1.16</td>
</tr>
<tr>
<td>I am comfortable working with non-English and minimal-English students in a small group setting.</td>
<td>4.96</td>
<td>1.78</td>
</tr>
<tr>
<td>Based on my experiences thus far, I feel that teaching is the correct profession for me.</td>
<td>6.33</td>
<td>1.06</td>
</tr>
</tbody>
</table>
PSTs were also invited to participate in focus group sessions and interviews. A total of three focus group sessions took place with PSTs, with a total of 12 participants in all. To analyze the focus groups, the researcher utilized thematic content analysis. First, the researcher transcribed each session and then read through each transcription in its entirety. Next, the researcher identified recurring statements as well as anything that reflected an answer to one of the four evaluation questions. The highlighted information was then separated by evaluation question and re-read to identify themes. Through open then axial coding, the focus groups were coded for overarching themes based on findings and then properties of each theme were identified as well as dimensions of each property. The researcher used member checking to verify information gleaned from focus group sessions. Member checking is a form of respondent validation and is used in qualitative studies to increase the validity of findings. For both the PST and K-12 educators, the researcher used member checking during the sessions, restating what was said by participants, summarizing what was stated, and asking for validation of what was understood from the participant (Morse, Barrett, Mayan, Olson, & Spiers, 2002). The researcher relied on member checking during the focus group sessions rather than after them in case post-session member checking did not return feedback. Having the participants affirm that what the researcher understood is what they intended to say increases the credibility of findings, themes, and conclusions. It also lends itself to extracting direct quotations in summarizing findings, which was done by the researcher in this study to support the data findings.

A total of 26 PSTs participated in the interviews. 84.6% of participants were either already accepted or in the process of completing pre-requisite requirements to be accepted into the university’s education program. Of the 84.6%, 53.8% were elementary education majors, 26.9% were secondary education majors, and 3.8% were pursuing other K-12 certifications, like
Art or ESE. The remaining 15.4% of participants were not education majors and were not planning on pursuing education as a career choice. Twenty-four of the twenty-six PST interview participants were in one of the introductory courses—EDF2005 (Introduction to the Teaching Profession) and EDF2085 (Introduction to Diversity in Education)—and the other two were taking upper level coursework, including Classroom Management. Both EDF2005 and EDF2085 are introductory courses, meant to be taken in the first two years of coursework, often as a prerequisite to being admitted into the university’s education program, which indicates that the majority of interview participants were in their freshman or sophomore years. 92% of PSTs who were interviewed stated that they were volunteering in K-12 classrooms because the BotG program was required of them this semester, with the other 8% saying that it was a choice assignment. In addition, 23.1% of respondents explicitly stated that they wanted to volunteer in a hands-on environment to gain experience and 7.7% expressed a desire to help K-12 educators and students.

For interviews, the researcher using thematic content analysis to analyze participants’ responses. First, the researcher transcribed each interview and then analyzed each in isolation. Using open coding, the researcher identified concepts and themes that each participant focused on in response to each individual question. Then, using axial coding, these concepts were grouped together into related categories with dimensions of each being identified as well. This allowed overarching themes with specific sub-categories to be identified. Direct quotations were also used to support data findings. The thematic content analysis process used can be found in Figure 5. The researcher also sought to apply member checking after the interviews were completed and the data was analyzed. Participants who completed interview sessions were reached out to via email to ask if they would be willing to verify the themes, concepts, and
information gleamed from their interviews. Only 7 participants responded, but all 7 verified that the transcriptions accurately reflected what they had stated and the concepts identified as going well, needing improvement, and overall perceptions of the BotG program. One of the participants added to the interview, having completed additional hours since the interview took place and wanting to include additional information.

**Participant Summary: K-12 Educators**

The K-12 educators who utilized the BotG program in their classrooms represented the second group of participants. They ranged from pre-k to 8th grade teachers and taught a range of different subjects and student-types, including self-contained ESE, Art, PE, Science, ELA, and Math, amongst others. K-12 educators were invited to participate in both focus group sessions and interviews. A total of 13 K-12 educators participated in the focus groups and 16 K-12 educators completed interviews. As with the PSTs, thematic content analysis was used to analyze both focus group sessions and interviews, with a focus on open then axial coding in focus group sessions. Again, member checking was applied during the focus group sessions to increase reliability of understanding by the researcher and member checking was applied after the interviews with K-12 educators who were willing to provide feedback. In total, 4 K-12 educators participated in member checking. As aforementioned, inter-rater agreement was applied with interview thematic content analysis.

**Participant Summary: University Professors**

The two professors at the university of focus for this study who incorporated BotG as part of their coursework made up the third participant stakeholder group. One professor taught the prerequisite courses for education majors, EDF2005 and EDF2085, and required students to complete a minimum of 15 hours with the BotG program. The other professor taught upper level
coursework and did not require PSTs to complete BotG service learning hours, but offered the program as one of the choice assignments.

Analysis of Results in Relation to Evaluation Questions

Evaluation Question 1

Does participation in the Boots on the Ground program influence pre-service teachers’ perceptions of preparedness and/or self-efficacy?

For this question, the PSTs in particular were the stakeholder group analyzed. Quantitative data was used as the primary data source to answer this question. This data was gathered from Paired Samples t-Test findings of pre- and post-surveys as well as descriptive statistics from additional post-survey questions. Qualitative data was used to further understand findings and identify additional themes, with interviews and focus group sessions as well as the open-ended post-survey question being used to collect qualitative data. The participants’ personal attitudes and beliefs regarding both perceived preparedness and self-efficacy are addressed in the findings. Ultimately, the answer to this question was yes, participation in the BotG program increased PSTs’ perceptions of preparedness and self-efficacy. In particular, PSTs felt strongly that participation in the BotG program provided significant opportunities to enter classrooms and practice instructional design, delivery, and engagement practices, which contributed to growth in both perceived preparedness and self-efficacy.

Quantitative Findings

Prior to starting their service learning hours, all PSTs were asked to complete the pre-survey. At the end of their respective semester using BotG, PSTs were asked to complete the survey again, this time as a post-survey. The post-survey included all of the same questions as the pre-survey. The researcher also utilized additional questions on the post-survey to measure
PSTs’ perceptions regarding the program, its implementation, and its impact on increasing perceived preparedness and self-efficacy. The surveys themselves were given to PSTs in an effort to obtain perceptions of their professional preparedness to teach and their self-efficacy beliefs as educators. Researcher findings indicate that participants’ overall perceptions of the BotG program were favorable.

In analyzing pre/post survey comparisons, PSTs who responded to both the pre-survey and the post-survey were included (n=131) and their mean score changes were used to analyze findings. Mean scores, also sometimes referred to as change scores, are the difference between the pre- and post-surveys (Ary et al., 1996; Newman & Newman, 1994). The null hypothesis was that there would not be a statistically significant difference between the means of the pre-survey and the post-survey. The alternative hypothesis was that there would be a statistically significant difference between these two means. Item-specific means for each question in the pre- and post-survey data collected by PSTs enrolled in coursework requiring use of the BotG program in either the fall 2017 or spring 2018 semesters are presented in Table 1. SPSS statistical software was used for all preliminary analyses. The PSTs’ mean scores ranged from M=4.96 to M=6.71 on the pre- and post-surveys. For items specific to perceived preparedness, means ranged from M=4.50 to M=6.71. For items specific to self-efficacy, means ranged from M=4.96 to M=6.38. PSTs’ perceptions concerning perceived preparedness were highest for understanding professional expectations of teachers (M=6.71, SD=.739); PSTs’ perceptions concerning self-efficacy were highest for believing that they should continue pursuing teaching (M=6.38, SD=1.133). PSTs’ perceptions concerning perceived preparedness were lowest for differentiating instruction for diverse student needs (M=5.21, SD=1.42); PSTs’ perceptions concerning self-efficacy were lowest for being comfortable working with diverse students (M=5.56; SD=1.42).
In calculating pre/post survey comparisons for overall mean score changes as well as mean score changes of perceived preparedness and self-efficacy, PSTs who responded to both the pre-survey and the post-survey were included. The data was again analyzed using SPSS statistical software to run Paired Samples t-Tests and determine changes in mean scores between pre-survey and post-survey averages. Table 2: Paired Samples Statistics for Survey ScoresTable 2 contains the descriptive statistics for both pre-survey and post-survey variables, including overall differences as well as differences in perceived preparedness and in self-efficacy. In all three areas, results indicate that the post-survey mean scores were higher.

Table 2: Paired Samples Statistics for Survey Scores

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post- Perceived Preparedness</td>
<td>6.17</td>
<td>131</td>
<td>.778</td>
</tr>
<tr>
<td>Pre- Perceived Preparedness</td>
<td>5.65</td>
<td>131</td>
<td>.861</td>
</tr>
<tr>
<td>Post- Self-Efficacy</td>
<td>5.89</td>
<td>131</td>
<td>.872</td>
</tr>
<tr>
<td>Pre- Self-Efficacy</td>
<td>5.47</td>
<td>131</td>
<td>.985</td>
</tr>
<tr>
<td>Post- Overall</td>
<td>6.03</td>
<td>131</td>
<td>.784</td>
</tr>
<tr>
<td>Pre- Overall</td>
<td>5.55</td>
<td>131</td>
<td>.880</td>
</tr>
</tbody>
</table>

In the second phase of data analysis, correlation coefficients were computed. This was done as a means of examining any possible relationship between the pre-survey and post-survey. Data was computed for overall correlation coefficients as well as for perceived preparedness and for self-efficacy. The results suggest that, overall, the pre-survey and post-survey were interrelated (r= .24, p=.006). For perceived preparedness (r=.147, p=.093), the results were not interrelated. For self-efficacy (r=.3, p=.000), the results were interrelated. Table 3 reports the paired samples correlations between the two survey variables in all three analyses.

Table 3: Paired Samples Correlations
In the third phase of data analysis, the researcher sought to determine if there was a statistically significant difference—with a significance level of $p<.05$ and a corresponding 95% confidence level—between the pre- and post-survey means. The null hypothesis was that there would not be a statistically significant difference ($p \geq .05$). The alternative hypothesis was that there would be a statistically significant difference ($p<.05$), meaning that, with 95% certainty, the difference would not be due to random chance.

The results of the Paired Samples t-Tests support the alternative hypothesis for overall findings ($t(130)=-5.344$, $p<.05$). For perceived preparedness ($t(130)=-5.866$, $p<.05$) and self-efficacy ($t(130)=-4.267$, $p<.05$), the results of the Paired Samples t-Tests also support this alternative hypothesis. Consequently, the results of the survey indicate that the differences between the pre- and post-surveys were statistically significant for all three aspects analyzed and, with 95% certainty, were not due to random chance. These findings suggest that the BotG program positively impacted PSTs’ perceived preparedness and self-efficacy level to teach.

Table 4 reports results from the Paired Samples t-Test statistical significance analysis.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Correlation</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post- and Pre-Survey Perceived Preparedness Scores</td>
<td>131</td>
<td>.30</td>
<td>.000</td>
</tr>
<tr>
<td>Post- and Pre-Survey Self-Efficacy Scores</td>
<td>131</td>
<td>.147</td>
<td>.093</td>
</tr>
<tr>
<td>Post- and Pre-Survey Scores</td>
<td>131</td>
<td>.24</td>
<td>.006</td>
</tr>
</tbody>
</table>

Table 4: Paired Samples t-Test for Statistical Significance
Descriptive statistics were also calculated from post-survey questions. Descriptive statistics describe basic findings of study data, providing simple descriptions, or summaries (Mann, 2007). All 183 PSTs who completed the post-surveys were included in this analysis. Overall, the data shows that the program had a positive influence on learning, application of coursework, and growth as future educators. On a scale from 1-7, with 7 being strongly agree, the mean score for recommending the experience for future PSTs was 6.584 (SD=.909) and the mean score for believing new skills/techniques were learned by volunteering in K-12 classrooms was 6.431 (SD=1.029), both of which show moderate to strong agreement in the positive influence of the BotG program. The lowest post-survey mean was 6.202 (SD=1.180), indicating that participants moderately to strongly agreed that the BotG program was positively influential. Complete findings can be seen in Table 5.

Table 5: Post-Survey Findings (N=183)

<table>
<thead>
<tr>
<th>Question</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The work was a valuable addition to accompany my academic studies.</td>
<td>6.377</td>
<td>1.092</td>
</tr>
<tr>
<td>I was given responsibilities that enabled me to apply knowledge/skills</td>
<td>6.202</td>
<td>1.180</td>
</tr>
<tr>
<td>learned in my college coursework.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was trusted by the K-12 educator to support student learning.</td>
<td>6.639</td>
<td>0.680</td>
</tr>
<tr>
<td>K-12 educators with whom I worked answered questions/concerns I had.</td>
<td>6.622</td>
<td>0.759</td>
</tr>
<tr>
<td>K-12 educators with whom I work provided meaningful feedback/suggestions</td>
<td>6.301</td>
<td>1.075</td>
</tr>
<tr>
<td>to me.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I learned new skills/techniques by volunteering in K-12 classrooms.</td>
<td>6.431</td>
<td>1.029</td>
</tr>
<tr>
<td>I would recommend this experience for future PSTs.</td>
<td>6.584</td>
<td>0.909</td>
</tr>
</tbody>
</table>

Qualitative Findings

Findings from interviews, focus group sessions, and the open-ended post-survey question with PSTs were incorporated in this section.

In individual interviews, many PSTs indicated that participation in the BotG program increased their perceived preparedness. Specifically, 69.2% of participants stated that the hands-
on aspect of the BotG program helped increase their preparedness and 31.3% stated that the program influenced their readiness to make career/major choice decisions. In focus groups, a similar common theme was found in that the hands-on aspect of the program made it relevant to PSTs. One focus group participant stated:

I really liked that we are actually able to interact with the students and actually help out and do things instead of just sitting and observing. In class it’s tough to learn and apply. We are supposed to be in the field for this I think.

Participants in the focus groups repeatedly stated that the BotG program was a valuable learning opportunity to them as future educators completing early coursework. Specifically, participants stated that the hands-on aspect of the program made it more influential for learning than observation or textbook learning. One participant stated, “It’s much more valuable than anything I can read or learn from a textbook.” Another participant said:

I had a class and we just sort of pushed into classes and I ended up, I’d just kind of stand in the back and grade papers and observe and stuff. And I feel like that is not as useful as when we actually get, like, when I get one-on-one time with the kids. I think that’s what really helps. For me at least, I learn more tools for educating by working with kids. Whereas, when I was doing observing, maybe it helped pick up the tools, but it was hard to ever apply them.

In regards to the extent to which the BotG program facilitated learning for participants, 73.1% of PSTs stated that participation absolutely facilitated their learning, while 3.8% stated that it absolutely did not. The remaining 23.1% felt that the program had somewhat contributed to learning, stating that they wanted an observation component (7.7%) or that the opportunities offered did not align with their specific major/career track (15.4%). In addition, 53.8% of
respondents explicitly stated that the authentic hands-on experience was superior to observation experiences in their opinion. The findings indicate that the opportunities provided to PSTs facilitated their learning, which in turn contributed to increased perceptions of preparedness.

Looking at the tasks PSTs completed, 84% of interview respondents reported that they always worked with students in some capacity during their service learning hours. The other 16% stated that some of their hours were spent either observing or supervising students. These findings indicate that the majority of time spent volunteering included meaningful activities meant to support PSTs learning and, in turn, preparedness. All PSTs who participated in focus group sessions stated that the program offered a wide variety of opportunities for PSTs to participate in. Participants listed opportunities such as self-contained ESE, push-in and pull-out groups, tutoring, and working with students who had diverse academic and behavioral needs. These opportunities afforded PSTs the ability to practice strategies introduced in coursework and gain authentic exposure to the profession, which in turn positively impacted perceptions of preparedness and self-efficacy. Summed up best by one PST, “Being in the classroom really prepared me for where I’m going to be working and really showed me what I need to work on before I actually have my own class.”

Overall, 23 of 26 interview respondents stated that they would absolutely recommend the BotG program to future semesters of PSTs, while the remaining three participants felt that they would recommend it on the condition that more school options were made available. None of the PSTs stated that they would not recommend the program’s use in future semesters. These findings indicate that PSTs found value in the opportunities afforded to them through BotG.

Qualitative findings with PSTs also indicated that participation in the BotG service learning experience increased self-efficacy. 53.8% of PSTs interviewed attributed gains in self-
efficacy to the authentic exposure to the profession and the reality of classrooms that the program provided them. In focus group sessions, too, PSTs discussed how their understanding of the profession and its requirements increased merely by being in K-12 classrooms. One focus group participant stated, “Seeing the difference between different types of learners gave me, like, a deeper appreciation for the different types of teaching you have to do even within one group.” Another participant explained, “Just talking to them and hearing the teacher-style talk helped.” Of the 15.4% who felt that participation in the BotG program did not increase their confidence, or self-efficacy, they attributed it to the lack of relevant exposures due to being secondary education majors without the ability to volunteer in high school classrooms. In a focus group session, one participant identified this same limitation, saying, “I was actually hoping to be able to observe and do service learning hours, not only for elementary, but potentially high school to get a good feel of where I might fit in best.”

Bandura (1993) explained that the most influential way of increasing self-efficacy is through mastery experiences, or experiencing first-hand oneself being successful. Positive, successful field experiences support teachers’ increases in self-efficacy. It is with this knowledge that the connection between K-12 educators being satisfied with PSTs and that resulting in increased self-efficacy for PSTs is established. 100% of PSTs interviewed felt that the K-12 educators appreciated the help they had to offer, with 16% of PSTs stating that the K-12 educator had explicitly told them that their support was helpful. The positive feedback and perceptions PSTs had of their impact on K-12 classrooms supports the conclusion that the BotG program increased PSTs’ self-efficacy.

Finally, in looking at which areas of the program were most and least influential, four common themes for most influential were seen. These themes can be seen in Table 6.
Table 6: Most Influential in Growth for PSTs

<table>
<thead>
<tr>
<th>Theme</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence and confidence working academically with K-12 students</td>
<td>64%</td>
</tr>
<tr>
<td>Competence and confidence with classroom management and behavior</td>
<td>44%</td>
</tr>
<tr>
<td>Understanding how to differentiate instruction</td>
<td>24%</td>
</tr>
<tr>
<td>Providing exposure to grade levels, subjects, etc. in the profession</td>
<td>8%</td>
</tr>
</tbody>
</table>

For least influential, school offerings and availabilities were noted by five interview participants as limiting the influence due to the BotG program not having any high schools for PSTs to volunteer in. Six participants stated that they still were not confident with the idea of delivering a whole group lesson and five participants wanted more exposure to lesson planning. Participants discussing whole group instruction and lesson planning all acknowledged that they had not expected to achieve this through BotG, as it was not part of the program’s objectives, but it was an area that they still felt they needed more support with as future educators before entering internship.

For both perceived preparedness and self-efficacy, a recurrent comment in both interviews and focus groups was that coursework learning became more meaningful through participation in BotG. One respondent stated, “What we are learning in the classroom is emphasized and experienced during the service learning hours.”

PSTs who completed the post-survey questions were asked if there was anything that they had hoped to gain from the experience that they did not achieve. Table 7 shows the results. Overall, 150/185 felt that program had achieved its purposes. Of the other 35 participants, the most common theme of limited influence was that the program did not provide diverse enough opportunities. Of the 13 participants who stated this, 6 specifically noted the lack of high school opportunities as a limitation in the influence of the program. This had the potential to limit both
preparedness and self-efficacy of secondary education majors. However, with 81% of PSTs stating that the program presented no limitations, the findings are above the 75% threshold established by the researcher in APPENDIX I: EVALUATION QUESTIONS, MEASURES, AND COLLECTION METHODS, indicating that the BotG program supported growth in preparedness and self-efficacy.

Table 7: Post-Survey Open-Ended Question

<table>
<thead>
<tr>
<th>Themes: Most Common Limitation to the Program’s Influence</th>
<th>Number (out of 185 total)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No limitation in influence</td>
<td>150</td>
<td>81%</td>
</tr>
<tr>
<td>Lack of diverse opportunities</td>
<td>13</td>
<td>7%</td>
</tr>
<tr>
<td>Lack of lesson planning opportunity</td>
<td>4</td>
<td>2%</td>
</tr>
<tr>
<td>Lack of feedback</td>
<td>4</td>
<td>2%</td>
</tr>
</tbody>
</table>

Evaluation Question 2

*What are stakeholders’ perceptions regarding the influence of the BotG program?*

To fully address this question, convenience samplings of PSTs and K-12 educators were used for interview and focus group data collection. In addition, the professors requiring BotG service learning as part of their coursework were interviewed. Finally, for triangulation purposes, PSTs were invited to complete a pre- and post-survey that looked at perceptions of professional preparedness and self-efficacy in teaching. Findings are reported based on which sector was influenced: PSTs, K-12 schools, or the surrounding community. Themes are also discussed collectively at the end of findings for evaluation question two.

Ultimately, participants in the study felt that three main sectors were influenced by the BotG program: PSTs, K-12 schools, and the surrounding community. The BotG program influenced PSTs’ career decision-making, understanding of professional expectations, and preparedness and self-efficacy. For the K-12 school sector, the program influenced K-12
students’ academic achievement and their behavior and engagement. Finally, findings suggest that the program positively influenced community relations. Each of these findings as well as limitations to the program’s influence and overarching themes are discussed below.

*Influence on Pre-Service Teachers*

Through triangulation of data, the researcher identified four areas of influence that the program had on PSTs. They include: influence on career decision-making, influence on professionalism, influence on preparedness and self-efficacy, and limitations to the program’s influence. Each area is discussed below.

*Influence on Pre-Service Teachers’ Career Decision-Making*

Often, PSTs majoring in education select their major based on perceived ideals of teaching, many of which are not the same as the realities of the profession (Olsen, 2008). For this reason, early exposure to the profession is needed to help PSTs better understand expectations of the profession and determine if it is still the career path they want to pursue (Johnston, 1994).

Overall findings in this study indicate that, across all three stakeholder groups, participants felt that the BotG program provided PSTs with exposure to and experience in the profession to support career decision-making. In fact, 31.3% of K-12 educators interviewed cited the program’s ability to help PSTs gain the exposure and experience needed to determine if teaching is the proper profession for them as one of the most influential aspects of the program. Similarly, with PSTs, a common finding in both focus group sessions and interviews was that participation in the program provided the opportunity needed to decide whether or not they wanted to continue as education majors. Furthermore, this exposure came during early coursework, allowing those who decided to switch majors the time to do so early on. One PST stated, “I really hoped to get hands-on experience with kids to see if I wanted to be a teacher or
not, and I did. I realized I want to work with kids but not become a teacher.” The opportunity afforded to this PST by the BotG program allowed the PST to change majors before delving too far into the coursework. The two university professors interviewed both felt that the BotG program influenced PSTs’ career decision-making. One professor simply stated, “They need to know what today’s classroom looks like and if this profession is a good fit for them.” The other professor supported this influence of BotG, explaining that early exposure to the profession allows PSTs to either start their commitment to the field of teaching earlier or realize that teaching is not a good fit for them before it is too late to switch majors and still graduate on time.

Collectively, overall findings across all three stakeholder groups support the conclusion that participants felt that BotG afforded PSTs early exposure to the teaching profession, which allowed them to gain the insight needed to determine early on if they should continue with education or switch majors. This finding is not without limitation, though. While 50% of K-12 educators indicated that PSTs received exposure to the profession, which could help with career decisions, half of those same respondents (so 25% of the sample) acknowledged that limitations in availability could reduce this influence. Secondary education majors, in particular, were used as the example of this limitation, as the potential secondary education majors wanting exposure to high school classrooms were unable to get it. The university professors also acknowledged this, stating that a limitation of the program was that there was not currently a high school partnership, which meant PSTs wanting exposure to high school classrooms would not be able to get that opportunity within the program.

Influence on Pre-Service Teachers’ Professionalism

Triangulation of data suggest that the BotG program positively influenced PSTs’ professionalism. In particular, findings indicate that the program allowed PSTs to establish
relationships with schools and with K-12 educators. It also provided them with the opportunity to engage in professional conversations with K-12 educators and school administrators right out of high school.

Similarly, 50% of K-12 educators interviewed felt that one of the most influential aspects of the program was in helping PSTs understand the profession and elements of professionalism, including dress code, interacting with students, and engaging in discourse with school faculty. PSTs who participated in interviews noted the same theme, saying that the program positively influenced their professional practices by providing them the professional exposure needed to build relationships with K-12 students and educators, practice professional dress and dialogue, and create networking opportunities. Both K-12 educator and PST focus group findings also showed that the program had a positive influence for PSTs’ professionalism.

Many K-12 educators reported isolated incidents of dress code concerns. Particularly in focus group sessions, participants discussed short dresses, clothing not suitable for sitting on the floor with groups, and clothing with holes in it as dress code concerns. All participants noted that these incidents were isolated, but also bothersome enough to still be recounted in detail months later. In detailing an incident with a PST from the fall semester, one K-12 educator said:

*Her dress was so short that she was constantly pulling on it, tugging down the hem. She had to cross her legs and sit sideways in the small chairs we use in my room. It’s like, you know, you’re coming to work with kindergarteners. You’re going to be on the floor. They’re going to be sitting and looking up at you. Dress professionally!*

This same K-12 educator noted that she saw marked improvements in dress attire during the spring semester.
In triangulating findings, the university professors also acknowledged that isolated incidents of poor dress attire had been a concern in professionalism brought to their attention. In particular, dress code, professional etiquette, and individual concerns were all elements of professionalism that university professors identified as problems with professionalism amongst PSTs. For the most part, though, the university professors felt that these dress code and professional etiquette issues were isolated to a few individuals and that, when the K-12 principals began including specific expectations that addressed these elements of professionalism in their orientations with PSTs, it helped to alleviate these issues. Overall, though, university professors reported very few instances of having to talk with PSTs about either dress code or professional etiquette. Furthermore, the university professors felt that even some of those initially negative situations ended up becoming early opportunities for PSTs to learn professional etiquette and dress code expectations of educators and adapt accordingly.

Influence on Pre-Service Teachers’ Preparedness and Self-Efficacy

In reporting findings, only the information gleamed in interviews and focus groups with the K-12 educators and university professors will be discussed in this section, as the program’s influence on PSTs’ perceived preparedness and self-efficacy was discussed in detail in findings for evaluation question one.

Overall data findings reveal that the BotG program afforded PSTs the opportunities to engage in meaningful instructional practices, apply coursework learnings, and gain exposure to both the profession and academic interactions with K-12 students and educators. Subsequently, field experience appeared to contribute to PSTs’ professional competencies related to instruction and engagement strategies as well as working with diverse learners. Both K-12 educators and university professors felt that the exposures and experiences afforded to PSTs have the potential
to help equip PSTs for success as future educators. Of the 16 K-12 educators interviewed, 3 (19%) felt that all early field requirements provide experience working with kids in an academic environment that can support PSTs’ learning and confidence. In contrast, all 16 (100%) said this of the BotG program’s influence. Furthermore, 37.5% added that the BotG program allowed PSTs to apply coursework learnings, which is not always feasible in other early field experiences, such as observing. This is similar to feedback from the university professors. Both professors emphasized that the hands-on component of BotG increased the program’s influence as opposed to observing in classrooms or learning merely through textbook and lecture. “Observation does not allow you to implement concepts and strategies taught in coursework, such as ESOL strategies, engagement techniques, and interacting with students in an academic environment,” explained one professor.

All stakeholders also consistently cited preparation for teaching as an element influenced by participation in BotG. This included understanding of professional expectations, such as timeliness, dress code, and discourse. It also included increased understanding of small group differentiated instruction as well as adapting for diverse learners’ needs. In fact, 93.8% of K-12 educators interviewed stated that PSTs participating in the BotG program benefited due to the authentic, hands-on exposure they received to the teaching profession. However, interview participants acknowledged that the BotG program did not provide opportunities for PSTs to practice lesson planning or whole group instruction, which are essential aspects of the profession that educators must be both competent and confident in, and therefore limited the program’s influence on PSTs’ perceived preparedness and feelings of self-efficacy in these areas. Many of the K-12 educators interviewed explained that, to the best of their understanding, the BotG program was not meant to expose PSTs to either of those two competencies, but that both lesson
planning and whole group instruction are important enough aspects of teaching that it is important for PSTs to gain experience in each prior to graduating.

As aforementioned in evaluation question one’s findings, the PSTs indicated that participation in the BotG program increased both their perceived preparedness and self-efficacy for working with diverse students and being sensitive to their unique needs. This carried forward as an appreciation for the need to develop differentiated lessons and expectations based on student readiness, learning style, or interest. This finding was supported by interviews with K-12 educators, where 81.3% felt that PSTs received the most exposure working with diverse students and differentiating instruction accordingly.

It is important to note that K-12 educators emphasized in both focus group sessions and interviews that the extent of the program’s influence depended on PSTs’ desire to engage in the experience. 18.8% of K-12 educators reported at least one instance in which the PST was unmotivated and seemingly volunteering more for the hour completion component than for the experience. This coincides with a concern that one university professor addressed, which was that the program lacks formal assessment by either university professors or K-12 educators. Consequently, the focus is on the experience rather than ensuring that PSTs are meeting expectations, which means that PSTs must be self-motivated to make the most of their time in K-12 classrooms. Despite this, 100% of K-12 educators interviewed felt that the program facilitated learning for PSTs. Specifically, 75% of these respondents stated that the hands-on aspect of the program benefitted the PSTs and, for those PSTs who were reluctant to get involved, forced experience upon them. The other 25% felt that an observational component added to the start of the time block would improve the preservice teachers’ understanding of their task assignment and increase both competence and confidence in ability to lead small group instruction.
Interview findings with K-12 educators showed that two of the most common areas of influence they felt the program had on PSTs’ preparedness was in the ability to differentiate instruction for diverse learners (37.5%) and providing opportunities to practice and improve classroom management skills (25%). In regards to self-efficacy, 62.5% of K-12 educators felt that the program was highly influential in helping PSTs gain comfort being in a school setting; 43.8% felt the program supported growth in self-efficacy of working with K-12 students; 31.3% felt PSTs grew most in their confidence leading small group instruction; and 31.3% felt PSTs grew most in their confidence of career choice selection. These findings are displayed in Table 8:

K-12 Educators’ Beliefs of Self-Efficacy Growth in PSTs (N=16).

<table>
<thead>
<tr>
<th>Question</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>BotG helped PSTs gain comfort being in a school setting</td>
<td>10</td>
<td>62.5%</td>
</tr>
<tr>
<td>BotG supported growth in self-efficacy of working with K-12 students</td>
<td>7</td>
<td>43.8%</td>
</tr>
<tr>
<td>BotG supported PSTs’ confidence leading small group instruction</td>
<td>5</td>
<td>31.3%</td>
</tr>
<tr>
<td>BotG supported PSTs’ confidence of career choice selection</td>
<td>5</td>
<td>31.3%</td>
</tr>
</tbody>
</table>

Both university professors interviewed echoed similar beliefs about the BotG program strongly and positively influencing PSTs’ self-efficacy. One professor stated, “They absolutely should grow in this facet [self-efficacy] because just being in a classroom helps you understand the profession, the expectations, what it means to be in a school, and what classrooms look like.” The other professor expounded on this, explaining that the relationship the university has with the participating K-12 schools allows PSTs entry into the schools without burdening undesiring teachers. This entry allows PSTs the opportunity to build their self-efficacy merely by being in a K-12 academic setting. It also increases the probability of the PSTs being provided hands-on opportunities to practice coursework strategies and see themselves as successful. Furthermore, it
allows the PSTs to better understand how schools operate, how different teachers teach, network with local schools, interact with local school administrators, and apply what they are learning about in coursework in a comfortable, non-threatening setting, all of which contributes to increases in self-efficacy of teaching.

In interviewing K-12 educators, 81.3% felt that the program was more influential for PSTs who chose to limit volunteer experiences within 1-3 classrooms. Supporting reasons for this included the ability to build relationships with students (50%) and that it made it easier for the K-12 educators to interact with and observe the PST enough to provide relevant feedback (31.3%). Focus group findings with K-12 educators revealed similar, consistent findings in that the influence was more positive and more significant for PSTs when they narrowed the number of classrooms in which they volunteered to 1-3 classrooms. One K-12 educator participant explained that the PSTs “can develop a routine and rapport with the kids by going to the same classroom multiple times,” which in turn helps build PSTs’ preparedness and self-efficacy. University professors who were interviewed stated that they encouraged the PSTs to limit their exposures to 1-3 classrooms, which would provide them with a significant glance into those rooms, as opposed to a snapshot if they volunteered in too many rooms. However, the university professors acknowledged that factors such as availability and scheduling limited the ability for PSTs to do so at times.

Finally, the program is meant to expose PSTs to best practice teaching in action, which contributes to perceived preparedness. As explained by one professor:

*We don’t need students in classrooms to assist or aid struggling in-service teachers. We need them in classrooms with stellar examples so that they can mimic these traits in their*
future classroom and, in turn, experience success. I believe we would have LESS teacher attrition if students were all in positive environments from the start.

The university professors who participated in the study felt that PSTs gained entrance into classrooms with exemplary K-12 educators who were able to model best teaching practices, support PSTs’ learning, and provide meaningful tasks to build PSTs’ ability and self-efficacy as future educators. Summarized by one of the professors, “The whole premise of the program is not to watch but to interact with students in order to hone their small groups and one-on-one teaching skills.” As explained by the university professors, the authentic exposure to the teaching profession contributed to opportunities for PSTs to grow in both self-efficacy and preparedness as future educators. However, it is important to mention that a potential limitation to this conclusion is that the K-12 educators who participated in the BotG program were not all doing so of their own accord or because they were selected as exemplary educators. While one university professor felt that “the teachers WANT them [PSTs]. Teachers sign up for these volunteers and know that the whole premise of the program is not to watch but to interact with students in order to hone their small groups teaching skills,” two of the sixteen K-12 educators interviewed (12.5%) explicitly stated that they only allowed PSTs into their classrooms because the principal required it of them. This shows possible discrepancies between program ideals and program realities, which could limit the program’s influence.

Ultimately, the data supports the finding that participation in the BotG program provided significant opportunities to practice instructional strategies, engagement practices, and gain exposure to the profession, all of which contributed to increases in self-efficacy and perceptions of preparedness in PSTs.
Limitation to the Program’s Influence on Pre-Service Teachers

While the previous sections did acknowledge some of the limitations to the program’s influence on PSTs, it is important to highlight the most prevalent limitations noted by stakeholders.

The overwhelming limitation to the program’s influence that K-12 educators identified in interviews was the lack of feedback, which 75% of participants noted as a limitation. In fact, 62.5% of K-12 educators interviewed said they were unable to provide any feedback at all, with 31.3% attributing it to limited time and another 31.3% saying it was due to not knowing the objectives to know if PSTs were achieving the expected goals. Overall, 43.8% of K-12 educators interviewed felt that inability to provide feedback to PSTs was the greatest drawback of the program, which shows both the K-12 educators’ desires to support PSTs’ learning and their inability to do so. Focus group findings with K-12 educators supported this limitation. One K-12 educator expressed frustration about factors limiting her ability to provide feedback to the PSTs, saying, “It’s also the time that it takes for you to articulate what you want them to do and how they can help facilitate that small group, you know, because you’re in the middle of teaching when they arrive. You’re not always able to guide them and train them effectively.”

The second most prevalent limitation in the program’s influence was availability. Pre-service teachers continually emphasized that availability limited their ability to take advantage of opportunities. Chiefly, lack of high school options, K-12 schools geographically distant to PSTs’ homes, and the inability to match one’s personal schedule with the K-12 school’s available time slots were the main aspects of availability limiting the program’s influence for PSTs. As explained by one participant, “I feel like the scheduling thing was tough. It’s only, like, one hour increments and it’s only certain times during the day. It doesn’t fit everyone’s schedule.”
Similarly, one secondary education major said, “There weren’t any high schools and the middle school wasn’t available for my times.” Amongst K-12 educators, 25% of interview participants identified availability as a limitation, too, explaining that the program would have been more influential for PSTs had they been able to select the classrooms, subjects, and grade levels they most desired to see rather than being limited by what was available. Many also felt that longer time slots, possibly with observation components to allow PSTs to observe the lesson they would be enacting, would have better benefitted the PSTs.

Finally, at times the expected activities—or program ideals—did not align to what actually took place in K-12 classrooms—program realities—when PSTs were there, which limited the program’s influence. In an interview, one PST explained that she had signed up for the normal small-group reading time, only to arrive as the class was leaving to have their picture taken. This unavoidable schedule change kept her from working with students that day. In a focus group session, one PST explained how standardized testing preparations kept him from working with students: “One teacher, they were taking a test in there, so I literally just walked around the classroom and just watched kids take a test.” This same participant acknowledged that, as a teacher, he would need to monitor students during testing, but felt that this was not the most beneficial use of his 15 hours during BotG. Finally, one K-12 educator interviewed explained how she had an unexpected family emergency come up once, causing her to be out, and it wasn’t until she read the substitute’s note the next day that she even remembered that she was supposed to have a BotG volunteer. All of these schedule changes contributed to limitations in the program’s influence.
Influence on K-12 Schools

Through triangulation of both qualitative and quantitative data from the three primary stakeholders, the researcher identified two areas of influence that the BotG program had on K-12 schools. They include: influence on K-12 students’ academic achievement and influence on K-12 students’ behavior and engagement. Each area is discussed below.

Influence on K-12 Students’ Academic Achievement

The first area that the researcher found the BotG program to influence was K-12 students’ academic achievement. K-12 educators involved in both interviews and focus groups emphasized that having an extra set of hands in the classroom allowed more K-12 students to get small group and individualized instructional support, which they felt as a necessary component in supporting K-12 students’ academic growth. The PSTs, too, felt that they positively contributed to K-12 students’ academic achievement, providing extra support for students who needed it. Across both interviews and focus group sessions, PSTs continually explained that one of their responsibilities was to work with individuals and small groups of students, providing differentiated instructional opportunities to support diverse student needs within classrooms. One participant explained, “It was difficult for the teacher to get to every single student. And so it did help, the fact that I was able to go around and also help, and it kind of helped the students not really fall through the cracks.” Similarly, the university professors explained that K-12 educators need help to meet the diverse needs of their students and apply proper small-group instruction and that the BotG program affords them that extra help at no cost. Overall, 87.5% of K-12 educators interviewed felt the program positively benefitted their K-12 students by providing extra academic support. Within that broad category, academic support was clarified as being support for diverse student needs (62.5%) and positive adult relationships and role models to show the importance of being
ambitious and pursuing higher education (31.3%). The overall 87.5% of K-12 educators who felt the program positively benefitted their K-12 students is above the 75% threshold established in the data collection and analysis criteria (see APPENDIX I: EVALUATION QUESTIONS, MEASURES, AND COLLECTION METHODS, suggesting that the K-12 educators felt the BotG program had a positive influence on their students.

Despite these positive findings on K-12 students’ academic achievement, it is important to note that not all experiences were positive. 56.3% of K-12 educators interviewed acknowledged that they had experienced at least one instance where a PST was misinforming students on how to do things or giving answers to students rather than guiding their learning, which could negatively influence student learning. This finding was consistent in focus group sessions with K-12 educators, with one participant saying, “Sometimes you don’t know until it’s too late and they do it wrong and you didn’t notice.” However, overall, 62.6% of K-12 educators participating in interviews reported that this was rarely the case, and the overwhelming majority of PSTs were positively influencing students’ learning. One K-12 educator participating in the focus group sessions explained, “I find the disconnect is, it’s student to student. The work I give is dependent upon what I can use that person for.” She felt that the program did not allow her to build deep enough relationships with the PSTs to understand their level of understanding and fully trust them when working with her students.

Influence on K-12 Students’ Behavior and Engagement

The second area that the researcher found the BotG program to influence was K-12 students’ behavior and engagement. Again, findings were mostly positive, but also included examples and instances of negatives, too.
Collectively, 100% of K-12 educators involved in focus group sessions felt that the program provided them with an extra adult in the classroom, which in turn meant an extra set of eyes to help monitor student engagement and behavior. This influence on student behavior and engagement was found in PST focus group sessions, too. One PST said, “I feel like it also helps the teachers.” Another said, “I was able to make sure that they stayed on-task instead of the teacher having to worry about six different students not focusing.” Despite this, some K-12 educators felt that the PSTs were not all equally competent in classroom management, with some actually contributing to off-task behavior. “It’s luck of the draw really and you hope the good ones come back,” explained one participant. In interviews, 62.5% of K-12 educators appreciated the extra support PSTs offered, emphasizing that the PSTs were able to help redirect students who got off-task, provide proximity to students during small group time to increase engagement, and simply be there to observe and report on any behavioral issues. 50% of K-12 educators interviewed felt that positive influences on student behavior and engagement were more pronounced when the same PSTs came back multiple times, as they became more familiar with the students and which ones needed additional support. This finding was consistent with PSTs, too, with 73.2% of interview participants saying that they preferred to complete multiple hours in the same classrooms because it helped them better understand the students, build relationships with them, and know which ones needed additional engagement or behavioral support.

Influence on Community Relations

The third theme found was that the BotG program influenced community relations. Through interviews with the university professors, the researcher identified the recurring idea that access to K-12 schools and classrooms is difficult for many PSTs to achieve. By establishing a connection with local K-12 schools via the BotG program, university professors were able to
help the PSTs gain access to volunteer opportunities within classrooms. Furthermore, they were able to dictate that these opportunities be hands-on rather than observational, meaning that they were able to have increased influence in the types of experiences PSTs obtained. The partnership between BotG professors and the K-12 schools also eliminated the need for PSTs to call or email schools to ask for volunteer opportunities. This decreased the strain on community relations between the associated university and school district. It also eliminated the burden of finding opportunities to volunteer from PSTs.

This finding was supported by K-12 educators to a certain degree. The interview and focus group participants did agree that the program provided organized opportunities for PSTs to gain access to K-12 classrooms, but they were less sure on the types of opportunities being offered to PSTs. In fact, 68.8% of K-12 educators who participated in the interviews did not know the exact expectations of BotG.

For the K-12 educators involved with BotG, the university professors felt that the program had a positive influence for them because they wanted the extra help and BotG provided that help to them in an organized, systematic manner. As explained by one of the professors, “The teachers WANT them. Teachers sign up for these volunteers and know that the whole premise of the program is not to watch but to interact with students in order to hone their small groups teaching skills.” The other professor expressed similar beliefs, emphasizing that, since the program is an established partnership with certain schools, it allows PSTs entrance into local classrooms without straining community relationships or harassing schools or teachers for hours. It places extra help in classrooms where teachers want the support and have asked for it. However, that influence is potentially limited by discrepancies between program ideals and program realities. In particular, the notion that all K-12 educators involved in the program
wanted PSTs to volunteer in their rooms was found to be untrue. Two of the sixteen K-12 educators interviewed (12.5%) stated that the only reason they participated in the program was because their principals required them to do so. However, the percentage of K-12 educators who appreciated the program was far greater, with 87.5% of interview participants and 100% of focus group participants being grateful for their school’s partnership with the university and the provision of the BotG program.

**Evaluation Question 3**

Did the program contribute to any intended outcomes? (Were there any unintended outcomes, good or bad, on program participants?)

To answer this question, information from interviews with the university professors was first analyzed. This was done to determine what the intended outcomes of the program were. Then, by looking at responses from K-12 educators and PSTs, the researcher worked to determine if, and to what extent, the intended outcomes were met as well as if any unintended outcomes occurred.

Through analysis of interviews, the researcher determined that the professors’ primary goal in using the BotG program was to increase PSTs’ pedagogical skills and confidence as future educators to better prepare them for internship and subsequent employment as educators. Subsequent goals of the program included supporting local K-12 schools and providing authentic exposure to the profession to inform career-based decisions for PSTs. Overall findings through triangulation of data sources and participant groups indicate that the program contributed to the intended outcomes, with certain areas of limitations, all of which will be discussed below.

Overall, the university professors felt that the BotG program contributed to the intended outcomes. One professor explicitly stated, “The program is going well. Teachers need help and
this program provides that help, meaning that it is beneficial to both the university and the [local] schools. It can always go better, but it is working.”

*Intended Outcomes for Pre-Service Teachers*

The university professors explained that the purpose of the BotG program for PSTs was to provide them entrance into classrooms with exemplary K-12 educators who were able to model best teaching practices, support PSTs’ learning, and provide meaningful tasks to build PSTs’ ability and confidence as future educators. Summarized by one of the professors, “The whole premise of the program is not to watch but to interact with students in order to hone their small group and one-on-one teaching skills.” Both professors explained that the BotG program was meant to influence PSTs’ teaching practices—particularly in small-group and individual settings—and confidence.

One intended outcome was to start PSTs’ commitment to the field of teaching. This also meant helping PSTs identify if teaching was a good fit while they were still completing early coursework. In both focus group sessions and interviews with PSTs, participants acknowledged early exposure to the profession as a benefit with career decision-making. One PST stated, “I really hoped to get hands-on experience with kids to see if I wanted to be a teacher or not, and I did. I realized I want to work with kids but not become a teacher.” In interviews, 23.1% of PSTs hoped to get early career choice validation and all of those participants felt they got that opportunity by participating in BotG. Similarly, 31.3% of K-12 educators interviewed felt that the program positively influence PSTs ability to make career decisions.

Another intended outcome was to add more hands-on experience to the preparation program for PSTs. 84% of PSTs interviewed stated that they were always required to work hands-on with students in small group or individualized settings, with the other 16% saying that
at least some, but not all, of their hours were hands-on. Furthermore, 53.8% of PSTs explicitly stated that the hands-on aspect of the BotG program made it superior to observation. In a focus group session, one participant explained, “We will read things and I try to remember them, but I’m more of an action learner.” Collectively, these findings imply that the program is doing well in achieving its intended outcome of hands-on experience. K-12 educators who participated in interviews seconded this notion, with 18.8% saying that any field experience opportunity for PSTs provides them with experience relevant to the profession, whereas 100% felt that the BotG provided PSTs with relevant experience. However, despite the experience being beneficial, 68.8% of K-12 educators interviewed said they did not know the exact program expectations, so it is possible the opportunities they provided to PSTs did not align to course objectives or professors’ desires. Similarly, 75% of K-12 educators felt that the lack of feedback they were able to provide to PSTs limited the program’s ability to support PSTs’ learning and development.

Finally, the university professors stated that an intended outcome of the program for PSTs who entered the education program right out of high school was to provide them professional opportunities to support the transition into adulthood. One PST acknowledged appreciation for this opportunity, saying, “I liked betting the opportunity to communicate with, not only administration, but the teachers as well. Hearing their perspectives and being able to learn from them and taking on some advice.” While many K-12 educators acknowledged isolated issues of problems with professionalism amongst PSTs—namely, dress code and not showing up for assigned time slots—the overwhelming consensus was that PSTs were given opportunities to transition from adolescent to adult by working with K-12 students in a professional setting.

Collectively, 73.2% of PSTs interviewed absolutely would recommend the program, and 23% would recommend it, but felt that it should be tweaked to allow either observation
opportunities (7.7%) or additional schools and grade levels (15.3%). Only 3.8% of PSTs would not recommend the program, which shows that PSTs overwhelmingly felt that they benefitted from the program. This connects back to the program providing a relevant, meaningful opportunity for PSTs during early coursework, which was a major intended outcome of the program.

**Intended Outcomes for K-12 Schools**

The university professors who were interviewed both emphasized that the program was intended to be mutually beneficial, supporting the partnership K-12 schools, too. One professor stated, “The teachers WANT them. Teachers sign up for these volunteers.” The other professor expressed similar beliefs, emphasizing that the program places extra help in classrooms where teachers want the support and have asked for it. Findings indicate that, while a program ideal and commonly true, this was not always accurate. Overwhelmingly, K-12 educators did appreciate the help and were grateful for the opportunity to be part of the BotG program, with 100% of focus group participants and 87.5% of interview participants being grateful for their school’s partnership with the university and the provision of the BotG program. However, the notion that all K-12 educators involved in the program wanted PSTs to volunteer in their rooms was found to be untrue. Two of the sixteen K-12 educators interviewed (12.5%) stated that the only reason they participated in the program was because their principals required them to do so.

The university professors also emphasized that an intended outcome of the program was to increase K-12 student learning by providing additional adults in K-12 classrooms to support small group instruction. However, additional personnel equating to additional student achievement is not necessarily a direct correlation. As explained by one K-12 educator, “When you’ve got the right person, it’s great. But when you don’t, you feel stuck.” In interviews, 18.8%
of K-12 educators reported at least one instance in which the PST was unmotivated and seemingly volunteering more for the hour completion component than for the experience, which limited that individual’s influence on student achievement. Similarly, in both focus groups and interviews, issues of PSTs hindering student learning by misinforming them or incorrectly teaching concepts were reported. 56.3% of K-12 educators interviewed acknowledged that they had experienced at least one incidence where the PST was misinforming students on how to do things or giving answers to students rather than guiding their learning, which could negatively influence K-12 student learning. This finding was consistent in focus group sessions with K-12 educators, with one participant saying, “Sometimes you don’t know until it’s too late and they do it wrong and you didn’t notice.” However, overall, 62.6% of K-12 educators participating in interviews reported that this was rarely the case, and the overwhelming majority of PSTs were positively influencing students’ learning. Overwhelmingly, K-12 educators were grateful for the extra support. One focus group participant summarized hers and others’ sentiments on the additional support, saying “It’s additional manpower to work with those students one-on-one, those lower-performing students, to give them the support that they need.” PSTs, too, reported feeling that they made a difference, with one focus group participant explaining, “At the end, one of the teachers told me that he’d appreciated my help and that another teacher I’d worked with also told him she’d enjoyed me in her classroom. That makes me feel like I had made somewhat of a difference.”

Program’s Contribution to Unintended Outcomes

Data collected through interviews and focus groups support the finding that unintended outcomes also occurred with the BotG program.
The first unintended outcome was that certain K-12 students ended up feeling isolated by repeatedly being singled out to work with the PSTs. One PST explained:

*Sometimes when I was working in this one classroom, the teacher had that same kid where she kind of just had me, not necessarily taking him aside one-on-one, but I was pretty much making sure he was paying attention and I just feel like the class can tell and the student can tell sometimes and it’s kind of uncomfortable for that kid and also for me. I don’t think they respond well always being singled out.*

The BotG program was implemented with the intent of supporting K-12 students’ achievement. However, continuously having PSTs work with the same few individuals could contribute to those K-12 students feeling embarrassed or isolated rather than supported. This, in turn, could decrease their motivation to learn, effort towards tasks, or enjoyment of school.

A second, unintended outcome of the program identified by analyzing the data was that there were times when the program caused increased stress for K-12 educators. In particular, having a large number of PSTs complete only an hour or two in classrooms contributed to this unintended outcome. One PST said, “I tried to do my hours in just three rooms…I think some of the other students in my class just tried to jump around and get them filled, but that’s probably hard on the teachers.” This frustration was echoed by K-12 educators, with one focus group participant explaining, “I think if it’s the same person, too, it doesn’t disrupt as much as a new person walking in because, with a new person, [my students] all start to talk and ask who they are.” By not requiring PSTs to complete multiple hours within just a few classrooms, the potential for stress and disruption of classroom learning increased. K-12 educators also expressed that PSTs who struggled to exert authority within their small groups ended up causing more harm than good for students, which contributed to increased stress for K-12 educators,
particularly when they did not know the capability of the PST who would be working in their classrooms. This was explained by one K-12 educator participating in a focus group and agreed upon by the others in that group:

*If [the pre-service teachers] don’t have a lot of experience with classroom management, even if you’ve got them working with a small group, if that small group takes advantage of them and they allow that, then it’s a waste of everybody’s time.*

**Evaluation Question 4**

Are participants satisfied with what they gain from the program?

To fully address this question, findings were broken apart by stakeholder group: PSTs, K-12 educators, and university professors. Ultimately, findings indicate that the PSTs and university professors were highly satisfied and the K-12 educators were mostly satisfied.

**Pre-Service Teachers**

Qualitative data was used as the primary source of data for this question, with quantitative data utilized to triangulate, validate, and identify any other potential findings.

Satisfaction is a mixture of goal completion, increasing preparedness and self-efficacy, and feeling appreciated. As such, interview questions 6, 9, 10, 12, and 16 with PSTs were used to address evaluation question four, with focus group findings and survey data being used to support or clarify findings. These interview questions can be found in their entirety in **APPENDIX G: INTERVIEW QUESTIONS FOR PRE-SERVICE TEACHERS**

Interview question six asked participants if they accomplished what they hoped they would by participating in the BotG program. 76.9% of respondents said that they were satisfied with what they accomplished. 19.2% felt somewhat satisfied and 3.8% were not satisfied. Most common amongst reasons for not being fully satisfied with what they accomplished was not
having opportunities to volunteer in schools, subjects, or grade levels that matched PSTs’ career aspirations. Namely, 50% of respondents stated that lack of availability influenced their level of satisfaction with the program. The researcher identified 75% as the cutoff for satisfaction and, with 76.9% of respondents affirming their satisfaction, findings indicate that PSTs were satisfied in their ability to accomplish what they had hoped for by participating in the BotG program.

Looking at the program in its entirety, 13 of the 26 participants (50%) felt that the support provided by the university professors and K-12 principals and instructors was sufficient in preparing them to volunteer. The other 50% felt that the training was adequate, but that nothing fully prepares a person to work with students in an academic setting other than the experience itself. Zero percent of participants felt unsatisfied with the preparation before starting to volunteer.

In regards to being appreciated, responses to question 10 showed that 100% of PSTs who participated in interviews felt the K-12 educators appreciated them being in their classrooms. This finding is supported by the focus groups with PSTs, where a common theme was that PSTs felt appreciated. One focus group participant stated, “At the end, one of the teachers told me that he’d appreciated my help and that another teacher I’d worked with also told him she’d enjoyed me in her classroom. That makes me feel like I had made somewhat of a difference.” 84% of PSTs who participated in the interviews felt they were provided with tasks that aligned to what they wanted to experience. One focus group participant confirmed this finding, saying, “I grew a deeper appreciation for reading comprehension by being able to work with students who have struggles or are just learning English.” Each of these findings is above the 75% threshold established for the evaluation methods, data collection, and analysis criteria (see APPENDIX I: EVALUATION QUESTIONS, MEASURES, AND COLLECTION METHODS), supporting the
conclusion that PSTs felt appreciated and believe that their assigned tasks were relevant, both of which relate to positive feelings of satisfaction.

Interview question 12 asked participants if they felt the BotG program facilitated their learning. 73.2% of participants said it absolutely did, with 23% saying it mostly did and only 3.8% saying the program did not facilitate their learning. Of the six who responded that the program only somewhat facilitated learning, four felt that the lack of options specific to their education track limited the program’s influence and the other two felt that they needed more opportunities to observe the K-12 educator in action. Collectively, the percent of mostly and fully satisfied PSTs was 96.2%, suggesting that the participants were mostly satisfied, but in and of itself, the 73.2% of interviewees who were fully satisfied is below the 75% threshold established by the researcher for the evaluation methods, data collection, and analysis criteria, indicating that PSTs were not fully satisfied with the program’s ability to facilitate learning.

In the focus groups with PSTs, a common theme was that the program was beneficial, but could have been more so with additional opportunities. One participant explained, “I didn’t like that the program was particular on where you could go. It’s not that I didn’t enjoy the school, being with elementary students, but I certainly would’ve loved the opportunity to have gone to a different school.”

Perhaps most directly answering evaluation question four was interview question 16: Would you recommend this experience to future semesters of pre-service teachers? Of the 26 respondents, 23 (88%) stated that they absolutely would recommend it. Of the remaining three participants, all stated that they would recommend it, but wanted additional schools added to the list of choices. In particular, these three PSTs all felt strongly that the program needed a high school option. Zero percent of participants stated that they would not recommend the program to
future semesters of PSTs, leading the researcher to conclude that PST participants were satisfied with the BotG program as a whole. Similar to this finding, PST participants who answered the post-survey question were asked if there was anything that they had hoped to gain from the experience that they did not achieve. Table 7 shows the results. Overall, 150/185 (81%) felt that program had achieved its purposes. This is above the 75% threshold established by the researcher for the evaluation methods, data collection, and analysis criteria, leading the researcher to conclude that PSTs were satisfied with the experience provided by the BotG program. Of the other 35 participants, the most common theme of limited influence was that the program did not provide diverse enough opportunities. Of the 13 participants who stated this, 6 specifically noted the lack of high school opportunities as a limitation in the influence of the program.

Looking at the quantitative results, the researcher utilized the additional questions on the post-survey to measure PSTs’ perceptions regarding the program, its implementation, and its impact on increasing perceived preparedness and self-efficacy. These descriptive statistics helped to describe basic findings of study data, providing simple descriptions, or summaries (Mann, 2007). All 183 PSTs who completed the post-surveys were included in this analysis. Overall, the data showed that the program had a positive influence on learning, application of coursework, and growth as future educators. On a scale from 1-7, with 7 being strongly agree, the mean score for recommending the experience for future PSTs was 6.584 (SD=.909) and the mean score for believing new skills/techniques were learned by volunteering in K-12 classrooms was 6.431 (SD=1.029), both of which show moderate to strong agreement in the positive influence of the BotG program. The lowest post-survey mean was 6.202 (SD=1.180), indicating
that participants moderately to strongly agreed that the BotG program was positively influential. Table 5 shows these findings in their entirety.

Finally, findings from the pre/post survey Paired Samples t-Tests indicate that PST participants’ overall perceptions of the BotG program were favorable, with post-survey means being higher than pre-survey means for all statements. SPSS statistical software was used for all preliminary analyses. The PSTs’ mean scores ranged from M=4.96 to M=6.71 on the pre- and post-surveys. For items specific to perceived preparedness, means ranged from M=4.50 to M=6.71. For items specific to self-efficacy, means ranged from M=4.96 to M=6.38. PSTs’ perceptions concerning perceived preparedness were highest for understanding professional expectations of teachers (M=6.71, SD=.739); PSTs’ perceptions concerning self-efficacy were highest for believing that they should continue pursuing teaching (M=6.38, SD=1.133). PSTs’ perceptions concerning perceived preparedness were lowest for differentiating instruction for diverse student needs (M=5.21, SD=1.42); PSTs’ perceptions concerning self-efficacy were lowest for being comfortable working with diverse students (M=5.56; SD=1.42). Table 1 displays these findings in their entirety.

**K-12 Educators**

Qualitative data in the form of both interviews and focus groups with K-12 educators was used to address evaluation question four.

In the interviews with K-12 educators, questions 6, 8, 11, 22, and 24 addressed elements of satisfaction. The interview questions can be found in their entirety in APPENDIX F: INTERVIEW QUESTIONS FOR K-12 EDUCATORS. The question that most directly answers evaluation question four is interview question 11: *Do you feel that the BotG program benefits your students?* 87.5% of K-12 educators reported feeling that their students benefitted by having
PSTs volunteering in their classrooms, which was the primary reason they participated in the BotG program. This is above the 75% threshold established for satisfaction (see APPENDIX I: EVALUATION QUESTIONS, MEASURES, AND COLLECTION METHODS), suggesting that participants were satisfied with the program. The other 12.5% of K-12 educators were not satisfied with the program and only used it because their principal required them to do so. Of the 14 teachers who reported using the program because they felt it helped their students, 6 also stated that they enjoyed being able to help the PSTs learn, too.

In regards to feeling satisfied in their ability to support PSTs’ learning, 75% of K-12 educators reported feeling unsatisfied with the amount of feedback they were able to provide PSTs. Further impacting satisfaction, 68.8% of K-12 educators felt unclear as to exactly what was expected of them in regards to the tasks they assigned to PSTs, which negatively influenced feelings of satisfaction for supporting PSTs’ learning. However, when asked if the program benefitted PSTs, 100% of K-12 educators felt satisfied with the influence the program had on PSTs’ learning. This shows that K-12 educators were satisfied with the program’s ability to help PSTs develop as future educators, but not with their direct involvement in that development.

Overall, K-12 educators were mostly satisfied with the impact the BotG program had on both the PSTs and the K-12 students. One focus group participant said, “We’ve been provided with a service because, you know, an extra set of helping hands, it goes a long way.” In a different focus group session, a similar sentiment was shared: “There’s additional manpower in the classroom. There’s another adult visible. There’s another person who’s keeping track of on-task behavior, off-task behavior. Extra hands; that’s a positive.”
Table 9: What is the greatest strength you see in the program? (N=16) shows specific areas of satisfaction gleamed in interviews with K-12 educators by reporting the greatest strengths K-12 educators felt the program had to offer to both PSTs and themselves.

<table>
<thead>
<tr>
<th>For Pre-Service Teachers</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>It provides practice implementing coursework learnings</td>
<td>56.2%</td>
</tr>
<tr>
<td>It provides early opportunity to validate or change major</td>
<td>25%</td>
</tr>
<tr>
<td>It provides exposure to schools and the teaching profession in general</td>
<td>18.8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>For K-12 Educators</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>It provides extra hands to help with students’ academic needs</td>
<td>50%</td>
</tr>
<tr>
<td>It provides extra support for behavior and engagement needs</td>
<td>50%</td>
</tr>
</tbody>
</table>

The K-12 educators involved in the focus group sessions endorsed the BotG program and suggested it made a meaningful difference for their K-12 students as well as for the PSTs who completed service learning hours in their classrooms. All focus group participants had opened up hours for the BotG volunteers and planned to continue to do so in the future. For PSTs, the K-12 educators felt that they, as veteran educators, should be providing these opportunities to future generations of educators and expressed satisfaction at being able to do so. One participant said, “You are helping them in the future, too, if they’re education majors.” A second participant added to the first’s comment, saying, “And that’s part of the way I look at it. As teachers, we should help these students!” Focus group participants also felt the program benefited their students, too, with both academic and behavioral support. One went so far as to express frustration on the PSTs completing their hours, which attests to the benefits she saw for her students with the extra support:

*After they get the hours, they don’t come anymore. And so that kind of hurts. Like you have good volunteers and they’re coming consistently and then they meet their hours and*
stop coming... it’s like, ‘No! We had a groove!’ and now without her there it’s making it so hard. It’s not as easy.

However, this was not a blanketed finding, as one K-12 educator said, “When you’ve got the right person, it’s great. But when you don’t, you feel stuck.” Similarly, another said, “If you have a person who is not strong, you now have to worry about them doing things wrong. That’s something that, with this program, those volunteers become more of a frustration than a help.”

Within each of the focus group sessions, debates emerged regarding the level of satisfaction K-12 educators felt towards the BotG program and its true value to K-12 students and educators. While the K-12 educator participants appreciated the opportunity for an extra set of hands and eyes in the classroom, most conceded that the academic value was dependent upon a multitude of extraneous factors, including the competence of the PST on the subject matter, the ability of the PST with engagement and behavior management, the time the K-12 educator had to explain the task to the PST, and the motivation of the PST to engage in the activity. All of these elements affected the level of satisfaction K-12 educators had with the BotG program. Overall findings can be found in Table 10: Evaluation Question Four Findings for K-12 Educators.
Table 10: Evaluation Question Four Findings for K-12 Educators

<table>
<thead>
<tr>
<th>Theme</th>
<th>Information to Support</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact on K-12 students</td>
<td>50%: benefited students’ academic learning</td>
<td>Not uniformly beneficial</td>
</tr>
<tr>
<td></td>
<td>50%: helped in managing student behaviors and engagement</td>
<td></td>
</tr>
<tr>
<td>PSTs’ Commitment</td>
<td>Certain PSTs were less invested, coming more to fulfill hours than to support K-12</td>
<td>Seen more with PSTs who either weren’t education majors or weren’t in relevant</td>
</tr>
<tr>
<td></td>
<td>students</td>
<td>classrooms</td>
</tr>
<tr>
<td>Teaching ability of PSTs</td>
<td>Concerns: PSTs giving students answers, unable to manage behaviors, and incorrectly</td>
<td>“When you’ve got the right person, it’s great. But when you don’t, you feel stuck.”</td>
</tr>
<tr>
<td></td>
<td>teaching concepts</td>
<td></td>
</tr>
<tr>
<td>Supporting PSTs’ learning</td>
<td>100%: the program influenced and increased PSTs’ learning</td>
<td>Dependent upon a PST’s desire to grow</td>
</tr>
<tr>
<td>Inability to support PSTs’</td>
<td>75% unsatisfied with the amount of feedback they could provide PSTs</td>
<td>The desire to support PSTs shows the K-12 educators supported the program and its</td>
</tr>
<tr>
<td>improvement cycle</td>
<td>Lack of time</td>
<td>intentions for developing PSTs.</td>
</tr>
<tr>
<td></td>
<td>68.8% were unclear on the types of tasks they should be assigning to PSTs</td>
<td></td>
</tr>
<tr>
<td>Professionalism</td>
<td>CANCELATIONS: 100% of K-12 educators expressed frustration with PSTs who were “no-shows”</td>
<td>Both problems were isolated but left lasting impressions</td>
</tr>
<tr>
<td></td>
<td>DRESS CODE</td>
<td>K-12 educators encouraged increased communication and stricter guidelines pushed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>during orientations</td>
</tr>
<tr>
<td>Post-Completion of Service</td>
<td>Once PSTs completed their hours, they stopped coming</td>
<td>Small group facilitation is more difficult without extra help</td>
</tr>
</tbody>
</table>

*University Professors*

Qualitative data from interviews with the two university professors was used to answer evaluation question number four. In particular, interview questions 17, 18, 19, 20, and 21 were related to evaluation question four. The interview questions can be found in their entirety in APPENDIX E: INTERVIEW QUESTIONS FOR UNIVERSITY PROFESSORS.
Interview question 17 asked professors if there were any barriers that limited the program’s influence and success. Overall, availability, opportunity, timing, and scheduling were things that limited satisfaction with the program’s influence. Professors explained that the lack of high school opportunity limited their satisfaction with the program’s benefit to secondary educator majors. PSTs were encouraged to volunteer in a select few classrooms, preferably both primary and intermediate/secondary, to increase exposure. This would allow PSTs to get a ‘significant glance’ into classrooms as opposed to a ‘brief snapshot’ if they chose to volunteer in too many different classes and grade levels. However, PSTs’ personal schedules and the time slot openings offered by K-12 educators limited this to a certain extent, which impacted professors’ satisfaction with the program’s influence and success, too.

Interview question 18 asked whether the university professors felt the goals and objectives of the program were being met. Both professors felt that, for the most part, they were. One professor stated, “You can always do better, but the program, as it is, is working. It’s getting the PSTs into classrooms that want volunteers, putting them to work with students, and exposing them to the profession.” This shows that the professor was satisfied with the program’s ability to meet the stated goals and objectives. The professors also stressed satisfaction with the program’s ability to build community relationships rather than straining them, which helped get PSTs into schools and classrooms that wanted the extra help. Supporting local K-12 schools and not straining community relationships was another objective of the BotG program, and findings imply that professors were satisfied with the program’s ability to meet this objective.

Interview question 19 asked the professors if there were any aspects of the program that could be enhanced. One professor indicated a desire to collect data to support whether the program had an impact and/or benefit to participants and then develop a way to articulate this
information to others. This would have increased the professor’s satisfaction with the program as a whole. The other professor acknowledged the lack of high school partnerships during the 2017-18 school year, but stated that a partnership with a local high school was in the works, leaving the professor optimistic about overcoming this program barrier.

Interview question 20 asked about any unexpected effects of the program. One professor expressed that there had been some minor instances of dress code, professional etiquette, and individual problems, all of which were isolated to a few PSTs. At first, this was an element of dissatisfaction but, as these issues were addressed and more emphasis was placed on expectations in these regards during orientation, the professor expressed immense satisfaction at the decrease in number of issues reported. Overall, the professor was satisfied in that there were few issues and even some of the things that were originally negatives ended up being learning opportunities that allowed PSTs to grow in professional etiquette and teaching practices. While not mentioned as an unforeseen effect, the professors discussed that some of the PSTs had been identified by the local K-12 schools as hard-working and talented, resulting in them being offered employment as tutors after completing their coursework volunteer hours. Since employment was not stated as an explicit objective of the program, it could be include as an additional effect.

Overall, the university professors were very satisfied with the program. One professor explained that the opportunities to work in schools were some of the best chances for PSTs to begin deciding if they wanted to teach, what they wanted to teach, and to be able to practice skills and strategies before internship and subsequent employment. This professor said, “Barring internship, which is more consistent and a longer time period, I think that Boots on the Ground is an extremely valuable experience for those that participate.”
Overarching Themes

Through thematic content analysis, the researcher was able to identify some overarching themes found across participant groups in regards to the program, its influence, and its limitations. The process used for thematic content analysis can be found in Figure 5. While the aforementioned evaluation findings in this chapter do include themes, combining findings collectively rather than separating them out by evaluation question or participant group can also describe overarching themes found in this study. These themes are described in detail below and include professionalism, innovation, continuity, academic clarity, and improved professional practice.

Theme 1: Professionalism

Participants perceived that involvement in the Boots on the Ground program increased understanding of professional expectations of educators. In fact, 50% of K-12 educators interviewed felt that one of the most influential aspects of the program was in helping PSTs understand the profession and elements of professionalism. Thematic content analysis of PST interviews revealed the same theme in that the BotG program positively influenced PSTs’ professional practices, providing them the professional exposure needed to build relationships with K-12 students and educators, practice professional dress and dialogue, and create networking opportunities. Both K-12 educator and PST focus group findings also showed that the program had a positive influence for PSTs’ professionalism.
Dress Code

The BotG program provided access to K-12 classrooms, allowing PSTs the opportunity to practice dressing professionally, receive feedback if their attire did not meet expectations, and see professional educators in authentic classroom settings to note how they dressed.

Many K-12 educators reported isolated incidents of dress code concerns. Particularly in focus group sessions, participants discussed short dresses, clothing not suitable for sitting on the floor with groups, and clothing with holes in it as dress code concerns. All participants noted that these incidents were isolated, but also bothersome enough to still be recounted in detail months later. In detailing an incident with a PST that took place more than five months earlier, one K-12 educator said:

*Her dress was so short that she was constantly pulling on it, tugging down the hem. She had to cross her legs and sit sideways in the small chairs we use in my room. It’s like, you know, you’re coming to work with kindergarteners. You’re going to be on the floor. They’re going to be sitting and looking up at you. Dress professionally!*

This same K-12 educator noted that she saw marked improvements in dress attire during the spring semester.

The university professor participants both stated that they had to address isolated incidents of poor dress attire with some of their students (the PSTs). For the most part, though, the university professors felt that these dress code and professional etiquette issues were isolated to a few individual PSTs and that, when the K-12 principals began including specific expectations that addressed these elements of professionalism in their orientations with PSTs, it helped to alleviate these issues. This supports the K-12 educator’s statement above of the spring semester having far fewer dress code incidents than the fall semester. Furthermore, the university
professors felt that even some of those initially negative situations ended up becoming early opportunities for PSTs to learn professional etiquette and dress code expectations of educators and adapt accordingly.

Communication

Across all three stakeholder groups, participants felt that the BotG program offered a unique opportunity to improve professionalism and practice communication skills early on in college coursework. Particularly for PSTs who recently graduated from high school and were transitioning from adolescent to adult, being emerged in professional education settings allowed them to present themselves as adults and communicate accordingly, with modeled exposure being provided, too. This coincides with research from Hemmerich et al. (2015), who found that early exposure to K-12 classrooms for PSTs provides opportunities for these future professionals to “practice effective communication and teaching strategies” (p. 116).

As described by one pre-service teacher, “It’s a lot different and it feels cooler. You don’t really do that as a student, you know? Whenever you talk to your teacher when you’re younger it’s not the same as when you’re talking to them as a peer.” This PST felt that the BotG program allowed him to begin acting as a fellow professional and talk on a similar level as the K-12 educators, rather than as a student talking to teachers, which is what he had been doing the year before as a high school student.

Cancelations

Within professionalism, K-12 educators expressed that cancelations on the part of PSTs were an issue. In particular, 100% of the K-12 educators who participated in focus group sessions and interviews alike expressed frustration with PSTs who signed up for a time slot and then did not show up. This was specific to no-shows who did not notify anyone and did not apply
to the PSTs who signed up and then canceled with the 24-hour minimum required notice. Many K-12 educators expressed understanding for those with last-minute issues and were open to receiving an email on even the same day, but were extremely frustrated by PSTs who just did not show up at all and did not attempt to notify them. Below is an excerpt from one focus group session where K-12 educator participants went into detail about their concerns with cancelations:

**T4A:** So the one I have coming now has showed up when she was supposed to and kind of knows which kids to take and work with, you know. And the only, the only negative is, I have had times, other students, and I get things together for them and they just don't, they don't show up.

**T2A:** And some of them have legitimate reasons and some of them do call in. We’re not, you know, we are understanding.

**T3A:** Normally they let us know ahead of time if they can’t come.

**T4A:** Right, like sending an email.

**T5A:** Or if they cancel in time, our coordinator can tell us.

**T1A:** Or they can send an email to tell us they’re not coming in. It’s like anything in life! Just let someone know.

**T4A:** It’s just when they don’t tell us they’re not coming and we get it all together, that’s frustrating.

**T1A:** And you’re expecting this person for this small group.

In another focus group session with K-12 educators, a participant described a similar frustration with cancelations.

*For me, it’s that they are just not showing up and not telling anybody because the girl that didn't show up for me said that the, the online program or something requires them*
to give a 24-hour notice and she didn't have that so she just didn't tell anybody. And then when our coordinator person emailed her and was like, ‘Hey, the teacher said you didn’t show up today when you signed up for hours today.’ She's like, ‘oh, I'm really sick but I didn't get sick till last night.’ So I feel like they need to have some kind of system where they can contact the teacher who has signed up for these hours and is expecting them to show up. I had one last year who got in a car accident on the way and she figured out a way to email somebody here so that the message got to me.

Last minute cancelations affected the K-12 educators’ ability to have the extra support they wanted from PSTs. As one educator explained:

That was a problem I had last semester. I had one, literally, she would schedule for every single one of my times and then never show up. It got to the point where it's like, ok, I just didn’t even try to plan for her to be there. And then I never had anyone else able to come because of that one person.

Pre-service teachers who signed up for hours and did not cancel in a timely fashion prevented other PSTs from signing up to fill those slots, leaving the K-12 educators who wanted and were planning on additional help in the classroom without it. At times, this became a huge hindrance, such as on field day, when the PE teacher at one of the participating K-12 schools had created stations with PSTs to run each and then had many last minute cancelations, leaving him without enough help. As he explained, “field day was just a couple of weeks ago and I had it where people filled the morning session and then the day before they told me they couldn’t come and I was in a bit of a panic.” While he did acknowledge that his school’s field day coincided with PSTs’ spring break, he felt that once those PSTs did not cancel the day before, they would be showing up, which did not end up being the case.
For the most part, cancelations were isolated and school-based coordinators who worked with the university professors to express specific concerns helped to address this issue of professionalism and reduce the number of last-minute cancelations.

**Networking**

K-12 educators, university professors, and PSTs alike explained that signing up for volunteer hours and then talking with the K-12 educators and other school staff allowed PSTs to build relationships with K-12 schools, network, and practice adult-based communication skills. One PST, a secondary art education major struggling to find service learning hours specifically in art classrooms, was able to apply communication skills to network and open doors to work in additional Art classrooms at various K-12 schools after completing her mandatory BotG hours. Without the BotG program, this opportunity to network may not have been afforded to her. As she explained in her interview:

*They [the K-12 educators] have been really nice and receptive. One of them introduced me to the art teacher at the school...and then she talked to me about any art teachers that she would know of. So it’s really cool that they’re, you know, trying to help me out, because I feel like they were probably in the same situation at some point.*

Another PST expressed similar feelings of gratitude for the networking opportunity the BotG program provided to her.

*I feel like if I didn’t do this I would be going in as like a first year teacher and not really understanding and like kind of like a chicken with my head cut off running around trying to ask for friends. But this way I’m going to have these connections and if I ever need to ask I know I can reach out to [the K-12 teacher I worked with during BotG this semester] during my first year of teaching and I know she will help.*
Theme 2: Innovation

Participants felt that the Boots on the Ground program provided a unique, engaging, relevant opportunity to support both pre-service teachers and K-12 educators that was unlike other opportunities available to PSTs completing early coursework. Aspects of innovation within the BotG program included scaffolded instruction to the profession to support PSTs’ learning without overwhelming them; access to the profession and to willing, qualified K-12 educators; reciprocally beneficial opportunities; and early authentic experience concurrently with coursework learnings.

Scaffolded introduction to the profession

Coursework alone does not adequately prepare PSTs for internship or success as first-year teachers. Without hands-on learning experiences beyond just the senior year internships, PSTs do not receive enough relevant, meaningful, and varied exposures working with K-12 students to enter the workforce fully prepared to succeed (Richardson, 1996). The lack of hands-on experiences prior to internship leaves education majors ill-prepared for the many challenges of teaching because they lack exposure to real-world-based applications of learning prior to internship (Duck, 2007).

The BotG program was innovative in that it provided PSTs early experiences working with K-12 students in authentic, hands-on fashions. One PST stated, “What we are learning in the classroom is emphasized and experienced during the service learning hours.” This supports the theme of innovation via a scaffolded introduction to the teaching profession, as the BotG program aligned to coursework learnings and provided applicable opportunities to apply those learnings without requiring PSTs to take on the many additional responsibilities expected of them in internship and as first-year educators.
Access

The BotG program was also innovative in that it provided PSTs with early access to K-12 classrooms to both work with K-12 students and observe K-12 teachers in authentic settings. Through interviews with the university professors, the researcher identified the recurring idea that access to K-12 schools and classrooms is difficult for many PSTs to achieve. By establishing a connection with local K-12 schools via the BotG program, university professors were able to help the PSTs gain access to K-12 classrooms. Furthermore, they were able to dictate that these opportunities be hands-on rather than observational, meaning that they were able to have increased influence in the types of experiences PSTs obtained. The partnership between BotG professors and the K-12 schools also eliminated the need for PSTs to call or email schools to ask for volunteer opportunities, which decreased the strain on community relations between the associated university and school district and eliminated the burden of finding opportunities to volunteer from PSTs. One university professor felt that the access afforded by the BotG program allowed PSTs the opportunity to increase their understanding of the profession merely by being in a K-12 academic setting and also gain access to hands-on opportunities to practice coursework strategies and see themselves as successful. In addition, the university professor felt that access to K-12 classrooms helped PSTs better understand how schools operate, how different teachers teach, network with local schools, and interact with local school administrators, all in a comfortable, non-threatening setting.

Participants in the study suggested that the program provided access to PSTs to work in K-12 classrooms and gain real-world professional exposure as well as hands-on opportunities to apply coursework learnings. When describing her experience working with a first grade teacher, one PST said, “She’s a great one to watch. Her classroom management is incredible. She’s, I just
love her so much, I really do!” The K-12 educators felt that they, as veteran educators, should be providing this unique access to classrooms to future generations of educators and expressed satisfaction at being able to do so. One focus group participant said, “You are helping them in the future, too, if they’re education majors.” A second participant added to the first’s comment, saying, “And that’s part of the way I look at it. As teachers, we should help these students!”

It is important to note that a limitation to this form of access was that the BotG program did not provide opportunities to work in all facets of education. In particular, secondary education majors with subject-specific declarations, such as chemistry, experienced limited access to related classroom exposures. One PST identified this limitation, saying, “I was actually hoping to be able to observe and do service learning hours, not only for elementary, but potentially high school to get a good feel of where I might fit in best.”

Another aspect of access found through this study was that the BotG program was established with the innovative intention of exposing PSTs to best teaching practices in action. As explained by one professor:

*We don’t need students in classrooms to assist or aid struggling in-service teachers. We need them in classrooms with stellar examples so that they can mimic these traits in their future classroom and, in turn, experience success. I believe we would have LESS teacher attrition if students were all in positive environments from the start.*

The university professors who participated in the study felt that PSTs gained access to exemplary K-12 educators who were able to model best teaching practices, support PSTs’ learning, and provide meaningful tasks to build PSTs’ ability and self-efficacy as future educators.

As explained by the university professors, the authentic exposure to the teaching profession contributed to opportunities for PSTs to grow in both self-efficacy and preparedness.
as future educators, which contributed to the innovativeness of the BotG program. However, it is important to mention that a potential limitation to this conclusion is that the K-12 educators who participated in the BotG program were not all doing so of their own accord or because they were selected as exemplary educators. One university professor said, “The teachers WANT them [PSTs]. Teachers sign up for these volunteers and know that the whole premise of the program is not to watch but to interact with students in order to hone their small groups teaching skills.” However, the notion that all K-12 educators involved in the program wanted PSTs to volunteer in their rooms was found to be untrue. Two of the sixteen K-12 educators interviewed (12.5%) explicitly stated that they only allowed PSTs into their classrooms because the principal required it of them. This shows possible discrepancies between program ideals and program realities, which could limit innovative access of the program. However, the percentage of K-12 educators who appreciated the program was far greater, with 87.5% of interview participants and 100% of focus group participants being grateful for their school’s partnership with the university and the provision of the BotG program.

Reciprocally Beneficial Opportunities

The BotG program differed from the state-mandated observation hours required in Florida for education majors completing early coursework. Rather than merely sitting in classrooms watching K-12 educators, the expectation of professors utilizing the BotG program was that PSTs would work hands-on with K-12 students in small group settings. This innovative approach to early field experience supported research findings that PSTs’ experiences should be provided in conjunction with course learnings and should include multiple, varied exposures to the profession to be most beneficial (Brown et al., 2014; Tschannen-Moran & Woolfolk Hoy, 2001). The BotG program was innovative in doing this and also in that it created a mutually
beneficial relationship for the K-12 schools and the university, as now the K-12 educators were also benefitting from having PSTs in their classroom, as opposed to only PSTs benefitting through observation-based field experience. K-12 educators who participated in focus group sessions overwhelmingly felt that the BotG program benefited them and their K-12 students, providing both academic and behavioral support. One went so far as to express frustration on the PSTs completing their hours, which attests to the benefits she saw for her students with the extra support:

*After they get the hours, they don’t come anymore. And so that kind of hurts. Like you have good volunteers and they’re coming consistently and then they meet their hours and stop coming... it’s like, ‘No! We had a groove!’ and now without her there it’s making it so hard. It’s not as easy.*

This dilemma from a K-12 educator indicated that small group facilitation was more difficult without PSTs’ support. This concern shows that, in regards to the program itself, the approach was innovative and mutually beneficial, with K-12 educators wanted and appreciating the support provided by PSTs involved in the BotG program.

It is important to note that there were isolated incidents of negativity reported by having PSTs work with K-12 students. One such instance was that certain K-12 students ended up feeling isolated by repeatedly being singled out to work with the PSTs. One PST explained:

*Sometimes when I was working in this one classroom, the teacher had that same kid where she kind of just had me, not necessarily taking him aside one-on-one, but I was pretty much making sure he was paying attention and I just feel like the class can tell and the student can tell sometimes and it’s kind of uncomfortable for that kid and also for me. I don’t think they respond well always being singled out.*
The BotG program was implemented with one intent being to support K-12 students’ achievement. However, continuously having PSTs work with the same few individuals could contribute to those K-12 students feeling embarrassed or isolated rather than supported. This, in turn, could decrease their motivation to learn, effort towards tasks, or enjoyment of school.

Overall, findings indicate that the program did provide a mutually beneficial opportunity to K-12 schools and the participating PSTs. Best summarized by one of the university professors, “The program is going well. Teachers need help and this program provides that help, meaning that it is beneficial to both the university and the [local] schools. It can always go better, but it is working.”

Early Authentic Experience Concurrently with Coursework Learnings

As part of the theme of innovation, many PSTs interviewed indicated that participation in the BotG program increased their understanding of concepts taught in coursework, which in turn increased their perceptions of preparedness as educators. In focus groups, a similar common theme was found, with one participant stating, “It’s much more valuable than anything I can read or learn from a textbook.” Another participant said:

I had a class and we just sort of pushed into classes and I ended up, I’d just kind of stand in the back and grade papers and observe and stuff. And I feel like that is not as useful as when we actually get, like, when I get one-on-one time with the kids. I think that’s what really helps. For me at least, I learn more tools for educating by working with kids.

Whereas, when I was doing observing, maybe it helped pick up the tools, but it was hard to ever apply them.
Theme 3: Continuity

Across all three stakeholder groups, continuity emerged as a common theme of suggested improvement, with the overwhelming majority of participants feeling that the program had the potential to be more influential if elements of continuity were to be added. Chiefly, participants suggested that PSTs complete more hours or longer time slots within the same K-12 classrooms.

Continuity would provide PSTs the opportunity to better understand the students in a classroom, their diverse needs, and the K-12 educator’s classroom management style and small group expectations. It would also allow them to build deeper relationships with both the K-12 educators and students. As one PST stated, “I would prefer just one teacher so I could build that relationship, see how they handle things, especially the classroom management because I don’t understand classroom management yet.”

K-12 educators were also in favor of continuity, with 81.3% of interview participants expressing that the program was more influential for PSTs who chose to limit volunteer experiences to just 1-3 classrooms. Supporting reasons for this included the ability to build relationships with students and that it made it easier for the K-12 educators to interact with and observe the PST enough to provide relevant feedback. Focus group findings with K-12 educators revealed similar, consistent findings. One participant explained that the PSTs “can develop a routine and rapport with the kids by going to the same classroom multiple times,” which in turn would help to build PSTs’ preparedness and self-efficacy as future educators. Below is an excerpt from one focus group session focused on the topic of continuity:

**TSA:** The one thing I like most is having the consistency, you know, like having, I mean it’s not quite like a senior intern, but having the same person come consistently. Like I know that in the beginning we had many different and...
T4A: You have to stop everything and explain and they might not even come back again.

T2A: But when it’s a familiar face, they bond with the children.

T5A: Even good, bad, whatever they are, you know what you can ask them to do.

T4A: Just that same person.

Researcher: That makes sense. And that could be a suggestion. Now, looking at suggestions for the future anything else? Good, bad or suggestions?

T4A: I mean, one would be to encourage them to sign up for the same class.

T2A: That does, it makes a big difference. You know?

T5A: To not have to stop everything you’re doing for someone new.

T4A: So, you know, go to the same class several times so that you can develop a routine and rapport with the kids.

University professors who were interviewed stated that they encouraged the PSTs to limit their exposures to 1-3 classrooms, which would provide them with a significant glance into those rooms, as opposed to a snapshot if they volunteered in too many rooms. However, the university professors acknowledged that factors such as availability and scheduling limited the ability for PSTs to do so at times.

Theme 4: Academic Clarity

Often, PSTs majoring in education select their major based on perceived ideals of teaching, many of which are not the same as the realities of the profession (Olsen, 2008). For this reason, early exposure to the profession is needed to help PSTs better understand expectations of the profession and determine if it is still the career path they want to pursue (Johnston, 1994). Through interviews with the university professors, the researcher determined that academic clarity for PSTs, or a more secure understanding of whether the education profession was the
correct career path to pursue or not, was an expected outcome of the BotG program. “They need
to know what today’s classroom looks like and if this profession is a good fit for them,” said one
university professor. The other professor supported this belief, explaining that early exposure to
the profession allows PSTs to either start their commitment to teaching earlier or realize that
teaching is not a good fit for them before it is too late to switch majors and still graduate on time.

Triangulation of data sources and methods revealed that academic clarity was not just a
program ideal, it was a theme, with all three stakeholder groups feeling that the BotG program
provided authentic exposure to the profession to inform career-based decisions for PSTs. One
PST expressed a strong desire to teach in one of the intermediate grade levels at the beginning of
the semester but, after participating in BotG, her career focus had shifted. As she explained:

    I chose [a first grade teacher] but I didn’t actually want to do first grade. I didn’t want to
    teach it, I just chose it because that was one of the first teachers available. So I picked
    her and was like, ‘ok, whatever, first grade’ but I was wanting to teach second, third, or
    fourth so I picked a third grade class. But now I’m totally against third grade! [The third
    grade teacher] is a good teacher, it’s just the kids, they start to get like their own
    personality. They start to have the attitude of like, ‘no don’t tell me what to do.’ And I
totally, I, she is incredible at handling it, but I personally feel like I’m not ready to handle
    that so I’m leaning towards first now...I chose first on accident and now I love it and
    chose third on purpose and I hate it.

For PSTs, participation in the BotG program provided the opportunity needed to decide whether
or not they wanted to continue as education majors and did so during early coursework, allowing
those who decided to switch majors the time to switch early on. One PST stated, “I really hoped
to get hands-on experience with kids to see if I wanted to be a teacher or not, and I did. I realized
I want to work with kids but not become a teacher." The opportunity afforded to this PST by the BotG program allowed the PST to change majors before delving too far into the coursework.

Limitations to Academic Clarity

While the theme of academic clarity was strong and present across all data collection types, it was not without limitation. While 50% of K-12 educators indicated that PSTs received early exposure to the profession that could help make career-based decisions, half of those same respondents (so 25% of the sample) acknowledged that limitations in availability could reduce this influence. They felt that the program would have been more influential for PSTs had they been able to select the classrooms, subjects, and grade levels they most desired to see rather than being limited by what was available. Secondary education majors, in particular, were used as the example of this limitation, as potential secondary education majors wanting exposure to high school classrooms were unable to get it. The university professors also acknowledged this, stating that a limitation of the program was that there was not currently a high school partnership, which meant PSTs wanting exposure to high school classrooms would not be able to get that opportunity within the program.

Pre-service teachers also continually emphasized that availability limited their ability to take advantage of opportunities and make career-based decision. Chiefly, lack of high school options, K-12 schools geographically distant to PSTs’ homes, and the inability to match one’s personal schedule with the K-12 school’s available time slots were the main aspects of availability limiting the program’s influence on career-based decision-making for PSTs. As explained by one secondary education major, “There weren’t any high schools and the middle school wasn’t available for my times.”
Theme 5: Improved Professional Skills

Bandura (1993) explained that the most influential way of increasing self-efficacy is through mastery experiences, or experiencing first-hand oneself being successful. Positive, successful field experiences support teachers’ increases in self-efficacy. Similar research by Sangster et al. (2016) found that, through hands-on applications of learning, “student participants typically experience personal and professional development, begin to think and work like researchers, hone academic skills, clarify and refine their career and educational pathways, and become better prepared” (p. 3). These findings resonate with this study, where an emergent theme was that participation in the BotG program led to improved professional skills for PSTs in both understanding of the profession (self-efficacy) and ability as professionals (preparedness).

Through analysis of interviews with the university professors, the researcher determined that the professors’ primary goal in using the BotG program was to increase PSTs’ pedagogical skills and confidence as future educators to better prepare them for internship and subsequent employment as educators. This goal then emerged as an overarching theme as improved professional practice was continually noted by K-12 educators and PSTs, too.

Data triangulated from all data sources and methods indicate that participation in the BotG program provided significant opportunities to practice instructional strategies, engagement practices, and gain exposure to the profession, all of which contributed to increases in self-efficacy and improved professional practice in PSTs. Both K-12 educators and university professors felt that the exposures and experiences afforded to PSTs have the potential to help equip PSTs for success as future educators. In fact, 100% of the K-12 educators interviewed felt that the BotG program provided experience working with kids in an academic environment and supported PSTs’ learning and confidence. One K-12 educator even went to far as to explain that
he had only been allowed to observe during early coursework as an education major and said, “As a former student, I wish I’d had it.”

This is similar to feedback from the university professors, who felt that the hands-on component of BotG increased the program’s influence as opposed to observing in classrooms or learning merely through textbook and lecture. “Observation does not allow you to implement concepts and strategies taught in coursework, such as ESOL strategies, engagement techniques, and interacting with students in an academic environment,” explained one professor.

**Improved Understanding of Differentiation**

All stakeholders consistently cited preparation for teaching as an element influenced by participation in BotG. In fact, 93.8% of K-12 educators interviewed stated that PSTs participating in the BotG program benefited due to the authentic, hands-on exposure they received to the teaching profession. This included increased understanding of small group differentiated instruction as well as adapting for diverse learners’ needs. Similarly, the PSTs indicated that participation in the BotG program increased both their perceived preparedness and self-efficacy for working with diverse students and being sensitive to their unique needs. This carried forward as an appreciation for the need to develop differentiated lessons and expectations based on student readiness, learning style, or interest. PSTs discussed how their understanding of the profession and its requirements increased merely by being in K-12 classrooms. One focus group participant stated, “Seeing the difference between different types of learners gave me, like, a deeper appreciation for the different types of teaching you have to do even within one group.”

**Limitations to Improvement in Professional Skills**

While the majority of PSTs interviewed felt that participation in the BotG program increased their confidence, or self-efficacy, as future educators, 15.4% did not feel this way,
attributing it to the lack of relevant exposures due to being secondary education majors without the ability to volunteer in high school classrooms. In a focus group session, one participant identified this same limitation, saying, “I was actually hoping to be able to observe and do service learning hours, not only for elementary, but potentially high school to get a good feel of where I might fit in best.”

A second limitation to the program’s influence highlighted predominately by K-12 educators was lack of feedback, which 75% of K-12 educators participating in interviews noted as a limitation. In fact, 62.6% of K-12 educators interviewed said they were unable to provide any feedback at all, with 31.3% attributing it to limited time and another 31.3% saying it was due to not knowing the exact program objectives to know if PSTs were achieving the expected goals. One K-12 educator expressed frustration about factors limiting her ability to provide feedback to the PSTs, saying, “It’s also the time that it takes for you to articulate what you want them to do and how they can help facilitate that small group, you know, because you’re in the middle of teaching when they arrive. You’re not always able to guide them and train them effectively.”

Finally, it is important to note that K-12 educators emphasized in both focus group sessions and interviews that the extent of the program’s influence depended on PSTs’ desire to engage in the experience. 18.8% of K-12 educators reported at least one instance in which the PST was unmotivated and seemingly volunteering more for the hour completion component than for the experience. This coincides with a concern that one university professor addressed, which was that the program’s focus is on experience rather than ensuring that PSTs are meeting expectations, which means that PSTs must be self-motivated to make the most of their time in K-12 classrooms. Despite this, 100% of K-12 educators interviewed felt that the program facilitated learning for PSTs. Specifically, 75% of these respondents stated that the hands-on aspect of the
program benefitted the PSTs and, for those PSTs who were reluctant to get involved, forced experience upon them.

**Summary**

Using both qualitative and quantitative data collection from three primary stakeholders, evaluation findings were triangulated. The data illustrates that the BotG program had a positive affect on participants. For PSTs, survey results indicate that the differences between the pre-survey and the post-survey were statistically significant for both perceived preparedness and self-efficacy, which suggest that BotG positively influenced PSTs’ perceived preparedness and self-efficacy level to teach. Interview and focus group data supports these findings for PSTs.

As identified by qualitative and quantitative data alike, the program met many of its intended outcomes, though program ideals were not always program realities. Collectively, all three stakeholder groups were satisfied with the BotG program, with PSTs and university professors being more satisfied than K-12 educators.

Segebrecht (2010) found that an essential purpose of field experience for PSTs is to provide them with an assortment of opportunities for both exposure and experience purposes. Based on findings, this was achieved.
CHAPTER FIVE: SUMMARY, DISCUSSION, AND RECOMMENDATIONS

Introduction

Effective small group instruction is a daunting challenge for classroom teachers. For interns and novice teachers with limited experience in the field, this task can be even more demanding. L'Allier and Elish-Piper (2007) state that one of the most impactful ways of helping pre-service teachers (PSTs) “understand, value, and thoughtfully apply research-based practices in their student teaching and ultimately in their own classrooms is to have them experience and apply strategies in the coursework” (p. 339). Without early exposure facilitating small group instruction, PSTs may not receive the opportunities needed to implement concepts taught in coursework.

The Boots on the Ground (BotG) program seeks to address this concern by exposing PSTs to direct instructional opportunities with small groups of K-12 students concurrently with early education coursework. This program is used by certain education professors at one large metropolitan university in the southeastern United States to support class-based learnings and provide early, authentic opportunities for PSTs to work with K-12 students. In essence, the BotG program shifts the role of the PST from passive observer to active facilitator of learning. The primary goal of the BotG program is to increase PSTs’ pedagogical skills and confidence as future educators to better prepare them for internship and subsequent employment as educators. Subsequent goals of the program include supporting local K-12 schools and providing authentic exposure to the profession to inform career-based decisions for PSTs. Goodwin et al. (2005) found that many educational leadership scholars encourage multiple field-based experiences to
better prepare PSTs as future educators. This is because field experiences expose PSTs to authentic realities of the profession rather than scripted situations in textbooks or ideals held from their own childhood educational experiences (Harfitt, 2015).

In chapter four, the analysis of the data was reported. In this chapter, the researcher will begin by offering a summation and discussion of the findings presented in chapter four. To better assist readers, the summary of findings has been organized using the four evaluation questions, which guided the study. In each summary, the researcher will examine the data and illuminate any conclusions that were drawn. Following the summaries is a discussion and synthesis of the study as well as insights gained from it. In the final section of this chapter, inferences and implications for education as well as recommendations for further research have been offered.

**Purpose of the Study**

This study was a mixed methods program evaluation that used interviews, focus group sessions, and surveys to explore stakeholders’ perspectives on the influence of the BotG program. The primary purpose of this study was to determine the affect the BotG program had on perceived preparedness and self-efficacy of pre-service teachers (PSTs). Additionally, the study analyzed the program’s impact on different stakeholder groups and each group’s overall satisfaction with the program, including if the BotG program was meeting its intended objectives.

The study used a participatory approach to program evaluation, which allowed multiple groups of stakeholders to provide feedback and experience on the program, including the benefits of coursework in relation to practical experience. Three primary stakeholder groups were included: pre-service teachers, university professors, and K-12 educators. These stakeholders occupy a range of power positions in the community and use of the participant-
oriented approach allowed each stakeholder group to be heard rather than accentuating one group’s views at the expense of the others (Ross, 2010). Given that all three stakeholders have a vested interest in seeing the PSTs succeed, the participant-oriented approach was used to enhance the quality and relevance of the evaluation and better incorporate the multiple perspectives involved in implementing the BotG program. In keeping with the formative nature of the study, the research relied on implementation evaluation for an evolving program and preliminary perceptions of effectiveness (Chen & Garbe, 2011). This approach allowed the researcher to compile findings that could be used by stakeholders to inform decisions going forward with the program.

Use of multiple stakeholder groups and multiple data types allowed the researcher to triangulate results and strengthen overall findings and themes. Triangulation is an essential piece in qualitative and mixed methods studies because it “increases the likelihood that the phenomenon under study is being understood from various points of view” (Ary et al., 2006, p. 505). Triangulation helps to proffer either a mutual confirmation of findings or to support a thorough understanding of the phenomenon (Krefting, 1990, p. 219).

Qualitative data was acquired through interviews and focus group sessions with different stakeholders. The goal of these qualitative data collection tools was to get first-hand feedback on the program, the extent to which it met its stated objectives, and ways in which it could be improved. Quantitative data was acquired through use of pre- and post-surveys completed by PSTs reflecting on their perceived pedagogical skills and feelings of self-efficacy for teaching prior to (pre-survey) and after participating (post-survey) in the BotG program. The goal of these surveys was to determine PSTs’ perceptions concerning the growth they experienced in preparedness and self-efficacy as educators by working with K-12 students. Use of both
qualitative and quantitative data across the three primary stakeholder groups was utilized to support triangulation of data findings.

It is important to emphasize that the focus of this study was to determine the influence and inform improvement for the BotG program at one particular university in the southeastern United States. Further studies and additional data would be needed to extend findings to a larger scale. This study only sought to determine if the program was achieving its targeted goals and what aspects should be modified for increased success in future usage at the one particular university in which it was being implemented. Results from the study do not claim to fix the current problem of practice; they merely serve as one step in the right direction for addressing the issue of poor or unrelated preparation of PSTs.

Four specific evaluation questions guided the study:

1. Does participation in the Boots on the Ground program affect pre-service teachers’ perceptions of preparedness and self-efficacy?
2. What are stakeholders’ perceptions regarding the influence of the Boots on the Ground program?
3. Did the program contribute to the intended outcomes? (Were there any unintended outcomes, good or bad, on program participants?)
4. Are participants satisfied with what they gain from the program?

Discussion of the Findings

Evaluation Question 1

Does participation in the Boots on the Ground program affect pre-service teachers’ perceptions of preparedness and self-efficacy?
For this question, the PSTs in particular were the stakeholder group analyzed. Their responses in both interviews and focus group sessions as well as the open-ended post-survey question were used to collect qualitative data. Quantitative data was gathered from Paired Samples t-Test findings of pre- and post-surveys as well as descriptive statistics from additional post-survey questions. Quantitative data findings indicate that PSTs who participated in the BotG program showed statistically significant growth in both perceptions of preparedness and self-efficacy, indicating that the program was beneficial to PSTs. Interview and focus group data support these findings. Furthermore, SPSS Statistical analysis found that results for self-efficacy were interrelated, but results for perceived preparedness were not. Ultimately, PSTs felt strongly that participation in the BotG program provided significant opportunities to enter classrooms and practice instructional design, delivery, and engagement practices, which contributed to growth in both perceived preparedness and self-efficacy.

Opportunities to interact with K-12 students and apply concepts taught in coursework were continually emphasized by PSTs in both interviews and focus group sessions as positive contributors to authentic learning. A limitation of the program’s influence was in availability. In particular, the lack of high school partnership schools and the misalignment between time slots offered by K-12 educators and PSTs’ personal availability limited the program’s influence. Despite this limitation, 73.1% of PSTs interviewed felt that the program absolutely facilitated their growth as future educators, 23.1% felt the program somewhat facilitated growth, and only 3.8% felt that the program did not facilitate professional growth. Similarly, 23 of 26 PSTs interviewed would absolutely recommend the program, and all three of the other respondents would recommend the program with minor tweaks in availability. These findings support the
conclusion that the program had a positive influence on PSTs perceived preparedness and self-efficacy despite certain limitations.

Knowing that self-efficacy is one of the few reliable predictors of a teacher’s instructional practices and, in turn, K-12 students’ achievement, growth in self-efficacy is important (Tschannen-Moran & Woolfolk Hoy, 2001). Especially given research supporting the notion that self-efficacy is most significantly developed during pre-service experiences, the statistically significant findings support the notion that the BotG program contributed to increased self-efficacy and, in turn, increased future professional success for PSTs (Brown, et al., 2015). For preparedness, Christenbury (2006) maintained that “no class or book can teach a beginner or novice what to do and how to do it in every specific instructional incident” (p. 44). Authentic applications of coursework learnings are needed for this. Similarly, L’Alliet and Elijah-Piper (2007) found that one of the most impactful approaches to supporting PSTs as they work to “understand, value, and thoughtfully apply research-based practices in their student teaching and ultimately in their own classrooms is to have them experience and apply strategies in the coursework” (p. 339). This research, together with the study’s findings, support that the BotG program positively affected PSTs’ perceived preparedness and self-efficacy, which has the consequential potential to lead to other positive impacts on their success and the success of their future students.

**Evaluation Question 2**

What are stakeholders’ perceptions regarding the influence of the Boots on the Ground program on participants?

Through triangulation of data from all three primary stakeholders and the multiple forms of data, the researcher found that participants perceived the BotG program as influencing PSTs,
K-12 schools, and the surrounding community. For PSTs, the researcher found that the program influenced their ability to decide early on if education was the correct career path for them. It also influenced PSTs’ understanding of professional expectations for educators and preparedness and self-efficacy. Findings also indicated limitations to the program’s influence on PSTs, namely limitations due to lack of feedback from K-12 educators, limited availability offerings, and instances of program ideals not matching program realities. For the influence on K-12 schools, findings indicated that the program influenced K-12 students’ academic achievement and their behavior and engagement. Finally, findings suggest that the program positively influenced community relations. Specifically, it provided meaningful opportunities for PSTs to volunteer in local schools, allowed PSTs access to those schools without burdening community relationships, and supported local K-12 educators, most of whom wanted the extra help.

**Evaluation Question 3**

Did the program contribute to the intended outcomes? (Were there any unintended outcomes, good or bad, on program participants?)

In answering this question, the researcher first used information gleamed in interviews with the university professors to determine the intended outcomes of the BotG program. Then, information gathered from all stakeholders was used to determine if the program contributed to those, and/or other, outcomes. The university professors emphasized that the primary goal of the BotG program was to increase PSTs’ pedagogical skills and confidence as future educators to better prepare them for internship and subsequent employment as educators. Subsequent goals of the program included supporting local K-12 schools and providing authentic exposure to the profession to inform career-based decisions for PSTs.
Findings indicate that the BotG program did indeed provide PSTs access into K-12 classrooms, but that this outcome was limited in that not all classroom types—namely high schools—were available and not all participating K-12 educators were as keen on having PST volunteers in their classrooms as university professors felt they would be. Overwhelmingly, PSTs were provided opportunities to work with small groups of students, but not all experiences were relevant to PSTs. 100% of PSTs felt that the program’s experience was relevant and meaningful, though 68.8% of K-12 educators were unclear on the exact program objectives to know if the work they were assigning to PSTs supported coursework objectives or not.

In regards to the program’s contribution to the intended outcomes on K-12 schools, findings imply that, while 87.5% of K-12 educators were grateful for their school’s partnership with the university’s BotG program, the other 12.5% of K-12 educators were forced to participate in the program. It is important in this regard to emphasize that the program’s ideals—namely that only those teachers who wanted the additional help of PSTs signed up for hours—were not always program realities. This is a point that reflects on communication and collaboration between the university and K-12 principals.

Another intended outcome of the program was to support K-12 student learning. However, there were instances reported by K-12 educators of PSTs misinforming students or giving them answers rather than guiding them, which detracted from achievement of that objective. 18.8% of K-12 educators also reported at least one instance in which the PST was unmotivated and seemingly volunteering more for the hour completion component than for the experience, which limited that individual’s influence on student achievement. However, overall, 62.6% of K-12 educators interviewed felt that the overwhelming majority of PSTs positively influenced students’ learning and they were grateful for the support of the PSTs.
Unintended outcomes of the program included instances of isolating K-12 students by focusing too much effort on their individualized instruction and instances of increased stress for K-12 educators due to having too many different PST volunteers or having volunteers who struggled with classroom management and behavior.

**Evaluation Question 4**

Are participants satisfied with what they gain from the program?

Overall, all stakeholders were satisfied with the program, with each having areas of concern or for potential growth. PSTs and university professors were both overwhelmingly satisfied, with K-12 educators being mostly satisfied but acknowledging more limitations to the program than the other stakeholder groups.

**Pre-Service Teachers**

For the PSTs, interview analysis showed that 76.9% of respondents said that they were satisfied with the program, 19.2% felt somewhat satisfied, and 3.8% were not satisfied. Most common amongst reasons for not being fully satisfied with the program was not having opportunities to volunteer in schools, subjects, or grade levels that matched PSTs’ career aspirations. Namely, 50% of respondents stated that lack of availability influenced their level of satisfaction with the program. These findings were seen in focus group sessions, too, with participants stating that the program provided a valuable opportunity to apply coursework learnings, interact with K-12 students in authentic settings, and go beyond just textbook or observational learning experiences, but participants would have liked more time slot openings and the addition of a high school offering.

100% of PSTs who participated in interviews said that they felt the K-12 educators appreciated them being in their classrooms. This finding was seen in focus groups with PSTs,
too, where a common theme was that PSTs felt appreciated. 84% of PSTs who participated in the interviews also felt they were provided with tasks that aligned to what they wanted to experience. These two findings coincide with opportunities to grow in self-efficacy and perceptions of preparedness, both of which were afforded by participating in the BotG program.

Quantitative survey results triangulated this finding for PSTs. On a Likert scale ranging from one to seven—with one being strongly disagree and seven being strongly agree—PSTs showed an average of 6.377 (SD=1.092) in belief that the work was a valuable addition to accompany academic studies. Similarly, the mean for recommending the experience to future PSTs was 6.584 (SD=0.909). Both of these responses show favorable levels of satisfaction with the program.

The most prevalent theme of dissatisfaction was in regards to the availability offerings within the program. This included grade levels, subject areas, school types, school locations, time slot durations, and times of day. Across surveys, interviews, and focus group sessions alike, a common theme amongst PSTs was wanting more availability in all of those availability types. Given that participants wanted more availability rather than to eliminate the program due to limited availabilities, this is a strong indication that the PSTs were satisfied with the BotG program, viewing it as a positive and valuable experience.

*K-12 Educators*

The K-12 educators were the least satisfied of all three primary stakeholders, though the overall findings still indicate that the program was beneficial to them and their students. First and foremost, K-12 educators were satisfied with the impact the program had on their K-12 students’ learning. Half of interview participants stated that it benefited the academic learning of their students and the other half indicated that it helped to manage behaviors and
engagement. Collectively, 100% of K-12 educators felt that the program positively impacted their students, which shows a high level of satisfaction with the program. Despite this, some K-12 educators felt that certain PSTs were less invested in the program, coming more to fulfill hours than to support students. Also, certain K-12 educators expressed concern with PSTs giving students answers, being unable to manage behaviors in small groups, and incorrectly teaching concepts, all of which decreased the extent of their satisfaction with the program. Summarized best by one K-12 educator participating in a focus group session: “When you’ve got the right person, it’s great. But when you don’t, you feel stuck.”

The most significant theme of satisfaction seen by K-12 educators was in regards to supporting PSTs’ learning. Overwhelmingly, K-12 educators felt that they should help PSTs and that they wanted to do so and 100% of K-12 educator participants felt that the program influenced PSTs’ learning. It is from this theme that another one of lesser satisfaction emerged: K-12 educators were dissatisfied with the extent of the program’s influence due to the limited amount of feedback and support they were able to provide to PSTs. 75% of K-12 educators reported feeling unsatisfied with the amount of feedback they were able to provide PSTs. Chiefly, they were frustrated with the lack of time they had to provide this feedback. Further impacting satisfaction, 68.8% of K-12 educators felt unclear as to exactly what was expected of them in regards to the tasks they assigned to PSTs, which negatively influenced feelings of satisfaction for supporting PSTs’ learning. Though a negative in itself, this desire to support PSTs shows that the K-12 educators involved in the study were satisfied with the purpose of the program and with the intention of developing the PSTs.

Another strong area of dissatisfaction expressed by K-12 educators was in regards to cancelations. In particular, 100% of the K-12 educators who participated in focus group sessions
and interviews alike expressed frustration with PSTs who signed up for a time slot and then did not show up. This was specific to no-shows who did not notify anyone and did not apply to the PSTs who signed up and then canceled with the 24-hour minimum required notice. Many K-12 educators expressed understanding for those with last-minute issues and were open to receiving an email on even the same day, but were extremely frustrated by PSTs who just did not show up at all and did not attempt to notify them.

One final theme found in focus group sessions and interviews alike was that, once PSTs completed their hours, they stopped coming. This was an area of dissatisfaction for K-12 educators, who indicated that small group facilitation was more difficult without the extra help. This concern shows that, in regards to the program itself, K-12 educators were satisfied with and wanted the support provided by PSTs via the BotG program.

*University Professors*

The two university professors included in this study expressed strong satisfaction with the program, noting opportunity, entrance into schools, ability to interact with K-12 students and educators, early exposure to the profession, and opportunity to make early career choices as elements of satisfaction. Their overall satisfaction was high, with one professor professing, “You can always do better, but the program, as it is, is working. It’s getting the PSTs into classrooms that want volunteers, putting them to work with students, and exposing them to the profession.”

Both professors also emphasized the increased satisfaction they felt in having students complete hands-on service learning hours as part of the BotG program rather than observation alone. They emphasized that observation would not allow PSTs to engage with diverse learners and apply strategies and skills taught in coursework. This contributed to their satisfaction with the program.
Each professor noted an area of growth that they wanted to see in the future, which could be interpreted as shortcomings of the program or areas of decreased satisfaction. One professor expressed a desire to collect data on the impact the program had in different elements of the profession and then articulate those benefits to others to better support the program’s relevance and expand it. The other professor expressed concern over the assessment component with the BotG program. This professor felt the program would increase its impact by having some form of checklist or rubric aligned to the expectations as well as formative assessments from the supervising teachers and the professors. As it stands currently, the program is more about the experience itself.

**Implications for Practice**

Segebrecht (2010) found that an essential purpose of field experience for pre-service teachers is to provide them with an assortment of opportunities for both exposure and experience purposes. Based on overall findings across multiple stakeholder groups using both qualitative and quantitative data, the Boots on the Ground program achieved this purpose. Bandura (1997) emphasized that positive changes in self-efficacy require feedback, with changes in self-efficacy being most significantly influenced during pre-service years (Hoy & Woolfolk, 1990). As it stands currently, the most significant limitation to the program’s influence identified by K-12 educators was the lack of feedback, due to time constraints, limited understanding of the professors’ objectives for PSTs, and having too many different PSTs volunteer in classrooms. For pre-service teachers, the program’s influence was limited by availability, including grade levels, school types, geographic proximity to PSTs, and subject offerings as well as the alignment of offerings with PSTs’ personal schedules. Despite this, PSTs still found the program to be beneficial and recommended its continuation in future semesters.
Limitations of the Study

Limitations are variables that could inhibit the effectiveness of the study. Acknowledging limitations allows the researcher and those reading about the study to better interpret the results, their implications, and further applications of the project. Additionally, limitations can also serve as the foundation for future studies.

It is important to note that this study is specific to the Boots on the Ground program and its implementation at one particular university. More research is needed to see if the results are generalizable to other education programs nationwide. The study also relies heavily on qualitative data and, despite much research on the validity of qualitative data, the scientific world still tends to give priority to quantitative studies. In addition, the quantitative data collected from pre-service teachers is self-reported and relies upon honest self-reflection and reporting by participants. It is possible that PSTs over- or under-estimated their abilities. However, since they determined their level of expertise both before and after completion of the program, both surveys could and likely would be impacted by this factor. Furthermore, it is assumed that the PSTs genuinely want to improve the program and also understand their level of expertise so as to improve accordingly as educators, which contributes to more honest estimates of ability. Self-report surveys are, nevertheless, subject to multiple forms of bias, such as impression management, demand effects, and differences in understanding of key aspects of the requirements of the intervention (Humphrey et al., 2016). The results of the surveys should, therefore, be viewed in relation to this self-report limitation, acknowledging that they capture participants’ perceptions of preparedness and self-efficacy and not the actual preparedness and self-efficacy observed in the classroom as they teach. Thus, findings in inclusive classrooms may not be congruent with PST survey responses.
It is important to note that this study is limited in that it does not compare the BotG program to other programs or to a control group of PSTs completing just the state-mandated observation hours. Being that it was a program evaluation, the researcher did not seek to determine or compare the effectiveness of pre-service coursework requiring only observation hours. In future studies, PSTs who did not participate in the intervention program could complete the pre/post surveys. This would help to establish the counterfactual, or what happens in the absence of change, which is important for showing causal effects (Durlak & DuPre, 2008).

**Recommendations for Further Research**

This study was a program evaluation of one particular program implemented by select professors at one university. It sought to determine if program goals were being accomplished, if participants were satisfied with the program, and if the program contributed to increases in pre-service teachers’ perceptions of preparedness and self-efficacy. While it did utilize some quantitative data, that data was self-reported by PSTs on their perceived abilities. The question of whether this program contributed to any statistically significant differences in increases as compared to other programs at other universities or even as compared to the state-mandated observation requirement remains unanswered. The researcher’s recommendation for future research would be to conduct a quantitative comparison study, looking at growth in PSTs using the BotG program as compared to other programs as well as compared to a control group.

The researcher also recommends conducting a longitudinal study, following the BotG program participants into internship and their first five years of teaching to see if the results carry over to long-term impacts on success and commitment to the profession. The longitudinal study could also be comparative, looking at the BotG program’s long-term effects as compared to those of other programs.
A final recommendation would be to incorporate a rubric or checklist assessment of some sort for K-12 educators and university professors to complete for PSTs. The data could then be analyzed to determine if the PSTs’ perceptions of preparedness were in line with the K-12 educators’ and university professors’ perceptions of their preparedness. This could help offset the limitation of self-report survey results.

**Summary**

Poor or unrelated pre-service preparation of education majors prior to graduation leads to low retention of novice teachers (Zhang & Zeller, 2016). Researchers emphasize that this revolving door phenomenon can be addressed by providing concurrent pedagogical coursework training and authentic field experience to PSTs throughout all four years of the university-based education program (Brown et al., 2014; Tschannen-Moran & Woolfolk Hoy, 2001). This will not only prepare future educators, but also increase their commitment to the profession (Jorissen, 2002).

The Boots on the Ground (BotG) program used by certain education professors at one large metropolitan university in the southeastern United States is meant to do this, supporting class-based learnings while also providing early, authentic opportunities for PSTs to work with K-12 students. The primary goal of the BotG program is to increase PSTs’ pedagogical skills and confidence as future educators to better prepare them for internship and subsequent employment as educators. Subsequent goals of the program include supporting local K-12 schools and providing authentic exposure to the profession to inform career-based decisions for PSTs.

This program evaluation of the BotG program found that the program supported increases in PSTs perceptions of preparedness and self-efficacy. It also provided additional support to K-12 students with focuses on both instructional and behavioral support. All stakeholder groups
identified limitations in the program’s influence, but overwhelmingly showed support for the program and its influence on participants.

The Boots on the Ground program is just one program being implemented at one university to offset the revolving door effect of poorly prepared education majors becoming unprepared first-year teachers who leave the profession shortly after entering it. Hands-on experiences as PSTs allow future educators the opportunities to grow in both preparedness and self-efficacy and should, therefore, be embedded into university course requirements. These experiences should be provided in conjunction with course learnings and should include multiple, varied exposures to the profession (Brown et al., 2014; Tschannen-Moran & Woolfolk Hoy, 2001). With increased focus on K-12 student achievement and associated needs for highly qualified educators, the groundwork for accomplishing these ambitious goals is laid during pre-service training of education majors. The gap between teacher preparation in university-based programs and real-world expectations of novice educators must be bridged.
APPENDIX A: LOGIC MODEL
In order to accomplish our set of activities we will need the following:

**Resources**
- K-12 Educators and Administrators
- University professors using the Boots on the Ground (BotG) program
- University students majoring in education
- K-12 Students
- Training Materials

In order to address our problem, we will accomplish the following activities:

**Activities**
- Recruitment to gain participants
- University and K-12 school partnerships
- Training services for K-12 educators
- Training services for PSTs
- Field Experiences

We expect that once accomplished these activities will produce the following evidence or service delivery:

**Outputs**
- # of volunteer hours
- Increased understanding of the profession
- Improvement in PSTs’ professional skills
- Increased K-12 student engagement and academic support
- Improved content for training services
- # of partnerships

We expect that if accomplished these activities will lead to this **ACTION**:

**Short-Term and Intermediate Outcomes**
- Increased knowledge of small group instruction, engagement, and classroom management
- Increased clarity of career interests
- Increased PST self-efficacy
- Mutually beneficial partnerships between university and K-12 schools
- Increased small group instruction for K-12 students
- Stakeholders’ perceptions increase

We expect that this will lead to the following **IMPACT** (often involve changes in status or life conditions):

**Impact**
- Continuation and expansion of BotG
- Increased K-12 student academics and behavior
- Improved collaboration between the university and school districts
- Revamping of the university’s Edu. Program and subsequent improved reputation
- PSTs enter internship and subsequent employment in education with increased abilities
APPENDIX B: IRB APPROVAL
Determination of Exempt Human Research

From: UCF Institutional Review Board #1  
FWA00000351, IRB00001138

To: Nikki M. Djak

Date: November 20, 2017

Dear Researcher,

On 11/20/2017, the IRB reviewed the following activity as human participant research that is exempt from regulation:

Type of Review: Exempt Determination
Project Title: Copy of Teacher Pre-Service Preparation: A Program Evaluation of Boots on the Ground
Investigator: Nikki M. Djak
IRB Number: SBE-17-13405
Funding Agency:
Grant Title:
Research ID: N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in IRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

This letter is signed by:

[Signature]

Signature applied by Gillian Morien on 11/20/2017 12:54:19 PM EST

Designated Reviewer
Determination of Exempt Human Research

From: UCF Institutional Review Board #1
FWA0000351, IRB0000I138

To: Nikki M. Djak

Date: March 29, 2018

Dear Researcher:

On 03/29/2018, the IRB reviewed the following modifications as human participant research that is exempt from regulation:

- Type of Review: Exempt Determination
- Modification Type: Additon of focus group. Revisions to protocol and consent.
- Project Title: Copy of Teacher Pre-Service Preparation: A Program Evaluation of Boot on the Ground
- Investigator: Nikki M. Djak
- IRB Number: SBE-17-13495
- Funding Agency: N/A
- Grant Title: N/A
- Research ID: N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in IRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

This letter is signed by:

Signature applied by Gillian Morren on 03/29/2018 03:41:29 PM EDT

Designated Reviewer
Pre-Survey for University Pre-Service Teachers

Teacher Pre-Service Preparation: A Program Evaluation of Boots on the Ground

Directions: Using the seven-point Likert Scale (strongly disagree, moderately disagree, slightly disagree, neither agree nor disagree, slightly agree, moderately agree, or strongly agree), determine the extent to which you agree with each statement. You may only select one bubble per statement.

Name (first and last): _______________________

1. My coursework thus far has prepared me to independently supervise small groups of K-12 students.

2. I am ready to independently work with small groups of K-12 students.

3. I am capable of differentiating instruction for groups of students with diverse academic needs.

4. I am capable of differentiating instruction for students with varying social-behavioral needs (ex: defiant, selective mute, ADHD, Emotional-Behavioral disorders, etc.).

5. I am comfortable working with students who have various special needs (ex: gifted, dyslexia, specific learning disability, etc.)

6. I am capable of following a lesson plan that is provided to me for small group instruction.

7. I am comfortable using a repertoire of strategies to maintain engagement while working with small groups of students (ex: Kagan strategies, etc.).

8. I understand what is expected of me as a volunteer in the classroom.

9. I understand the professional expectations that teachers must adhere to.

10. I am comfortable working with students in any grade level (within the grade levels my degree is preparing me to teach).

11. I am comfortable using technologies available in K-12 schools (ex: SmartBoard, Doc Cam).

12. I am able to adapt for cultural differences when working with small groups of students (ex: religion, values, social norms, etc.).

13. I am comfortable working with non-English and minimal-English students in a small group setting.

14. Based on my experiences thus far at the university, I feel that teaching is the correct profession for me.
15. What year are you in at the university?

Freshman  Sophomore  Junior  Senior

16. Approximately how many hours have you spent working in K-12 schools up until this date?

0-15 hours  16-30 hours  31-45 hours  46-60 hours  61-75 hours  76-90 hours  91+ hours

○ ○ ○ ○ ○ ○ ○
APPENDIX D: POST-SURVEY FOR UNIVERSITY PRE-SERVICE TEACHERS
Post-Survey for University Pre-Service Teachers

Teacher Pre-Service Preparation: A Program Evaluation of Boots on the Ground

Directions: Using the seven-point Likert Scale (strongly disagree, moderately disagree, slightly disagree, neither agree nor disagree, slightly agree, moderately agree, or strongly agree), determine the extent to which you agree with each statement. You may only select one bubble per statement.

Name (first and last): _______________________

1. My coursework thus far has prepared me to independently supervise small groups of K-12 students.

2. I am ready to independently work with small groups of K-12 students.

3. I am capable of differentiating instruction for groups of students with diverse academic needs.

4. I am capable of differentiating instruction for students with varying social-behavioral needs (ex: defiant, selective mute, ADHD, Emotional-Behavioral disorders, etc.).

5. I am comfortable working with students who have various special needs (ex: gifted, dyslexia, specific learning disability, etc.)

6. I am capable of following a lesson plan that is provided to me for small group instruction.

7. I am comfortable using a repertoire of strategies to maintain engagement while working with small groups of students (ex: Kagan strategies, etc.).

8. I understand what is expected of me as a volunteer in the classroom.

9. I understand the professional expectations that teachers must adhere to.

10. I am comfortable working with students in any grade level (within the grade levels my degree is preparing me to teach).

11. I am comfortable using technologies available in K-12 schools (ex: SmartBoard, Doc Cam).

12. I am able to adapt for cultural differences when working with small groups of students (ex: religion, values, social norms, etc.).

13. I am comfortable working with non-English and minimal-English students in a small group setting.

14. Based on my experiences thus far at the university, I feel that teaching is the correct profession for me.
15. Approximately how many hours did you spend volunteering in K-12 classrooms this semester?

16. The work was a valuable addition to accompany my academic studies.

17. I was given responsibilities that enabled me to apply knowledge/skills learned in my college coursework.

18. I was trusted by the K-12 teacher to support student learning.

19. K-12 teachers with whom I worked answered questions/concerns I had.

20. K-12 teachers with whom I worked provided meaningful feedback/suggestions to me.


22. I would recommend this experience for future university PSTs.

23. Was there any experience you hoped to gain from volunteering that went along with coursework that you did not get to practice/implement? (if yes, please explain)
   - Yes
   - No

24. At what level of K-12 education did you work? (select all that apply)
   - Pre-K
   - Kindergarten
   - 1st Grade
   - 2nd Grade
   - 3rd Grade
   - 4th Grade
   - 5th Grade
   - 6th Grade
   - 7th Grade
   - 8th Grade
   - 9th Grade
   - 10th Grade
   - 11th Grade
   - 12th Grade
   - ESE Classes
   - Other (please specify: ____________________)

   ____________________  ____________________  ____________________
APPENDIX E: INTERVIEW QUESTIONS FOR UNIVERSITY PROFESSORS
Interview Questions for University Professors

1. How long have you been teaching in this teacher preparation program?

2. What additional experience do you have in teaching or education, prior and concurrent to your teaching here?

3. What courses do you teach that have a corresponding fieldwork or observational component prior to internship?

4. In your opinion, what are the purposes of early field experiences in general? For your classes in particular?

5. In your opinion, how well does the state mandated observational hours facilitate PST learning? How about Boots on the Ground?

6. In your opinion, how well does the state mandated observational hours assess PST learning? How about Boots on the Ground?

7. What are your perceptions related to issues that initially established your desire to implement Boots on the Ground?

8. What are your perceptions about other service education models used for this same coursework, if any?

9. Why do you require your students to complete hands-on service hours in K-12 classrooms as opposed to just observing in the classrooms, as mandated as minimum criteria by the state of Florida?

10. What do you hope your students will gain as a result of working in K-12 classrooms?

11. What increases in competence and confidence do you expect your students to show by the end of the semester?

12. Would you prefer your students to focus their volunteer hours in 1-3 classrooms/grades or to spread them out?

13. What concerns do you have about these required hours?

14. How have you prepared your students to volunteer in classrooms prior to them starting?

15. What collaboration takes place between you and the K-12 schools in which your students volunteer?
a. What teacher support systems are implemented, such as professional development?
b. Were the K-12 teachers involved in implementation discussions?
c. Did the K-12 teachers have opportunities to provide feedback on the program?

16. How do you determine if the learning objectives of the fieldwork assignment have been met?

17. Were there any barriers that you feel might have impacted the program’s success?

18. Do you believe the goals and objectives of the program were met by the end of the semester?

19. Which portions should be continued? Which should be changed? Eliminated?

20. Did you observe any unexpected effects of the program?

21. What were the program’s strengths? Weaknesses?

22. Do you have any additional comments, questions, or suggestions?
APPENDIX F: INTERVIEW QUESTIONS FOR K-12 EDUCATORS
Interview Questions for K-12 Educators

1. How long have you been a K-12 teacher?

2. What grades/subjects do you currently teach? Prior experience?

3. Approximately how many hours have you had PST volunteers in your classroom (both Boots on the Ground and observational students, but not internship students)?

4. In your opinion, what are the purposes of early field experiences in general?

5. What are the purposes of early field experiences for the Boots on the Ground PSTs?

6. How did the college instructors communicate objectives/expectations to you?

7. How did you determine if the objectives/expectations for PSTs had been met?
   a. How did you communicate this information to the college professors? PSTs?

8. What are your perceptions related to issues that initially established the need for the Boots on the Ground program?

9. What are your perceptions on other pre-service learning hour experiences, if any?

10. Why did you choose to allow PST volunteers in your classroom?

11. What do you hope your students will gain as a result of working with PSTs?

12. What increases in competence and confidence do you expect PSTs to show by the end of the semester as a result of working in your classroom?

13. Would you prefer to have only 1-3 PSTs who complete all hours in your classroom or to have multiple volunteers who can complete any number of their 15 hours in your classroom?

14. What concerns do you have about having PSTs working with your students?

15. Are PSTs prepared to volunteer when they come to your classroom? (sub-questions: professionalism, etiquette, and teaching ability)

16. What training have you received prior to allowing Boots on the Ground PSTs in your classroom?
   a. What support system was provided, such as professional development?
   b. Were you involved in implementation discussions?
   c. Did you have opportunities to provide feedback regarding the implementation of Boots on the Ground?
17. Do you feel prepared to have Boots on the Ground PSTs in your classroom?

18. Are you able to provide feedback to Boots on the Ground PSTs and answer their questions if needed?

19. In your opinion, how well does the Boots on the Ground program facilitate learning for PSTs?

20. In your opinion, how well does the Boots on the Ground program assess learning of PSTs?

21. In your opinion, what were the greatest strengths of the Boots on the Ground program? Weaknesses?

22. In your opinion, which aspects of teaching did PSTs get exposed to most? Least?

23. Were there any barriers that you feel might have impacted the program’s success?

24. Do you have any additional comments, questions, or suggestions?
APPENDIX G: INTERVIEW QUESTIONS FOR PRE-SERVICE TEACHERS
Interview Questions for Pre-Service Teachers

1. What kind of teacher license(s) are you pursuing in this program?

2. Which course did you take this semester that required completion of Boots on the Ground service learning hours?

3. In your opinion, what are the purposes of early field experiences in general?

4. In your opinion, what are the purposes of the early field experiences you completed for this course in particular?

5. Why did you choose to volunteer in K-12 classrooms this semester?

6. Why did you choose the particular classrooms and grade levels that you chose?

7. What did you hope to gain as a result of working in K-12 classrooms? Did you accomplish these goals?

8. Would you prefer to focus your volunteer hours in 1-3 classrooms/grades or to spread them out?

9. What problems did you face throughout your time volunteering this semester?

10. How were you prepared to volunteer in classrooms prior to starting? Do you feel that these things fully prepared you?

11. Were the K-12 teachers appreciative/receptive of you volunteering in their classrooms?

12. How did you determine if you achieved the expected learning objectives?

13. In your opinion, how well did Boots on the Ground facilitate your learning?

14. What aspects of the program would you change? Why and how?

15. What aspects of the program were most beneficial to you? Why?

16. What areas of teaching do you feel you made the most growth in? Least?

17. Would you recommend this experience to future PSTs?

18. Additional comments or information?
The three questions below were used in focus group sessions with both pre-service teachers and K-12 educators.

1. What is going well with the Boots on the Ground program?
2. What is not going well with the Boots on the Ground program?
3. What suggestions do you have for improving the Boots on the Ground program?
APPENDIX I: EVALUATION QUESTIONS, MEASURES, AND COLLECTION METHODS
<table>
<thead>
<tr>
<th>Question</th>
<th>Criteria (Measure)</th>
<th>Standards (Performance)</th>
<th>Sources of Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are PSTs prepared to work in classrooms?</td>
<td>Recruitment results in qualified PSTs</td>
<td>At least 75% of K-12 educators report that the pre-service volunteers understand what is expected of them</td>
<td>Interview Analysis, Focus Group Themes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>At least 75% of PSTs report that they moderately/strongly agree that they understand what is expected of them (based on mean score)</td>
<td>Interview Analysis, Survey Analysis, Focus Group Themes</td>
</tr>
<tr>
<td>Are K-12 educators prepared to support PSTs through the BotG program?</td>
<td>Recruitment results in qualified K-12 educators</td>
<td>At least 75% of K-12 educators report wanting to support PSTs using BotG</td>
<td>Interview Analysis, Focus Group Themes</td>
</tr>
<tr>
<td></td>
<td>K-12 educators feel they understand program expectations</td>
<td>At least 75% of K-12 educators report they are able to support program objectives when assigning tasks to PSTs</td>
<td>Interview Analysis, Focus Group Themes</td>
</tr>
<tr>
<td>Are PSTs being used appropriately?</td>
<td>K-12 educators feel PSTs are working as intended</td>
<td>At least 75% of K-12 educators feel PSTs are able to be used as intended (relative)</td>
<td>Interview feedback, Focus Group Themes</td>
</tr>
<tr>
<td></td>
<td>PSTs feel they are being asked to complete meaningful tasks</td>
<td>At least 75% of PSTs report that they moderately/strongly agree that they are being asked to complete meaningful tasks (relative)</td>
<td>Survey Analysis, Interview Analysis, Focus Group Themes</td>
</tr>
<tr>
<td>Does participation in the BotG program affect PSTs’ perceptions of preparedness?</td>
<td>PSTs report increases in preparedness</td>
<td>PST participants moderately/strongly agree (based on mean score) that the program supports coursework and contributes to learning</td>
<td>Post-survey descriptive (means) analysis</td>
</tr>
<tr>
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<td></td>
<td>At least 75% of PSTs report that the program supports coursework learning</td>
<td>Interview Analysis, Focus Group Themes</td>
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<td></td>
<td>At least 75% of PSTs report that working hands-on with K-12 students increases feelings of preparedness</td>
<td>Interview Analysis, Focus Group Themes</td>
</tr>
<tr>
<td>Question</td>
<td>Criteria (Measure)</td>
<td>Standards (Performance)</td>
<td>Sources of Information</td>
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<tr>
<td>Does participation in the BotG program affect PSTs’ self-efficacy?</td>
<td>PSTs report increases in self-efficacy</td>
<td>PST participants moderately/strongly agree (based on mean score) that the program increases self-efficacy</td>
<td>Post-survey descriptive (means) analysis</td>
</tr>
<tr>
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<td></td>
<td>At least 75% of PSTs report that participation in the BotG program contributes to increases in comfort working in K-12 classrooms</td>
<td>Interview Analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increases in self-efficacy on Paired Samples t-Tests are statistically significant and correlated</td>
<td>Focus Group Themes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>At least 75% of PSTs report that the program offers a variety of opportunities working in K-12 settings</td>
<td>Post-survey descriptive (means) analysis</td>
</tr>
<tr>
<td></td>
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<td>PSTs moderately/strongly agree (based on mean score) that the program offers a variety of opportunities working in K-12 settings</td>
<td>Interview Analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>At least 75% of PSTs report feeling appreciated by K-12 educators</td>
<td>Focus Group Themes</td>
</tr>
</tbody>
</table>

Paired Samples t-Test pre/post survey analysis of questions 6, 8, 9, 12, and 16

Interview Analysis
Focus Group Themes

Paired Samples t-Test pre/post survey analysis of questions 7, 10, 11, 13, and 14

Post-survey descriptive (means) analysis

Interview Analysis
Focus Group Themes

Post-survey descriptive (means) analysis

Interview Analysis
Focus Group Themes
<table>
<thead>
<tr>
<th>Question</th>
<th>Criteria (Measure)</th>
<th>Standards (Performance)</th>
<th>Sources of Information</th>
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</thead>
<tbody>
<tr>
<td>Are participants satisfied with what they gain from the program?</td>
<td>PSTs express their level of satisfaction.</td>
<td>At least 75% of PST would recommend the program</td>
<td>PST interview analysis of questions 6, 9, 10, 12, 16</td>
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<td></td>
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<td>Mean score of satisfaction is between 6 and 7 (indicating participants moderately to strongly agree)</td>
<td>Post Survey descriptive (means) analysis of Q22</td>
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<td>At least 75% of K-12 educators would recommend the program</td>
<td>K-12 interview analysis of questions 6, 8, 11, 22, 24</td>
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<td>100% of university professors would recommend the program</td>
<td>Univ. Prof. interview analysis of questions 17, 18, 19, 20, 21</td>
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<td>What is working and what can be improved?</td>
<td>Participants provide feedback</td>
<td>Feedback is given by PSTs, college professors, and K-12 educators</td>
<td>Feedback on open-ended survey question Interview Analysis Focus Group Themes</td>
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<td>Did the BotG program contribute to the intended outcomes?</td>
<td>Participants feel that the program increased PSTs’ pedagogical skills and confidence</td>
<td>Findings from evaluation question one support the program positively affecting PSTs’ pedagogical skills and confidence</td>
<td>Post Survey descriptive (means) analysis Interview Analysis Focus Group Themes Paired Samples t-Test pre/post survey analysis of Qs 6, 7, 8, 9, 10, 11, 12, 13, 14, and 16</td>
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<td>100% of university educators feel that the program increases PSTs’ pedagogical skills and confidence</td>
<td>Feedback in interviews</td>
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<td>Participants feel that the program supported local K-12 schools</td>
<td>75% of PSTs feel that their participation in the program is beneficial to K-12 students</td>
<td>75% of PSTs, 100% of university professors, and 75% of K-12 educators feel that the program provides authentic exposure to the teaching profession</td>
<td>Interview Analysis Focus Group Themes</td>
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<td>75% of PSTs feel that the K-12 educators appreciate the help</td>
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<td>100% of university educators feel that the program supports local K-12 schools</td>
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<td>At least 75% of K-12 educators feel that the program is beneficial to them and their students</td>
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<td>Participants feel that the program helped PSTs make career-based decisions</td>
<td>At least 75% of PSTs feel that the program helps them to make career-based decisions</td>
<td>100% of university professors feel that the program helps PSTs make career-based decisions</td>
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<td>At least 75% of K-12 educators feel that the program helps PSTs make career-based decisions</td>
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