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Investigating the Most Valued Components of the South Carolina Teaching Fellows Program by Graduates Who Have Remained in the Education Profession

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Investigating the Most Valued Components of the South Carolina Teaching Fellows
Program by Graduates Who Have Remained in the Education Profession

by

Amanda Jane Darden

A dissertation submitted to the faculty of

Coastal Carolina University

in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

in

Higher Education Administration

Department of Policy, Research, and Evaluation

Coastal Carolina University

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Coastal Carolina University Graduate School

STATEMENT OF DISSERTATION APPROVAL

The dissertation of Amanda Jane Darden
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ABSTRACT

The vision of every elementary, middle, and high school in the United States is to deliver an excellent educational setting to each and every student who enters their school building. Educational research overwhelmingly demonstrates that a primary factor contributing to an “excellent educational setting” is having highly qualified and effective teachers (Rice, 2003). However, the teacher supply and demand issues currently facing our nation is significantly compromising the ideal of providing excellent educational settings in our schools. Teacher attrition is a problem that faces schools throughout the United States. The number of teachers leaving their positions to pursue other careers continues to increase yearly across the nation. Approximately a quarter of public-school teachers entering the profession teaching leave within their first three years (U.S. Department of Education, 2007). School districts have responded to this issue by implementing new programs, resources, and support mechanisms to aid in retention (U.S. Department of Education, 2007). Teacher attrition impacts both districts and students in a number of ways. For example, when a teacher leaves their position it not only puts financial strain on the districts, but also has a negative impact on student achievement. The quality of teacher effectiveness and overall student achievement is directly related to having highly qualified teachers. These teachers become highly effective by remaining in the profession and garnering experience (U.S. Department of Education, 2007). This study focuses on how merit-based programs impact the teacher attrition rate and aims to identify the key components of the South Carolina Teaching Fellows (SCTF) Program that impact teacher retention. “The study aims to understand if participation in the SCTF Program during the teacher education preparation

program lowered teacher attrition rates, and if so, which components of the SCTF Program affect teacher retention rates significantly. Additionally, the study aimed to identify other key components that were most valued by its graduates that remain in the education profession.

Keywords: merit-based programs, professional development, educator preparation programs, retention, preparation, campus director, mentor, mentee, leadership, opportunities, cohort model, scholarships, impact, early/community experiences, teacher preparation, teacher quality, teacher effectiveness, achievement gains, program evaluation

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CHAPTER 1

INTRODUCTION

Teacher retention is a problem that schools throughout the United States face. Teachers are leaving their positions to pursue other careers. Today, teachers feel that are not supported by the administration as one of the biggest reasons that teachers are leaving the profession by increasing large numbers. Across the nation, school districts have been implementing new programs, resources, and support mechanisms to aid in teacher retention. One of the biggest concerns with teacher retention lies in the financial strain on the district and the negative impact on student achievement (Ingersoll & Strong, 2011). When experienced teachers choose to leave the field, their decision ripples through schools and districts, creating a disruption in the educational system's ability to provide quality and excellence in the educational experience of students.

To the dismay of many educational leaders, both experienced and recently hired teachers are leaving the field. During the 2018-2019 school year, the percentage of newly hired teachers who left the field of education in South Carolina was 28%. One year later, the percentage was up to 36%. Considering the COVID-19 pandemic hit during the 2019-20 school year, it is no surprise that more first year teachers left their position or the profession altogether compared to previous years (Center for Educator Recruitment, Retention, and Advancement, 2019). To alleviate the strain of the loss, United States school districts hire over 200,000 new teachers each year (Graziano, 2005). Learning

should be taking place in the classroom and the overall school climate should be growing and solidifying; instead, attrition disrupts school communities and becomes costly for districts who must use more funds to recruit, hire, and induct new teachers each year.

In 2014, a study by the Alliance for Excellent Education concluded that replacing public school teachers costs the nation up to \$2.2 billion each year, and South Carolina accounts for as much as \$36.8 million of that total. This is a modest estimate as the study used cost estimates from 2005. Factoring in growing departure rates and 15 years of inflation, the cost of teacher attrition was calculated between \$26.9 and \$58.5 million in the state each year and \$2.9 billion in the nation. These estimates reflect only teachers who left classrooms in the state and do not include teachers who transferred to another school district within the state (Garrett et. al, 2016).

Background of the Study

Merit-based fellowship programs that support high-achieving students entering the field of education is one proven tactic that retains teachers at a higher rate in South Carolina. This program, known as the South Carolina Teaching Fellows Program (SCTF), provides high school seniors with a merit-based fellowship. The fellowship provides up to \$24,000 (or \$6,000 a year for 4 years) and is currently operating in 11 identified institutions across the state of South Carolina. The SCTF provides critical preservice support and opportunities which include the following: cohort models, campus director(s), professional growth opportunities, leadership development, school/community experiences, and diversity awareness. These are components that students in a traditional teacher preparation program may not receive based on resources and funding from the

individual institutions. The components of this specific merit-based program provide preservice teacher candidates opportunities to be better equipped to handle teaching and are anticipated to remain in the profession. Program data of the SCTF Program consistently show that a majority of Teaching Fellows who have taught for the required number of years to satisfy their loan repayment through service are still employed in districts across the state of South Carolina. The retention rate is much higher when compared to the attrition rate among teachers in the first five years of their career. Several studies have found that as many as 50% of new teachers leave within the first five years of entry into the profession (Smith & Ingersoll, 2004).

The SCTF Program was created in 1999 by the General Assembly for the purpose of recruiting high achieving high school seniors into the teaching profession. Their goal was to help them develop leadership qualities while they pursue a degree leading to professional teacher licensure. The SCTF Program, which is administered by the Center for Retention, Recruitment, and Advancement (CERRA), currently claims 2,298 graduates and a program graduation rate of 78.2% (Garrett, 2021). This graduation rate is compared to the following chart based on graduation rates of all students in South Carolina.

Table 1

South Carolina Graduation Rates

2013 Freshmen Cohort	In 4 years (2017-18)	In 5 years (2018-19)	In 6 years (2019-20)
SC Public and Independent Institutions with Approved Teacher Preparation Programs* (Institution graduation rates)	46.9%	58.9%	61.3%
TFIs**, Public and Independent (Institution graduation rates)	53.5%	64.5%	66.4%
TFIs**, Public and Independent (Teaching Fellows Program graduation rates)	77.7%	79.9%	80.4%

Source: Integrated Postsecondary Education Data System (IPEDS); CERRA

*Teacher preparation programs are approved by the State Board of Education for meeting SC initial educator certification requirements.

*TFIs are SC institutions with approved teacher preparation programs that also have a designated SC Teaching Fellows program. During the 2013-14 academic year, there were nine TFIs in the state.

The SCTF Program is only one of two state-funded programs of its kind in the United States, although other teacher leadership programs exist. The other state-funded program, which the SCTF was modeled after, is the North Carolina Teaching Fellows Program (NCTF). Both the NCTF and SCTF are based on a cohort model structure whereby like-minded students have the opportunity to grow and support one another under the direction of a campus director. While there is an extensive evaluation process within the SCTF Program, there is limited research on how the identified components of this program

effects the retention of teacher candidates and if these components contribute to retaining teachers who have graduated from the SCTF Program.

Purpose of the Study

According to Grissmer and Kirby (1997), teacher turnover rates follow a U-shaped distribution pattern, illustrating the highest attrition taking place in the earlier and later years in teachers' careers. As a result, it is crucial that we examine how to lower the percentage of trained, qualified, new professionals who leave the field of education. Thus, the purpose of this study is to investigate the components of the South Carolina Teaching Fellows preparation program and impact on teacher retention. Research proves that merit-based programs have a positive impact on teacher retention. This study seeks to identify the SCTF's specific contributions to retaining quality educators. The research conducted in this study will be guided by the following question related to teacher retention.

Statement of the Problem

With many teacher preparation programs under intense scrutiny for failing to adequately prepare their graduates for the public school classroom, it is likely that these programs are attributing to teachers leaving the classroom. Data from The Center for Educator Recruitment, Retention, and Advancement (CERRA) show that thousands of South Carolina teachers leave their position every year and the South Carolina Teaching Fellows (SCTF) Program is one tool that helps to combat this attrition. The components of the SCTF Program identified in this research could be utilized to enhance and strengthen the quality of other induction programs and help retain valuable new teachers in the teaching profession after their induction period. The key components in the SCTF Program

may provide a more defined, research supported structure for preparing teachers to be both resilient and committed to remaining in the teaching profession (Hallman, 2018).

To achieve a fundamental transformation of education while supporting students to meet higher performance expectations, the basic philosophy of how teachers are supported must change. This will require clear incentives and structures to attract, develop, and retain the best teachers within the teaching profession. This starts with offering more merit-based incentive programs to attract them into the field of teaching. The challenge of preparing all students for the current workplace begins with emerging a shared capacity of an entire profession to address the needs of all students and teachers. “Teaching conducted largely out of the sight and hearing of other teachers must cease to be the norm. A new paradigm is needed for powerful systems of professional learning by which a clear vision of effective teaching informs the entire program and new teachers receive comprehensive induction and access to school-based collaborative learning” (Haynes, M., 2014 p. 1). Given the success that the SCTF Program has demonstrated in the retention of new teachers, the current design takes a closer look at what is offered and how that might affect retention rates.”

Research Question

Which key components of the SCTF Program are most valued by program graduates who have remained in the education profession?

Significance

Due to teachers in South Carolina leaving at excessive rates each year, this study will investigate specific components of the SCTF merit-based preparation program and how they contribute to retaining teachers. Teacher preparation programs across the nation feel

a growing urgency to produce qualified teachers (Henry et al., 2012). The past 20 years could be defined as a grand experiment to increase teacher quality through teacher impact innovations (Henry et al., 2012). Yet, the current teacher workforce is in a state of desperation as teachers battle personal safety fears, coupled with increased workload demands and salary issues. Many current teachers, both new and experienced, are openly voicing their serious considerations in leaving the field.

In an attempt to address the gap in our understanding of the program elements on teacher retention, this study will explore the impact of the SCTF Program related to the preparation of pre-service teachers. By determining which components of the SCTF program lead to teacher retention, this research could both inform and enhance conversations surrounding the best approach for using these components in all teacher education programs. The research could also support reform efforts aimed at improving teacher retention as well as the overall education of preservice teachers in the United States, resulting in an overall impact on teacher retention and educational gains for students. Finally, this study may provide insight into key components that could serve as a model for teacher preparation programs across the country.

There is compelling evidence of widespread teacher shortages as data from across the United States indicate there are not enough qualified individuals to fill the vacancies (Fensterwald, 2015). While the teacher shortage affects the entire country, it does not do so uniformly in classrooms and communities. This may be true in some districts, in some regions, but it was not a nationwide trend in the five years studied, 2007-08 through 2011-12 (Fensterwald, 2015). The impact of teacher shortages in some states, subject areas, and student populations are greater than others (Sutcher et al., 2019). More than 40 states report shortages in several subject areas, such as mathematics, science, and special

education. In addition to teacher shortages, equity concerns continue to grow as students in high-poverty and high-minority settings often bear the burden of the teacher shortage and the shrinking pool of qualified candidates. Historically, teacher shortages have disproportionately affected the most at-risk students and these students are four times more likely to be served by uncertified teachers (Sutcher et al., 2019).

While heightening standards for teacher candidates in academics and intellect are warranted, it is increasingly important to note that other qualities may also predict the future success and effectiveness of teacher candidates (Hall et al., 2011). Teaching is an art that involves partiality, worth, commitment, trust, care, and validation (Ayers, 1993 as cited in Hall et al., 2011). It requires a balance of skills based on knowledge and interpersonal characteristics (Zumwalt and Craig, 2005 as cited in Hall et al., 2011). Identified characteristics known as “supertraits” of teaching include enthusiasm, sociability/friendliness, organization, conscientiousness, optimism, and flexibility. These “supertraits” are all believed to contribute to a prospective teacher candidate’s competency, effectiveness, and ultimate success (Baiocco and deWaters, 1998). The SCTF Program indicates that involvement in activities is a strong component of the program. According to a previous dissertation on the SCTF Program that examined archived focus group data, involvement demonstrates organization, sociability, and enthusiasm of participants within the program (Hallman, 2017). Other areas assessed include the following: commitment to education, knowledge of educational issues, leadership potential, originality, and problem solving.

According to the National Research Council Report from 2010, there were 130 distinct portals in which individuals entered into the teaching profession. Through these paths, it has become evident that parallel processes exist. These parallel processes increase the pipeline of the educator workforce, which benefits students entering into the teaching profession. However, there is little evidence linked to whether many of the individual teacher labor market interventions have succeeded or failed (Henry et al., 2012). For example, Teach for America (TFA), is a selective program that quickly prepares graduates from top universities for teaching in rural or high-poverty classroom. TFA shows effectiveness in the classroom, yet most of these teachers exit the profession within their first three years of teaching (Boyd et al., 2006; Decker et al., 2006; Heilig & Jez, 2010; Henry et al., 2011; Raymond et al., 2001; Xu et al., 2011). In contrast, the SCTF Program retention data indicate that graduates are remaining in the classroom at a rate of 78% (Garrett, 2021). However, there is still the underlying question of what is it about this specific program, that helps to retain these teachers in the profession after their induction years.

Study Specific Terms

Definition of Terms

Merit-based programs. Programs that are solely provided to students based on their merit to include: academics, extra-curricular experiences, and being a well-rounded student. There is no financial need component attached to merit-based programs.

Mentoring. An evolving partnership through which one person shares information, provides assistances, and perspective to foster the personal and professional growth or someone else.

Beginning teacher. A teacher who has not received a continuing license.

Teacher Retention. The rate at which teachers remain in the teaching profession. Often rates are calculated by district or state and may not show transfer numbers.

Teacher Attrition. The rate at which teachers leave the classroom.

Self-efficacy. An individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments (Bandura, 1997).

Teacher leadership: Katzenmeyer and Moller (2001) maintained that “teachers who are leaders lead within and beyond the classroom, identify with and contribute to a community of teacher learners and leaders, and influence others toward improved educational practice,” (p. 5). For this study, teacher leadership is defined as the work of teachers within and outside the classroom that encourages continued growth, learning, and improved practice by all members of the learning community and impacts the constant reform of the educational system (Hallman, 2017).

Leadership. Based on individual's ideals of a specific sets of attributes and skills of what a leader means to them given their position in an organization, environment, or structure. Leaders in this research are identified as teachers, administrators, mentors, or stakeholders. Leaders have influence over others. (Hallman, 2017).

Professional Development. Opportunities provided to individuals to hone in on developing their skills by offering workshops, speakers, or learning modules to enhance one's personal growth and development through both refinement and reinforcement. Formal and informal learning opportunities that deepen and extend professional competence, including beliefs, motivation, knowledge, and self-regulatory skills (Baumert & Kunter, 2006; Kunter et al., 2007).

Assumptions, Limitations, Delimitations

Assumptions

When conducting a study on merit-based teacher preparation programs on teacher retention, there are a few assumptions that should be considered. First, if conducting research pertaining to teacher induction, the researcher would assume that everyone participating in the program are first-, second-, or third-year teachers. In the same fashion, conducting a survey pertaining to the impact of the merit-based teacher preparation program, you will assume that everyone is filling out the survey truthfully. While conducting research about retention, you must assume that those teachers who exit the teaching profession are leaving for specific reasons that they would be willing to share in an exit interview. For example, we expect participants are going to answer a survey honestly, you can explain how responses will remain confidential and unanimous and that participants in the study can remove themselves at any point in time without the fear of retaliation. The researcher also must be certain that all those who complete the survey understand that the “no harm” clause will hold true for participating in the survey. Another assumption could be that being a part of a merit-based program, it could be considered that because it is a merit-based program, these students (or new teachers) have already demonstrated a level of competence, ability, and commitment to hard work. This may not be the case with all candidates in other induction programs.

Limitations

In this particular study, there were only two significant limitations which effected the study. The researcher was only be able to obtain surveys from the population of graduates from the SCTF Program who were loan satisfied which was not diverse in gender or race. However, it is important to note that the sample population of this particular study

not only mimicked that are the demographic of South Carolina public school teachers but that of the nation as a whole of the current demographic of public school teachers. The collection of data had to be both valid and reliable thus it was imperative that the data was not compromised or skewed. The majority of graduates from this program were identified as female, so the population was not considered diverse. This was due to the fact that the teaching population in South Carolina is made up largely of females. Although this study was not specifically focused on the gender of teachers, further research may be done to examine if new teachers have differing needs based on gender.

The second limitation in this study was the fact that the researcher limited the survey to those who participated in the South Carolina Teaching Fellows Program and not other states nor other teacher preparation programs. The study was only be a snapshot which was dependent on the conditions that took place during the time of the study. If the researcher had more time in which to conduct the study, both focus groups as well as individual interviews would have taken place which would have provided more feedback in which to draw conclusions.

Delimitations

The researcher chose to exclude institutions that are no longer participating in the SCTF Program due to various reasons that will be explained in more detail in the method section of this study. The merit-based teacher preparation program is defined differently from state to state and also district to district. The researcher wanted to focus the study teachers that are loan satisfied from the SCTF Program in their teaching career. The

researcher did not use any random samples in order to gather as much data as possible on teachers who were no longer in loan forgiveness.

Conclusion

With an alarming 30-50% of beginning teachers leaving the profession within their first five years of teaching, education has become known as the profession with a constantly revolving door (Darling-Hammond, 2003, as cited in Perrachione et al., 2008). Merit-based teacher preparation programs play a vital role in teacher retention. The goal of merit-based teacher preparation programs is to support new teachers during their induction and mentoring process. Part of the goal of the SCTF is to prepare participants so they are more likely to have the mindset and skills to stay committed to the field. Merit-based teacher preparation programs (Fellows specifically) positively impact teacher retention in South Carolina. Research shows the importance of teacher induction in order to help decrease the attrition of beginning teachers. According to Wong (2003), all effective teacher preparation programs should not only be a provide professional development for beginning teachers, but should entail a professional development component embedded in the program. Prior to teachers entering into their first years of teaching, merit-based programs that mimic the SCTF Program can provide the specific components of professional growth opportunities, campus director (individual who oversees the SCTF Program on each individual campus), cohort model, leadership development opportunities, and early classroom experiences to help beginning teachers be more prepared for their profession. In closing, the prevailing question becomes what do teachers that participated in the SCTF Program remain in the profession after their loan forgiveness period is complete.

CHAPTER 2

LIERATURE REVIEW

Although salary increases and incentives, as well as work environment upgrades have shown to positively affect teacher retention, these factors are outside the scope of this study. These include reviews of the following programs that help address teacher retention needs which most directly correlate to the research question which include teacher preparation programs, merit-based programs, and mentor-based programs.

Review of these programs includes their key elements and past research on their role, successes, and challenges in addressing teacher retention both nationally and on the state level. The final section of this review of literature delves specifically into the SCTF Program, and explores its history and its connections and comparisons with the programs previously reviewed. The literature reviews the key components of the SCTF Program and its potential impact on teacher retention in South Carolina.

Review

Teacher Retention and Attrition: The Impact of Teacher Preparation, Mentoring, and Merit-Based Programs

Teacher retention has been a consistent topic in the field of education for many years (Ingersoll, 2004). However, in recent years there has been much debate around how strong mentoring programs can decrease the number of teachers leaving the classrooms each year across the United States (Ingersoll, 2012). By highlighting the research and evaluation efforts concerning the effectiveness of merit-based teacher preparation programs, preservice teachers could potentially add valuable information to these

discussions. The focus of this study is to identify the components of the SCTF Program that are successful as a means to decrease the number of teachers who are leaving the classroom each year.

Over the last three years, an average of 1,707 South Carolina students graduated with a Bachelor's degree with professional teacher certification. Compare that number to the fact that 6,662 teachers left their positions, including 1,671 who left to teach in another South Carolina District, leaves 6,872 teacher vacancies in South Carolina public schools. Primarily, these vacancies are caused by teacher departures which weren't filled prior to the start of the school year which was 596 teaching positions still vacant at the beginning of the 2021 school year (CERRA, 2019). According to these data, there are not enough students graduating from teacher preparation programs to fill the vacancies of teachers who are leaving the classroom.

According to the most recent data from CERRA, the average four-year graduation rate of the students within the SCTF Program in South Carolina is 77.7% as compared to 46.9% of other students (including all majors) within a South Carolina public or independent institution with an approved teacher preparation program. Furthermore, the average four-year graduation rate of students who attend an institution that have the SCTF Program but are not in the program is 53.5%. The data provided is provided from the 2013 cohort of students who were enrolled the SCTF Program in South Carolina. (CERRA, March 2021).

Teacher Preparation Programs

Over the past 40 years, educators have studied the issue of teacher attrition that span across many different educational contexts. Dating back to the early 1960's, attrition

rates were high, but fell to all-time lows during the 1990s (Grissmer et al., 1997). However, even with decreasing rates, there is still much concern that early-career teachers continue to exit the profession at much higher rates as compared to other professions (Certo & Fox, 2002). Much of the literature that illustrates attrition rates specifically highlight what impact the teacher preparation program models or options such as professional development schools (PDSs), alternative certification, and traditional preparation have on teacher retention (Latham & Vogt, 2007). As research also highlights, teacher education programs certainly have no direct impact over the personal reasons teachers leave the field, which include teachers who decide to stop working after they marry or have children. However, teacher education programs could influence the school or climate based reasons (e.g., inadequate administrative support, classroom management, lack of resources) as reasons teachers report for leaving the classroom (Eberhard & Reinhardt, 2000; Gonzalez, 1995; Holmes et al., 1988; Ingersoll, 2001; Marlow et al., 1996). Most certainly, teacher education programs may, however, better equip students to persist in teaching and become life-long educators versus deciding to leave and pursue other career options as early career changers.

Teacher preparation programs that diminish the gap between theory and practice, provide extensive experience in schools, and immerse preservice teachers in the school climate have the potential to prepare new teachers entering the field for the challenges they face. Providing professional development opportunities is one significant way to equip students with the resources they need to be prepared once they enter their own classrooms. The preservice teachers' preparation involvement provides an avenue for them to build resiliency skills and at the same time, a foundation of teacher efficacy by

equipping teacher candidates with confidence through preparedness (Darling-Hammond et al., 2002). Several studies have correlated teachers' positive feelings about their preparation with higher retention, especially when that preparation included clinical practice opportunities (Chapman & Green, 1986; Darling-Hammond & Youngs, 2002). Research suggests that teacher preparation programs should begin to consider, as an important programmatic outcome, the persistence of their graduates in the field.

Mentor-based Programs

The College Scholarship Service was created in 1954 to develop a standard formula for determining financial need of college students. Recognizing the potential for inequities inherent in a strictly merit-based system, most institutions adopted a policy of awarding scholarships according to need (Zhang et. al., 2006). Beginning in the early 1990's, financial needs-based scholarships have slowly become displaced with academic merit scholarships as the basis for awarding grants and scholarships. Furthermore, concerns have been raised previously over the effects of the merit-aid approach due to an overarching belief that merit awards tend to be given to those students who had planned to attend college whether they received the award or not due to their socioeconomic background (Heller, 2004).

Merit-Based Programs

Merit-based programs that focus on mentorship serve as a link for the transition from a pre-service teacher candidate to an in-service teacher (Prytula et al., 2009). "Stage theories propose that teachers progress through a linear continuum of development stages (e.g., Berliner, 1994) with the first two years of teaching commonly referred to as the time

of survival” (Huberman, 1989). In theory, the role of a teacher education program is to equip teacher candidates with the needed tools to be successful in their classroom environment based on their content areas, classroom management, and professionalism. However, as noted in regular communication with first year teachers, they realize that theory and practice are not always aligned and, therefore, it is virtually impossible to teach everything a new teacher must know during the teacher education program in a traditional brick and mortar model. Studies dating back to the mid-1990s have stated the major factor in improving student knowledge is having educated teachers (Wong & Wong, 2007).

In the past decade and a half, 14 states have adopted statewide scholarship programs that are awarded solely on the premise of academic merit as compared to the more conventional criterion of students financial needs (Zhang & Ness, 2010). More specifically, there has been a concentration of merit aid programs in the southeast. States in this particular region explicitly link these merit-based scholarship programs to the overarching goal of preparing the workforce with the return on investment in the hopes of retaining and attracting businesses (Zhang & Ness, 2010). A common theme has emerged among these state merit aid programs which is to “recruit and retain the best and brightest” students to attend college in state with the intent they will enter the state’s workforce after college graduation (Zhang & Ness, 2010). Nationally, merit-based scholarship programs typically share three goals: incentivize the academic achievement of high school students, increase enrollment in higher education, and retain the highest achieving students within the state’s college and university system and later as productive members of the state’s economy (Brown et al., 2019). The SCTF program in this study does this, thought it is unique in that at current, there are no other programs across the country

that mimic this merit-based fellowship program. The NC program has been reinstated and Indiana has the Next Generation Hoosier Educator Scholarship Program. The fellowship is solely merit-based, meaning any student who applies for the fellowship does not have to apply for financial aid to be eligible for the fellowship. The program is a win-win for the state of South Carolina due to the fact that in order to repay the fellowship, the Teaching Fellow must work in a public school setting for each year they receive the loan through the General Assembly. Brown et al., 2019) found that while one goal of merit-based scholarship programs is to retain high-achieving students as productive members of the community many programs have not been successful in this area. The authors describe the forgiveness requirements of the SCTF Program as one potential solution. "Creating a stipulation for working in-state is a way to prevent the immediate migration of college-educated workers and preserve the investment of the state. The service requirement would build upon the already successful rates of increased resident enrollment and turn the high-achieving students into skilled members of the workforce thereby contributing to the state's economy (Brown et al., 2019). At the conclusion of years of service, many fellows move into different roles within their schools and some decide to begin the path into administration.

National statistics show a rise in the number of beginning teachers experiencing formal induction during their first year of teaching (Serpell & Bozeman 1999). Offering one of the most cited reviews of the effects of mentoring programs on teacher retention, Ingersoll and Kralik (2004) studied quantitative data by utilizing experimental designs and determined that mentoring programs had a positive effect on teacher retention. However, more recent studies addressing the relationship between mentoring and retention have not

been entirely positive. Two recent studies have argued that there is no statistically significant link between mentoring and retention (Glazerman et al., 2010; Wechsler et al., 2010). Ingersoll and Kralik (2004) used the term mentoring program to refer to induction programs that include a mentoring component. Therefore, it is inferred that both merit-based programs and mentor-based programs deliver an element of mentoring as part of the key components.

According to Brill and McCartney (2008), one of the principal objectives of public schools should be to create a group of teachers who are dedicated to student learning. Furthermore, the teachers and administrators in schools must develop a partnership between the school and the communities they serve. Unfortunately, the high rate of beginning teacher turnover is viewed as more daunting due to 40-50% of teachers leaving the profession entirely within five years (Ingersoll, 2003). Moreover, studies indicate high-needs schools serving large groups of economically disadvantaged and minority students are least likely to retain experienced, National Board-Certified teachers (Berry et al., 2009). This persistent change may be a subsidiary contributor to the broadening achievement gap. Berry et al. (2009) suggested the strong links between student achievement and teacher effectiveness may be more appropriately described as “an effective teaching gap” (p.1).

To attract individuals into the teaching profession, many states have implemented college scholarship or loan forgiveness programs for pre-service teacher candidates who plan to become professional teachers. According to Hirsch and colleagues, 27 states offer specific programs with 11 states having recognized merit-based programs that explicitly target funds and recruitment efforts at academically high-performing candidates (Henry, et al., 2012). A national survey in 1998 reports that 34% of full-time public school teachers

had taken part in an induction program when they first started teaching. According to Darling-Hammond (1997), 55% of teachers with less than five years of teaching experience became involved in a formal induction program (Serpell & Bozeman, 1999).

Administrators, mentors and new teachers alike have recognized components of induction programs that are useful to all participants. The following are acknowledged as vital for success: a clear structure with well-designed activities that instruct beginning teachers on curriculum, effective teaching practices, and behavior management issues. Furthermore, a formal and structured mentoring component that focuses on improving practice, provides mentors with training, and compensates mentors is important. In South Carolina, some districts are now paying mentors much more than has been offered in the past to retain induction teachers at a higher rate. Release time or reduced teaching loads for beginning teachers and mentors that sufficiently provide opportunities for beginning teachers to observe and be observed are also strategies that many districts across the country are now implementing (Willis et al., 2004). A means of formative assessment that highlights the support of beginning teachers to include professional growth, adequate and ongoing financial means and political backing to sustain the program is critical for the future of the teacher shortage crisis that is affecting the entire United States (Ingersoll, 2004).

Characteristics of Effective Mentorship

Research continues to confirm that mentor programs are perceived by their participants as valuable. The most effective mentoring programs do the following: focus on improving practice, provide mentors with training, reduce the workloads or give release time for beginning teachers and mentors, and compensate mentors with money, status,

release time or graduate credit. The mentoring component is essential to many induction programs but is not a requirement of all induction programs (Ingersoll & Kralik, 2004).

Components of the SCTF Program and Teacher Attrition

Teacher attrition is greatly impacted by the capacity or tendency to receive help from mentors. In addition, most researchers obtained data only from novice perceptions and intents without providing any means of confirming those findings. Only one study recognized the effect of the recent economic downturn on researchers' ability to study new teacher retention (Wechsler et al., 2010). It is important to consider multiple factors for teacher attrition rates, rather than disregarding other factors, such as economic context.

When researchers discount beginner teacher characteristics, such as levels of professional abilities and their reasons for leaving teaching, and when they disregard other factors, such as economic context, they could be drawing faulty conclusions. Interactions between the key components of merit-based teacher preparation programs and new teacher attrition rates show important factors that must be considered when determining future studies.

Examining the findings through a traditional lens suggests researchers acknowledge the limitations of hard data to create answers to certain questions about merit-based programs and retention. By recognizing these limitations, decision-makers and researchers could begin exploring this topic using expressive terms that describe the mentoring process rather than quantifying its parts. For example, qualitative studies may best capture the discrete structures of the mentoring process to provide effective programs for beginning teachers to understand the intent of the mentoring process and its importance relevant to teacher retention (Ingersoll, 2004).

Quality of Programs

Fry (2007) concluded that simply determining the frequency of certain mentoring program activities did not adequately describe them. For example, all the studies reviewed addressed the frequency of time mentors and new teachers spent together; however, the quality of that time is much more complicated to assess. Further, in terms of professional development and training, few studies provided details about the quality of that training and its outcome on new teacher retention. Although several studies addressed the quality of mentoring program modules, they did so in a limited method using survey questions. An insignificant number employed the notion of quality as revealed through copious accounts (Geertz, 1973) of program components, which signifies that without investigating the key components of specific mentoring programs it is difficult to truly capture the effectiveness of the programs and the impact those specific programs have on teacher retention. In recent years, there has been increasing interest in policy related to mentoring strategies. These are designed to provide supplemental support and growth for teachers, usually in the early years of their career, with a view to retaining them within the profession (Morris et al., 2020).

Unlike other professions, beginning teachers assume the same level of responsibility as a more experienced colleague (Sweeny, 2008). In some cases, beginning teachers are given more challenging assignments than their more experienced colleagues (Sweeny, 2008). It is not shocking that new teachers are overwhelmed and feel insufficient (Villani, 2009). Beginning teachers experience an abrupt learning curve and are expected to rapidly adjust to their work environment and learn at a speed of light (Feiman-Nemser et al., 1990). Beginning teachers must also learn about local policies and procedures, curricula,

locate resources and materials, and learn to work in the multifaceted world of teaching, which is yet another reason all beginning teachers need professional development specifically intended to meet their needs (Billingsley, 2005). Breaux and Wong (2003, as cited in Anhorn, 2008) recommended that effective induction programs offer a continuum of professional development through system-wide training over two years.

According to the Center for Teacher Quality (2006), a lack of knowledge of comprehensive, high quality induction programs and their impact on teacher attrition is not abnormal. Research by CTQ (2006) has validated that one of the most effective approaches for improving new teacher retention rates is the execution of quality induction programs. A study by Smith and Ingersoll (2004) indicated teachers who participated in an induction program “were twice as likely to remain in teaching” (p. 38). However, this knowledge does not translate to behavior in school districts in most states (CTQ, 2006). Based on the information in a 2005 *Education Weekly* survey, only 16 states require and provide funding for mentor programs for beginning teachers (CTQ, 2006).

Moreover, in states where programs were executed, many lacked the key elements of effective induction programs. Smith and Ingersoll, (2004, as cited in CTQ, 2006, p.2) “found that only one percent of beginning teachers nationally are receiving comprehensive induction support.” Though these statistics validate the need for enhancement, Wong (2005) found several effective mentoring programs that incorporate all or many of the strategies needed to train, support, and retain beginning teachers. One of these programs is the Connecticut Beginning Educator Support and Training (BEST) program that began in 1985. This comprehensive four-year induction program provides strategies and detailed guidelines for hiring, supporting, and retaining new teachers. Administrators are given

detailed components for supporting beginning teachers. These components are outlined in four main categories: mentoring, support, evaluation, and professional development. In the evaluation model, administrators and beginning teachers are given a potential evaluation plan for each year of the four-year program. The overall structure of the induction program has been developed at the state level, with school districts charged with creating effective induction programs that meet the statewide standards but also address the needs connected to individual schools. New teachers must complete the four-year program before receiving their teaching certification (Youngs, 2003, as cited in Wong, 2004).

Colleges and universities provide opportunities for students to embark on a journey to embrace their potential career paths while learning and growing. The goal for both colleges and universities is to prepare students who can enter the workplace as global citizens who will contribute to society in a productive manner.

Data clearly show that individuals who participate in the SCTF Program, administered through CERRA, are retained in the profession at significant rates. By analyzing various merit-based program components, research methods, and noteworthy findings from specific studies, one could conclude that the components of merit-based programs, if implemented throughout teacher preparation programs, could prove useful in retaining teachers longer.

One specific merit-based program, known as the SCTF Program, incorporates the core tenets of a cohort model, professional development/self-efficacy development, leadership opportunities, diversity awareness, and early classroom field experiences that attribute to the success of preservice teachers that matriculate through this specific merit-based program. Incorporating the core tenets of the SCTF Program into all pre-service

programs has the potential to aid in reducing teacher turnover and in turn, increase teacher retention.

This literature review briefly examines the costs of teacher attrition, and more closely examines how core tenets of the SCTF Program are key factors to curbing attrition, particularly for teachers who are now loan satisfied—meaning they no longer owe years of service back to the state for the funding received as a South Carolina Teaching Fellow. Moreover, it further explores how these specific components of the SCTF Program can translate to other professions and why its alumni are remaining in the profession. Research proposes that professional development for new teachers should begin with a broad induction program where first year teachers learn to “consider specific educational contexts, and acquire practices and beliefs that last throughout their career” (Glassford & Salinitri, 2007; Luft et al., 2003; Moir & Gless, 2001; Wong & Wong, 1998). Presence alone at professional development trainings does not meet the educational needs of beginning teachers (Hinds & Berger, 2010). With this in mind, the professional development provided to the Teaching Fellows embraces the student-scholar model where students learn about different topics related to their career paths and how embracing those opportunities of growth and development provide necessary experiences earlier than beginning teachers. Thus, these individuals are equipped to enter with more “tools in their toolboxes” and in turn, provide the self-efficacy to persevere and remain in the classroom.

Preparing teacher candidates to become effective teachers has long been a source of debate and the subject of much research since schools were established in the US during the 19th century (Henry et al., 2013). Definitions of effectiveness have differed substantially throughout the years. They often include concepts such as morality, values,

democratic and capitalistic beliefs, promotions of social mobility and social justice, self-esteem, and human emancipation. The definition of teacher effectiveness has usually included elements of what teachers do to impart knowledge and their impact on student learning. These traits are what merit-based programs (beyond content and pedagogy) develop in their teacher candidates and could potentially be imbedded in all teacher preparation programs throughout the state of South Carolina.

There are key components of the SCTF Program that could potentially increase new teacher retention. One of these key components is a cohort model that allows program participants to function within a community of practice (CoP) (Lave & Wenger, 1991). A CoP is a group of people who "share a concern or a passion for something they do and learn how to do it better as they interact regularly" (Lave & Wenger, 1991). Through the CoP, students engage in legitimate peripheral participation (LPP) and situated learning (SL) (Lave & Wenger, 1991) as they grow as leaders and future educators. Lave and Wenger (1991) described SL as the connection between learning and the social context in which this learning occurs. Since even general knowledge has a specific and contextual component, these authors believed that all learning is situated learning. LPP describes how newcomers become experienced members and eventually old timers of a community of practice or collaborative project (Lave & Wenger, 1991). In other words, LPP is the process by which students engage with a community (in this case, a Teaching Fellows cohort) as they become functioning participants in that same community. Based on this construct, Teaching Fellows begin on the outskirts of the community as freshmen and absorb a general view of the CoP. These newcomers scaffold their own learning through the relationships they develop with other Teaching Fellows. This is the basis of LPP. The cohort

model in the SCTF Program potentially helps teacher candidates prepare for their early careers. Hallman (2017) found that members of the Teaching Fellows Program engaged in LPP, first by observing and learning the skills needed for success and then gradually assuming more leadership within the CoP and eventually in their schools. The CoP also supported the work of participants by providing a safe space for airing concerns and engaging in problem solving. Program graduates “reported that the experience was valuable and described the community as one of the strengths of the learning experience. The outcomes of the program, according to the participants, were an increased sense of confidence, courage and empowerment” (Hallman, 2017). These feelings help retain teachers at higher rates than pre-service teachers who might not have had the opportunity to participate in a cohort model program during their teacher preparation program.

Another key component is the presence of a campus director who can serve as a mentor and support both within and outside of the university setting. O’Meara (2020) examined the impact of a CoP, LPP, and a master teacher on the learning of two novice teachers. The master teacher successfully served as a mentor for the new teachers, helping them shape their knowledge of content, curriculum, pedagogy, while also supporting their development. Based on the definition of master teacher provided in the research, the campus director can also be viewed in this capacity. A strong mentoring program impacts retention and studies have found that students that have mentoring opportunities are more equipped to remain in the teaching profession. Mentoring impacts both the resilience and “grit” of teachers during their first five years and in turn, help them to be better prepared for the responsibilities that accompany being a teacher in the school system in today’s society.

A third component includes the opportunities to develop skills for leadership. Teacher leadership is a key component that the SCTF Program introduces to the cohorts during freshman year and continues to build on. The SCTF Program expands their students' knowledge base of what teacher leadership looks like in actionable steps until graduation from the program. A fourth component offers the opportunity for real-world application of skills and theories traditionally taught in coursework through classroom environments and experiences. Teaching Fellows are provided extra opportunities to engage in both theory work and transferring that theory into practice settings. Other components focus on the diversity of learners and the opportunities to participate in active classrooms earlier through residential experiences. All of the above key components provide students in the SCTF Program to become better equipped and more resilient once they enter into the classroom setting so they are more cognizant of the struggles that beginning teachers endure during the beginning of their careers.

The individual SCTF programs at partner institutions of higher education are evaluated on a five-year cycle by CERRA through annual program reports, annual graduate focus groups, biannual fiscal and academic audits, and site visits. An annual statewide program evaluation is completed through the center's comprehensive programmatic and budget reports to the South Carolina Commission on Higher Education (CHE) and the General Assembly through the Southern State Education Oversight Committee (EOC). These written reports are completed in August and September every year.

Mentoring

Conventionally, reviews of mentoring research (e.g., Ingersoll & Kralik, 2004) have ranked experimental designs that collected quantitative data and examined it through

demanding statistical procedures. The literature reviews for this study had to meet the following criteria: (a) were circulated in peer-reviewed journals or technical reports available through online databases; (b) in some way linked mentoring with new teacher retention; and (c) were conducted in the United States. Mentoring within the SCTF program is unique as some institutions assign upper-class students that paired with lower classmen in very much the same fashion that induction teachers are placed with a veteran or mentor teacher. This is one of the contributing factors that sets the pre-service teachers in the SCTF Program apart from other education majors.

Professional Development Opportunities/Self-Efficacy

The need for autonomy refers to the degree to which professional experiences provide a sense of choice and inner freedom while embracing his/her goals and activities (Deci & Ryan, 2000). A specific example to highlight is when an educator is asked to perform a specific job function during a day off. If the educator willingly accepts the opportunity to do so, the want for autonomy is satisfied. On the contrary, if the teacher educator prefers to embrace personal time and feels forced to keep on working, they might feel their autonomy is not being respected (Van Den Broeck et al., 2016). The desire for affiliation impacts the degree to which a professional feels linked to others and appreciated by others (for the work context; by superiors and colleagues) (Baumeister & Leary, 1995). This need is met when an educator views themselves as a valued team member, experiences a sense of connection, and has close contact with direct colleagues (Van Den Broeck et al., 2016). As one's opportunities for professional growth are meaningfully related to educators' basic needs and fulfillment at work, there lies an essential aspect for educators to further develop into their occupation. A specific study by Tack (2019) and

supported by Kelchtermans et al. (2017) focusing on the relationship between teacher opportunities for professional growth emphasizes the need to create opportunities to support professional development for teachers and mentors at institutional, national, and international levels. This recommendation is in line with the wider call for the establishment of a more formal professional development program for teacher educators (Kelchtermans et al., Year; Tack et al., Year; Vanassche et al., 2017).

Professional development is the practice of providing opportunities for growth in both leadership and pedagogy. Those who participate in the SCTF Program are provided a much deeper breadth and depth of pedagogy due to being offered professional development beyond that of a traditional education major. This, in turn, provides both the opportunity and space to reflect on their development. The experiences offered to SC Teaching Fellows makes the program distinctive in comparison with traditional teacher education preparation programs (Fuller, 1992). The SCTF Program provides professional development opportunities to the Fellows across the state of South Carolina that prepare them to be teacher leaders through advocacy for not only future students but also for themselves in relation to providing equity and inclusive practices. Teacher leader skills as used in this study refer to the skills that Teaching Fellows acquire through the key components administered through the programs at the institutions where the program is administered.

Professional development that focuses on teacher knowledge and ability to offer opportunities to enhance learning while building professional learning communities is an important future direction for teacher preparation programs. Within the SCTF program, a new initiative was launched during the 2020-2021 academic year. The initiative, developed

from feedback of a focus group of seniors responding to the attributes of the program, offers Fellows from all institutions opportunities to attend statewide cohort meetings via Zoom and connect with Fellows from other institutions. Through these opportunities, Fellows are able to expand their professional development opportunities and network with future colleagues. A deeper impact that these specific professional development opportunities provide to the Teaching Fellows is the ability to provide real-world examples of application and put into practice theory that Teaching Fellows receive in their courses.

Leadership Opportunities

Leadership opportunities for professional development is a key component entrenched in the SCTF programs on all campuses that currently have an active program in South Carolina. According to Beethan & Sharpe (2013), “Pedagogy in today’s digital age has evolved from the perspective of teaching knowledge where students are passive participants to creating social learning opportunities in which students are actively engaged in their learning process” (p. 254). In society, a shift in technological, globally competitive, demographic, and other prevailing aspects impact the intent of how understanding effective leadership and what it may look like in both work and organizational structures is not evident. Recent accounts of relational leadership (Cunliffe & Eriksen, 2011), authentic leadership (Avolio & Gardner, 2005), and identity-based leadership (Day & Harrison, 2007) all implicate that to be a strong leader in today’s society, one must first find a sense of both self-reflection and awareness of their own self and being able to manage both self and others simultaneously. However, research does not clearly define whether or how leadership development programs align pedagogical choices to facilitate the leadership shifts (Lord & Hall, 2005), transformational learning (Debebe,

2011). Moreover, necessary disruptions that are required to reach awareness of self and others in connecting across interpersonal differences of a diverse, global workforce (Stead & Elliot, 2012).

Teacher leadership has played an integral role as part of the education reform landscape since the mid-1980s (Murphy, 2005; York-Barr & Duke, 2004). In more recent years, teacher leadership has returned to the forefront around conversations related to the future of education. Today, there is strong advocacy for teacher leadership and arguments for why it is needed in the education world (Smylie & Eckert, 2017). The number of teachers who voice they are interested in learning more about teacher leadership and want opportunities to lead is growing (MetLife, 2013).

In the SCTF Program specifically, leadership opportunities are provided to the Teaching Fellows from the very beginning of the program and continue until graduation. These opportunities include an array of experiences for the Teaching Fellows, which include serving on committees, serving as a cohort representative, speaking on behalf of the program to potential future Teaching Fellows or to stakeholders at advisory board meetings, university events, community events, representing the program at functions on the local, state, or national levels, and serving as an advocate for the program both in their field experience placements as well as university-wide events. While this list is not comprehensive, these opportunities are consistent across all institutions that have a SCTF Program.

In order to provide a more concrete example of leadership in action, all active SCTF programs currently incorporate the “7 Habits of Highly Effective Teenagers” into their programs. The rationale for Teaching Fellows to receive this information is provide them

more exposure to what leadership looks like in action and give them the space to explore those key components in an environment where both critical feedback and open conversations take place. Furthermore, these opportunities embrace the model of exploring how Teaching Fellows view themselves as leaders, and how they can potentially grow in skills in this area of the program.

School/Community Experiences

Research indicates much is known about student teaching but much less is known about students' earlier classroom-based experiences (Maynard, et al., 2014). For the purpose of this research, early classroom experiences are defined as the timeframe from when a student enters into the university setting until they enter into their professional preparation program and begin their professional program placements. According to Maynard et al. (2014), "preparing teachers is a complex endeavor carried out by institutions of higher education using a variety of approaches which include courses and classroom-based experiences" (p. 244). Linda Darling-Hammond (2006, 2010) cites that it is crucial to provide opportunities for practice to occur to teaching strategies in the classroom setting. Furthermore, it is important to provide students both time and space to learn from well-trained practitioners, highlighting the mentoring process of becoming a teacher. One step in providing effective learning opportunities within the classroom-based experience is to understand the current practices related the early experiences from the perspective of the student who is completing the program (Prawat, 1992; Resnick, 1989). General teacher education research and research specific to preparing teachers for early childhood classrooms have highlighted that high-quality classroom-based experiences are connected to teachers having a higher sense of teacher efficacy, retention and overall

effectiveness (Darling-Hammond, 2005, 2006; Ross, 1992; Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998; Woolfolk & Hoy, 1990).

Once on their respective campuses, Teaching Fellows receive the same teacher education curriculum that other teacher candidates receive. However, they are offered additional specific preparation experiences that are uniquely designed for the Teaching Fellows program. These specific, more intentional opportunities begin during the freshman year with integration in the classroom and opportunities for Teaching Fellows to be involved with schools and interact with teachers, students, parents, and families. These extensive additional fieldwork opportunities, such as observing classrooms, serving as one-on-one tutors, and delivering instruction proves beneficial. Research indicates that teacher candidates who have these experiences have much stronger early teaching careers. (Boyd et al., 2009). As noted by the research, these early classroom experiences are tied to higher self-efficacy than those students who may not have had these same opportunities, which provide more exposure to different learning styles and teaching methods that take place in the classroom settings.

The current design draws on three constructivist perspectives related to early classroom experiences to better understand why these experiences are so crucial to teacher retention. First, Piaget's theory focused on the need for students to learn concepts based on hands-on experiences. Thus, the information new teachers acquire during these early learning opportunities guide them over time to acquire the skills needed to become high-quality effective teachers. Secondly, Dewey's theory is built on the notion that knowledge is constructed when individuals are rooted in the culture where they learn and grow in their knowledge base. Lastly, Vygotsky's theory based on the notion that students

are intentionally placed with more knowledgeable, supervising teachers, and “work to structure and scaffold experiences that allow students in classroom-based experiences to learn from experienced, mentor teachers” (Oxford, 1997). In closing, all perspectives aforementioned are crucial in both understanding and putting into practice theory in the settings in which Teaching Fellows are able to both learn and grow in their critical thinking abilities while putting theory learning into action steps through practice in those early learning experiences.

Diversity Awareness

As students from more diverse backgrounds enter the classroom setting during the 21st century, it is imperative that preservice teachers are equipped in both cultural and linguistic diversity competence (Banks, 2010; Gat, 2010). As future educators shift their mindsets of the landscape for the teaching profession, increasing diversity knowledge is crucial and teachers must adapt to these changes, each within their unique frameworks. A gap is present among the cultural, social and linguistic background of teachers and their students (Darling-Hammond, 2005). These discrepancies bring about incongruences that impact both the teaching and learning that takes place in the classroom due to insensitive curricular and instructional strategies, teachers misreading student abilities and behaviors, over-representation of immigrant and multilingual learners in special education classes, and inequalities in educational achievement (Banks, 2009; Gay, 2010; Ladson-Billings, 2009; Nieto & Bode, 2008). Increasing the diversity of the student population has been strongly associated to student achievement in school (Gay, 2010; Ladson-Billings, 2009; Mitchell, 2010; OECD, 2004, 2006, 2010, 2015). Data from the OECD Program for International Student Assessment (PISA) in 2003 and 2006 have identified family

background, socioeconomic status and immigration status as the main factors of student performance in school over and above other reasons (OECD, 2004, 2007a). Teacher beliefs have been revealed to be linked with their classroom practices (Borg, 2003; Zheng, 2009). Fang's (1996) and Zheng's (2009) review of many studies propose that teacher beliefs are often consistent with their classroom practices, albeit a majority of these studies have been focused on the field of reading and literacy.

“Culturally responsive teaching has been defined as using the cultural knowledge, prior experiences, frame of reference and learning styles of ethnically diverse students as conduits for teaching them more effectively” (Gay, 2010; Ladson-Billings, 2009). This is specifically highlighted through the SCTF Program where students are introduced to resources and professional developments based on culturally inclusive practices both inside and outside the classroom setting. Teaching Fellows participate in those critical conversations about equity and inclusion, accepting all their students no matter their race, sexual orientation, socioeconomic status, or cultural background. All Teaching Fellows Institutions across the state engage their Fellows in opportunities to identify and explore their own implicit biases that exist and to understand why those biases exist. Moreover, Fellows learn to respect each other's voices and opinions as global citizens who are change agents for the teaching profession they will be a part in the future of their teaching careers.

Discussions and Implications

Investigation of key components, researcher practices, and discoveries show that it is difficult to illustrate how individual factors are related to teacher retention. Prior research on South Carolina Teaching Fellows shows that Fellows remain in the profession

after they have satisfied their loan forgiveness. However, the current literature does not adequately explore the reasons for this difference.

When it comes to the more complex issue of teacher retention, it seems that the more significant questions focus on “how” and “in what context.” It is suggested that researchers and educational leaders take this into account as they develop and evaluate merit-based teacher preparation programs and other induction programs. When exploring the linkage between merit-based program components, such as those of the SCTF Program, and retention of new teachers, an intentional and systematic approach could be developed to explore the more indirect and subtle intricacies of teacher retention in specific school environments through exploring school climate.

One could argue that because new teachers have immeasurable personal needs and infinite interactional dimensions, determining why teachers are leaving the classroom early in their career does not provide any linear effects with any degree of reliability or validity and seems implausible to measure. Another important consideration is that teacher retention in general is not easy to measure. When researchers analyze teacher retention rates at the school or district level, they may overlook the movement of teachers between states and across numerous positions within the educational system beyond classroom teaching. Further, when researchers gather and measure intentionality to stay and satisfaction with prior programming based on self-identified data, it is hard to define whether it is the teacher’s true situation or if they are just cautious to express their discontent or desire to leave because they do not want to “burn bridges” (Ingersoll, 2004). Another factor to consider in regard to the early departure of educators based on feelings of seclusion and lack of a cooperative setting. In many districts, after teacher vacancies are

filled, the leaders feel that is sufficient, without properly planning for a support system within the school to build a foundation in which new teachers can thrive. Thus, referring back to the key components identified through the SCTF Program are those missing pieces that could be introduced during pre-service teacher preparation programs to equip candidates to be better prepared when they enter into the classroom environment.

Attention to these details strengthen the SCTF Program, which boasts higher teacher retention rates for Teaching Fellows to remain employed in a South Carolina public school district. The cohort model of the SCTF Program does not end at graduation but rather spills into the early careers of educators as SCTF graduates remain connected with the program after graduation. School systems could replicate a cohort model to build team unity and improve the work environment, creating positive social collaborations amongst all faculty members. This could be done by implementing team teaching, cooperative team meetings, and orientation programs to meet the needs of all teachers (Minarik et al., 2003). According to Debra Viadero (2008), unfortunately the intense, individualized, high-demand working conditions leave teachers feeling secluded and discouraged without the purposeful support and motivation of colleagues. Building upon professional development opportunities that encourage mentors and new teachers to be engaged in research efforts through self-study projects or self-evaluation could generate useful data. In turn, this data may be able to foster more opportunities for candidates in teacher preparation programs to build upon their skills prior to graduation. Creating research partnerships across schools, districts, and states would encourage and facilitate the distribution of resources and the emphasis on the value of research abilities used to increase teacher quality and teacher retention.

Conclusion

Teacher attrition is a complex and dynamic challenge for both our nation and for South Carolina. Multiple strategies have been offered and implemented to address the current and impending teacher shortage. Research in the areas of teacher preparation programs, merit-based programs, and mentor programs have yielded mixed but promising results in the effort to increase teacher retention. Programs that strategically blend the key elements of these programs may hold the most potential. One such program, the SCTF Program, has shown positive initial results. Further research clearly links certain components to the retention of South Carolina teachers in the public classrooms.

The exploration of teacher attrition through the current literature revealed that there is not one specific reason why teachers are leaving the classroom early in their careers. The review of current literature indicated a need for more information about the complex and non-linear nature of both mentoring and teacher retention. New questions, methods, and approaches for examining this relationship could provide insights for researchers, practitioners, and administrators as they design and develop key components of teacher preparation programs while including important aspects of merit-based and mentoring programs.

In the current environment of public education, it is crucial that students are given greater access and support from highly effective teachers. This particular study makes a unique contribution to the understanding of merit-based teacher preparation programs and teacher quality. By evaluating which specifically identified program components are effective mechanisms for improving the human capital and retention of teachers, these

components aid in increasing the number of professionals remaining in the workforce. (Henry et al., 2013).

To adequately examine the available literature, a systematic approach was taken. First, key terms including teacher attrition, professional development, cohort models, leadership opportunities, early classroom experiences, and merit-based programs were used to conduct the search through online databases: Education Resources Information Center (ERIC), JSTOR, PsycINFO, etc. The abstracts of all identified articles were reviewed to determine whether they met the specific criteria. Second, the researcher examined the citations listed in all acknowledged articles, including the articles that did not report practical studies, to search for any minor reports as well as supplemental articles that met the criteria. Third, periodicals by authors who have added meaningful research to teacher attrition and experts in the field to include any other pragmatic studies published. After reviewing relevant articles and reports, the researcher identified studies that met the criteria to be included in the literature review. Each study investigated the major program instruments, documented the exploration approach and data collected, considered and stressed the major outcomes, and considered merit-based teacher preparation programs and attrition.

The following chapter will outline the methodology that was used in this mixed methods study. This chapter will include an overview of the study. It will also provide specific information about the data sample and methods for identifying the sample population. It will outline the data collections techniques and detail the data analysis approach.

CHAPTER 3

METHODOLOGY

Overview

The purpose of this study is to determine what key components of the South Carolina Teaching Fellows Program were most valued by graduates of the program who participated staying in the classroom after their loan forgiveness period. The South Carolina Teaching Fellows Program (SCTF) is a merit-based program that provides high school seniors with a merit-based fellowship. The fellowship provides up to \$24,000 (up to \$6,000 a year for four years) and is currently operating in 11 identified institutions across the state of South Carolina. The SCTF provides critical preservice support and opportunities which include the following: cohort models, campus director, professional growth opportunities, leadership development, and school/community experiences. These are components that students who are in a traditional teacher preparation program may not receive. The intent of the study is to prove that the components of this merit-based teacher preparation program provide preservice teacher candidates opportunities to be better equipped and more confident in their skills which will help them remain committed to the profession.

Population Demographics

The population for this study was identified through CERRA, which houses all graduates of the program that are still teaching in a South Carolina public school. The identified group of participants included only teachers who have satisfied their loan forgiveness through their years of service after graduation. Those teachers who are no longer in loan forgiveness are defined as teachers who have taught for one year in a South

Carolina public school for each year they received the fellowship through CERRA. The population included South Carolina Teaching Fellows Alumni that graduated from a Teaching Fellows Institution (TFI). The data was comprised of Teaching Fellow alumni who have graduated from an active TFI from the years 2013-2018 and are no longer in loan forgiveness. The data was considered a strategic sample of all the SCTF Alumni. The gender of the sample population included 166 females which was 93% of the population, 11 males which was 6.2% of the population, and 1 other which was 0.6% of the population. The mean age of the sample population was 29.1 while the median was 29 and mode was also 29. The race of the sample was 161 White which yielded 90.4%, Native Hawaiian or Pacific Islander was 1 which yielded 0.6%, prefer not to answer was 2 which yielded 1.1%, Black or African American was 10 which yielded 5.6%, American Indian or Alaska Native was 1 which yielded 0.6%, and Hispanic or Latino was 1 which yielded 0.6%. Upon completion of the survey, data was collected, analyzed, and reported in two segments which included the statewide program and individuals TFIs.

Research Design and Approach

In this study, the researcher sought to determine if specific key components of the SCTF Program influenced their decision to remain in the teaching profession after their loan was satisfied. The selection of an appropriate research method for a study is an important decision considering the topic of the study, the research questions that surface after an extensive review of the literature, and the data collection and data analysis procedures that were followed. The central theme of this particular study, which focuses on the key components of the SCTF program, that impact teacher retention lent itself to a specific research model of a mixed methods nature.

The specific methodology approach would be considered an adapted convergent mixed methods design. This specific design adds the qualitative data collection into the data collection instrument so that the personal experiences of participants can be included in the research. Qualitative data through this approach becomes a secondary source of data collection (Creswell & Creswell, 2018). This research approach was used to investigate the specific components of cohort model, campus director(s), professional development, leadership opportunities, and school/community experiences preservice teacher candidates had during their duration as a South Carolina Teaching Fellow at the specific institution they attended. The qualitative component of this study included open-ended questions imbedded in the survey to grasp more rich feedback from fellows to use for later development of focus groups and interviews.

The survey instrument contained a section of questions focused on each of these identified topics. An online survey was developed based on an extensive review of research based on the archived data. The survey was administered to determine rate of satisfaction of the components using a Likert scale. The survey was sent in draft form to a targeted sample of Teaching Fellow directors and alumni of the program that did not meet the criteria to participate in the survey.

The research team for this project included the primary investigator and the CERRA staff. These two individuals were the Executive Director of CERRA, who also serves as the Teaching Fellows Program Director, and the Coordinator of Research and Program Evaluation. The team collected feedback from an identified group of individuals to review the survey, which served as a tool to check for both reliability and validity of the survey instrument.

Utilizing a combination of both quantitative and open-ended questions, this study seeks to better understand if the identified components of the SCTF program had an impact on teacher retention. The questions on the instrument were first reviewed by a selected panel of education experts, which included practicing teachers who graduated from an SCTF Program institution that are still in loan forgiveness and current campus directors of an SCTF Program. This was to ensure the questions on the survey correctly reflected the nature of the key components identified of the SCTF Program. More specifically, this panel was selected due to their experiences and expertise working with the SCTF Program. The panel's purpose was to check for content validity by verifying that the items accurately target the constructs that the research team determined were the most valued key components of the SCTF Program. The group that the survey was piloted were asked to complete the survey and provide feedback to the research team after they completed the survey. The research team, which consisted of the primary investigator, Executive Director, and Coordinator of Research, collected the feedback and made edits accordingly from the critiques gathered.

The final draft of the survey instrument was reviewed for both reliability and validity by the expert reviewers to obtain approval prior to launching the survey. These individuals included the dissertation chair, content expert, and methods expert to vet the final product prior to launching the survey. The study also sought to identify whether there were individual differences such as demographics that may affect the reason a SCTF graduate remains in the classroom. The data was collected and then analyzed for trends to make reasoned, informed decisions about relationships moving forward between the specific components of the South Carolina Teaching Fellows programs and the rate of

retention. The information collected through this phase of the research study will seek to address the identified question.

Research Question #1: Which key components of the SCTF Program are most valued by program graduates' who have remained in the education profession?

Role of the Researcher

In August 2014, the researcher accepted the position as Director of the SCTF program at the institution where the researcher is currently employed. The role of the program director for the purpose of this study was to develop and implement the SCTF program as the inception of the program was developed as part of the researcher's role. Duties included building and facilitating a model for the program that would follow the key components identified in this study while simultaneously sharing information about the fellowship with perspective students across South Carolina. Other duties include recruiting highly qualified candidates to maintain the minimum number of fellows required to remain in good standing and not fall into probationary status, plan and facilitate the experiences for the fellows from freshman-senior year, and oversee the financial expenditures. An additional duty includes reporting all experiences, academic standings, and paperwork for each teaching fellow in the program to the Center for Educator, Recruitment, Retention, and Advancement.

As the Director, the researcher does have contact with current fellows in the program on a regular basis. To offset the potential ethical issues in this particular study, the researcher chose to only use data provided by current fellows as archived data to gain background knowledge about the key components of the SCTF program and their views on the components the study is investigating. The survey utilized in this study was sent to

graduates of the program who have satisfied loan forgiveness. The survey was administered through CERRA using the Wufoo platform. The anonymous survey ensures participants can answer the survey without fear of identification. Participants were given an option to self-identify at the conclusion of the survey if interested in being a participant in focus groups and interviews in the future with the CERRA team and the primary investigator.

Disclosure statement: The researcher serves at the Coastal Carolina University current Teaching Fellows Director but none of the participants that completed the survey were students from the program that the researcher oversees.

The primary investigator as long with the CERRA team designed the study, developed the survey instrument, collected the data, and analyzed and interpreted the data in consultation with both Executive Director and Coordinator of Research & Program Evaluation. In order to obtain both reliability and validity of the instrument since it will be developed by the researcher and the CERRA team, a group of content experts will be working on the survey and once complete, the survey will be reviewed by a subset of individuals. To avoid potential for research bias, the researchers used strategies to improve the trustworthiness of the mixed methods research by vetting the survey instrument through campus directors across the state, SCTF program alumni who are currently teaching in the South Carolina public classroom still in loan forgiveness, and current TF's who are participating in a program at an active TFI.

Data Collection Method

In order to answer the guiding questions, the primary investigator spent time working with and alongside the Center for Educator Recruitment, Retention, and

Advancement (CERRA) team. By gathering and evaluating already existing data, the researchers created a clear description of the data collected through senior focus groups to gauge questions that would be included in the survey administered to graduate of the South Carolina Teaching Fellows Program. Senior focus groups are conducted by the CERRA team by selecting a random sampling of graduating TF's from all of the institutions across the state to ask questions surrounding their experiences as a SCTF and more specifically to gauge how they viewed the 5 key components that are addressed in the survey instrument.

Data Analysis Technique

Descriptive statistics were used to explain the level of preparation and retention rate of teachers had who participated in the SCTF program which included the components identified by the researcher. The primary investigator quantified the responses and used an analysis of variance (ANOVA) to infer which components were impacting the candidates' perspectives on the value of the SCTF Program. A correlation is a component of the analysis. However, the data was compared using the ANOVA.

Data will be collected from SCTF graduates who attended a South Carolina Teaching Fellows institution. The collection method for the quantitative component is an online survey using the software Wufoo and administered through CERRA on behalf of the researcher. The online survey was designed to examine the key components of the South Carolina Teaching Fellows Program that graduates most valued. The qualitative component will include an open-ended question after each Likert scale question to gauge more of the details about the key components SCTF Program that impacted the decision for a TF to remain in a South Carolina public schools district after their loan forgiveness period was

completed. The survey is a combination of both structured and unstructured questions to find both quantitative and qualitative data.

This chapter provided detailed descriptions of the methodological approach utilized in the study. Research questions, research design, a rationale for using a mixed methods approach was all explained in detail while providing the data collections process, sample population, obtaining both reliability and validity of the instrument, and data analysis techniques.

CHAPTER 4

RESULTS

The premise of the study was to determine the key components of the South Carolina Teaching Fellows Program that were most valued by its' graduates. The secondary significance was to determine which (if any) of the key components made an impact on graduates' decision to remain in the education profession after they satisfied their loan repayment.

The survey launched on February 15, 2022 and was sent to 402 graduates of the SCTF Program from years 2007-2013. The following issues occurred with the delivery of the survey to graduates which left 394 surveys delivered to an active email address. The following responses were received after the survey was launched: automatic "wasn't delivered..." messages for four graduates each time the survey was sent to participants, automatic "blocked..." message for two graduates each time the survey was sent to participants, automatic "problem delivering..." message for one graduate each time the survey was sent to participants, and one out-of-office maternity leave message (returns August 2022). This subject did not complete a survey and provide her name but could have completed one anonymously. The last subject the research team received an out-of-office maternity leave message, contacted CERRA and completed the survey. This participant is not included in the numbers above due to the fact that the email stated the graduates return date was August and they submitted the survey after the deadline.

The survey was accessible online for two consecutive weeks with two reminders sent during the duration of the survey which included after week one and four days prior to

the closing of the survey. The survey closed on March 1, 2022. A total of 178 out of 394 surveys were completed by subjects which yielded a response rate of 45.18%.

As illustrated in the following data charts, demographic data was collected on all participants who completed the survey. A description of the data along with both frequency and percentages of the findings is provided for each data point collected from survey respondents with the exception of the question: What year did you complete the SC Teaching Fellows Program? This question yielded responses from graduates that were not valid because the data for this specific question was only being collected from the 2007-2013 cohorts so the answers were not valid. Therefore, the researcher decided to not include that question in the data analysis.

Figure 1 below depicts the demographic of race in this particular study. From the 178 completed surveys, 161 (90.4%) identified as White, 1 (0.6%) identified as Native Hawaiian or other Pacific Islander, 2 (1.1%) identified as prefer not to answer, 10 (5.6%) identified as Black or African American, 2 (1.1%) identified as other, 1 (0.6%) identified as American Indian or Alaska Native, and 1 (0.6%) identified as Hispanic or Latino who completed the survey,

Figure 1

Percentage of Race Distribution

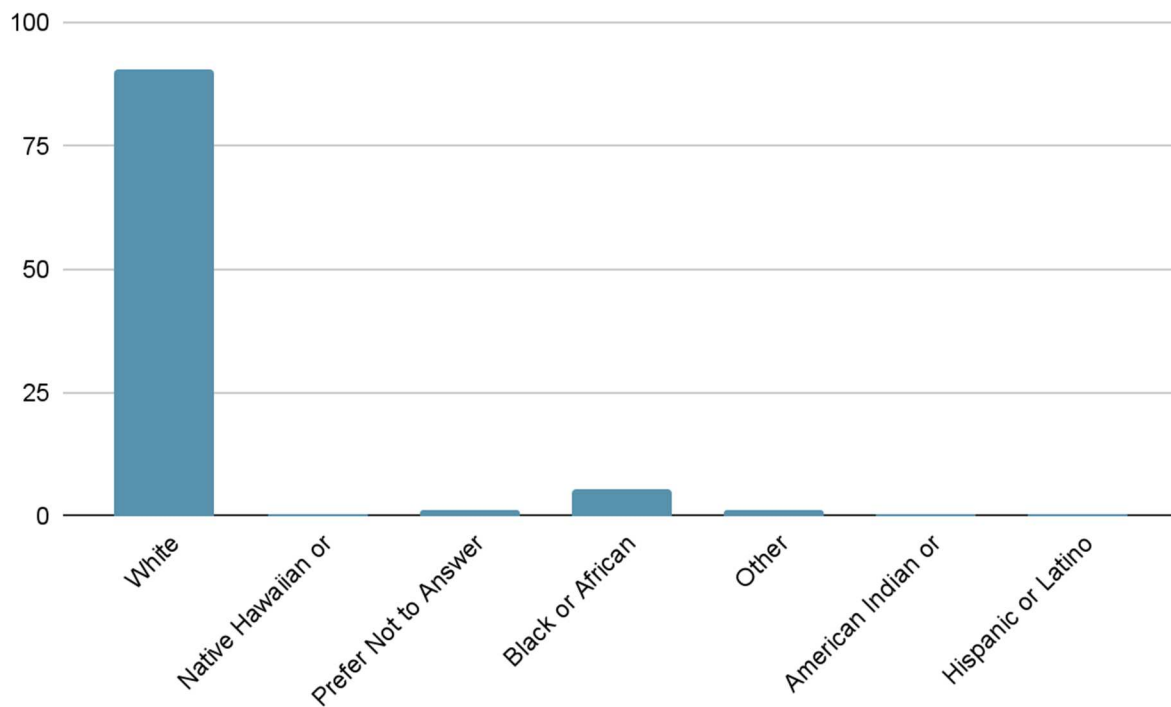


Table 2 depicts both the frequency and percentage of gender distribution of the respondent that completed the survey.

Table 2

Frequency and Percentage of Gender Distribution

Gender	Frequency	Percentage
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Female	166	93.3
Male	11	6.2
Other	1	0.6

Figure 2 and table 3 depicts the percent distribution by age of the sample population.

Figure 2

Percent Distribution by Age

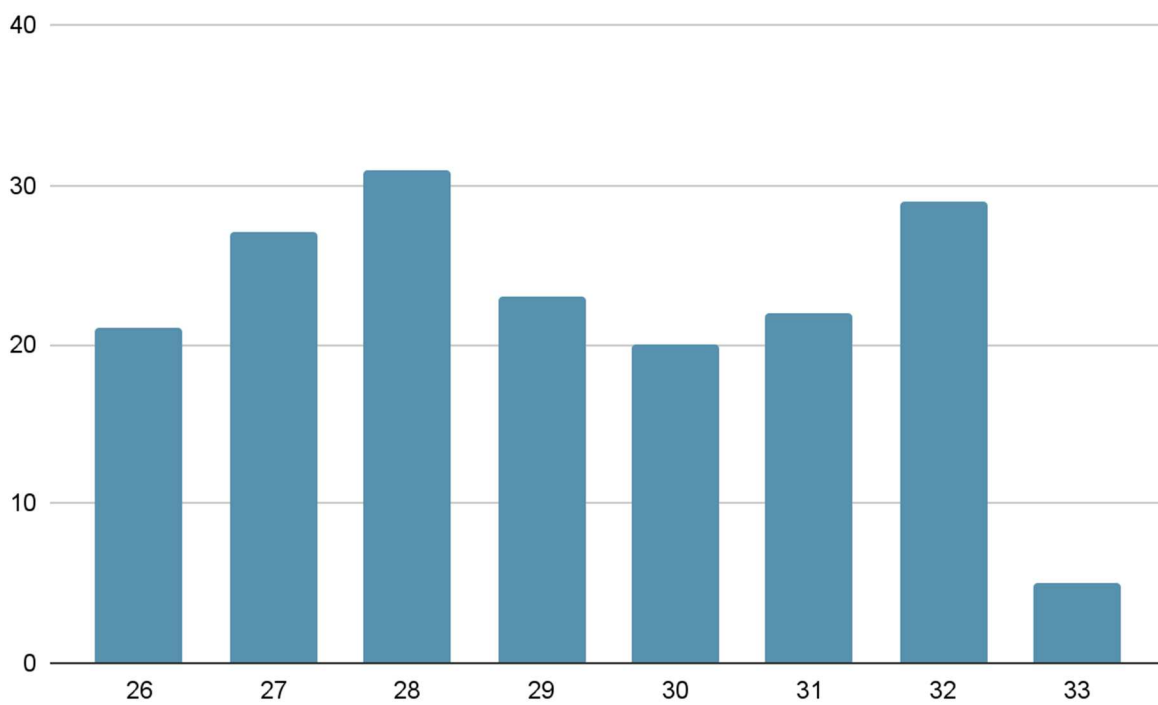


Table 3*Percentage and Frequency by Age*

	Current Age	Frequency	Percentage
	26	21	11.8
	27	27	15.2
	28	31	17.4
	29	23	12.9
	30	20	11.2
	31	22	12.4
	32	29	16.3
	33	5	2.8
Mean	29.1		
Median	29		
Mode	29		

Table 4 provides both the frequency and percentage of SC Teaching Fellows graduates of institution and frequency/percentages of those who responded to the survey.

Table 4*SC Teaching Fellows Institution Attended Frequency and Percentage*

Institution	Frequency	Percentage
Anderson University	38	21.3

UofSC Columbia	45	25.3
College of Charleston	21	11.8
Lander University	15	8.4
UofSC Upstate	22	12.4
Winthrop University	33	18.5
Charleston Southern University	4	2.2

Figure 3 provides a graph of the SC Teaching Fellows institutions and the number of graduates that attended that institution.

Figure 3

Institution Attended

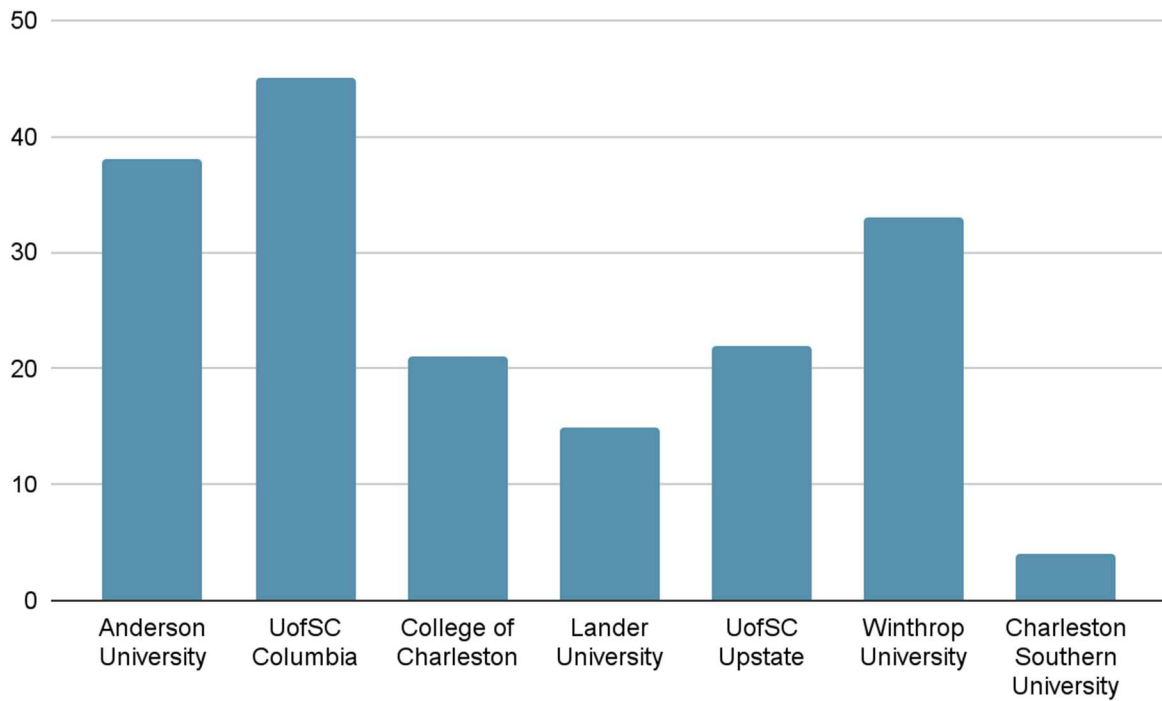


Table 5 provides the total number of years the graduates have been employed in an SC public school district.

Table 5

How many years have you been employed in a SC public school/district? Include your total years of experience in any SC public school/district.

Years	Frequency
4.0	2
4.5	2
5.0	34
5.5	1
6.0	30
6.5	1
7.0	30
8.0	25
9.0	19
10.0	24
10.5	1
11.0	9

Mean	7.4
Median	7
Mode	5

Key Components Findings and Analysis

The five key components of the SC Teaching Fellows Program identified in this study included cohort model, campus director(s), leadership development opportunities, professional development opportunities, and school/community experiences. The survey asked participants to rate the helpfulness of each component using a five-level Likert scale (very helpful - very unhelpful). Participants assessed each component separately, meaning the same participant could mark "very helpful" for all five components. Table 6 provides the percentages for each level of the Likert scale for all five components. The findings concluded that the professional development was identified as the most helpful based on percentage to graduates of the SC Teaching Fellows Program. However, it is important to highlight the fact the all five key components were above 84.3% which illustrates that all components showed a statistical significance in terms of their helpfulness to the graduates from the SCTF Program.

Table 6

Survey Results: Helpfulness of Key Components of the SCTF

Key Components	Very or Somewhat Helpful	Unsure	Very or Somewhat Unhelpful
Professional Development Opportunities* n=170	92.9%	5.3%	1.8%
Cohort Model n=178	90.4%	4.5%	5.1%
Campus Director n=178	87.1%	3.4%	9.6%
Leadership Development Opportunities* n=167	84.4%	13.2%	2.4%
School/Community Experiences* n=166	84.3%	9.6%	6.0%

*Note: *Does not include graduates who indicated they did not participate in these experiences as a Teaching Fellow.*

The raw data indicated that 58% of the respondents felt the cohort model was very helpful and somewhat helpful to them during their time in the SCTF program. In contrast, only 1 respondent answered they felt the cohort model was very unhelpful which was a .005% rate. A few specific examples of the very helpful responses stated, “I believe the cohort model was huge for me as I attend a school pretty far from home. I still keep in contact with people who were in my cohort to this day! They helped make the transition to college smooth and have helped with things as we became professionals” and “It was helpful to talk about our experiences when we were going through student teaching, applying to jobs, etc. It helped with networking. I have connections with other teachers at other schools because of the cohort model.” In contrast, the 1 respondent whom felt that the cohort model was very unhelpful shared, “It helped me get to know other teaching

fellows but the meetings were often tedious and I don't know that it has helped me with my career.”

The raw data indicated that the campus director/s role is important from the perspective of the graduates of the program. From those participants who completed the survey, 65% shared that their campus director(s) were very helpful during their time in the SC Teaching Fellows Program. The researcher was able to determine from the open-ended questions that asked the participants how having a Campus Director(s) impacted their career that those Teaching Fellows who had turnover during their time as Fellows in the program were at a disadvantage over those that had a consistent campus director who was able to be a strong presence for the fellows going through the program at their specific institutions. As one specific example of the importance of the campus director, a respondent stated, “Our campus director was very helpful and so important to the program. She was vital! I think about her often. She made an impact on my career by providing a leader and modeling a successful college level mentor.” In contrast, another stated, “We had several campus directors during my time. One in particular, I had a really bad experience with. I feel like they SHOULD have been there for extra guidance and support, but I feel like during my years, we were a burden to most of the hands that we were passed through. I have exceedingly great things to say about Teaching Fellows in general, but the campus director experience is absolutely not one of the great things.” The data clearly supports and acknowledges both the importance of a strong campus director and the “right fit” for the institution as well as the students this director will work with in the SCTF program.

Leadership development opportunities was deemed 50% very helpful of graduates who participated in the SCTF program. The researcher was able to determine after analyzing and interpreting the themes that emerged from the open-ended questions, that the majority of respondents who found the leadership development opportunities to only be somewhat helpful, unsure, somewhat unhelpful, or very unhelpful were those individuals who did not participate in leadership opportunities within their SCTF program. The graduates who felt that leadership opportunities very helpful were those students who sought out opportunities to serve in a leadership role and then expand their leadership to other areas within the university setting. One graduate stated in their open-ended response, "I was elected cohort representative my sophomore year. This taught me a lot about leadership and made me realize that I am often seen as a leader. My senior year, I co-founded and presided over a student chapter of the SCEA at the College of Charleston. My time spent as cohort representative helped guide me in that journey. And finally, both of those experiences taught me exponentially about the value and varied perspectives of leadership. If I had not been a Teaching Fellow, I would not have realized my leadership qualities, and would not have had the opportunity to define them." Another graduate stated, "I was cohort president for many years and enjoyed the leadership development. The leadership drive has continued into my career as I try to take any leadership opportunities that become available. In contrast, a graduate that felt the leadership opportunities weren't helpful stated "it's great if you're a popular member of your cohort, but there really aren't a lot of leadership lessons if you don't hold an office."

According to the raw data, 55% of the SCTF graduates felt that the professional development they received was very helpful and 33.7% felt that the professional development was somewhat helpful. Of the overall respondents, 9% felt unsure about how helpful the professional development was while they were part of the program. Only .011% of respondents felt that the professional development they received was somewhat unhelpful. Of the 55% of graduates' who felt professional development was very helpful one shared, "Again being able to attend those first few days of school to get that experience was the most eye opening and to get so much advice from teachers setting up and developing relationships with educators who had been in the profession for 20 years." In contrast, a respondent that felt the professional development was somewhat unhelpful stated, "we rarely had trainings that were pertinent as part of our College's Teaching Fellow program and I don't think I have used anything from my time in Teaching Fellows during my professional teaching career."

Based on the SCTF graduates', 62% felt that the school/community experiences were helpful while 16.8% felt the school/community experiences were somewhat helpful. Sixteen percent of the respondents felt unsure about this component for various reasons which include responses such as "I don't specifically remember many school/community experiences during my time that really stand out. We did complete service hours, but not specific things related to community involvement" to "We had to do volunteer hours and those were okay, but we didn't really do much as a cohort during my time. There were great ideas but we seemed to have a hard time following through with them." Of the SCTF graduates, .045% felt that school/community experience were somewhat unhelpful while only .011% felt the opportunities were very unhelpful. It is

important to highlight that .067% of the respondents did not participate in professional development opportunities as a Teaching Fellow. One respondent commented, "I am struggling to remember any of the aforementioned examples during my time as a Fellow."

Upon completion of the data analysis to determine that all five key components showed a significance of 84.3% of higher for the overall helpfulness of that specific component, a new set of ANOVA tests were ran to determine if the five components could be ranked in 1-5 order of significant impact according on the objective measurement. The outcomes of the data tested did show a difference in the specific categories that were measured and therefore proved to be both statistically significant and objective in nature. According to the data set, measurement of statistics showed the difference between the five key components and based on rankings determined by mean of the components, professional development was the number 1 factor in overall helpfulness according to the graduates who completed the survey. Professional development was followed by school/community involvement, cohort model, director/s, and leadership development. There was a statistically significant difference between each of the components that were measured and all showed a P value of $P > .001$.

Table 7 provides the data for the secondary portion of the research for this study which was to determine how effective the SCTF Program was for the graduates in helping to prepare them for the career in public education.

Table 7

Based on your overall experience as a SC Teaching Fellow, how effective was the Program in helping to prepare you for your career in public education?

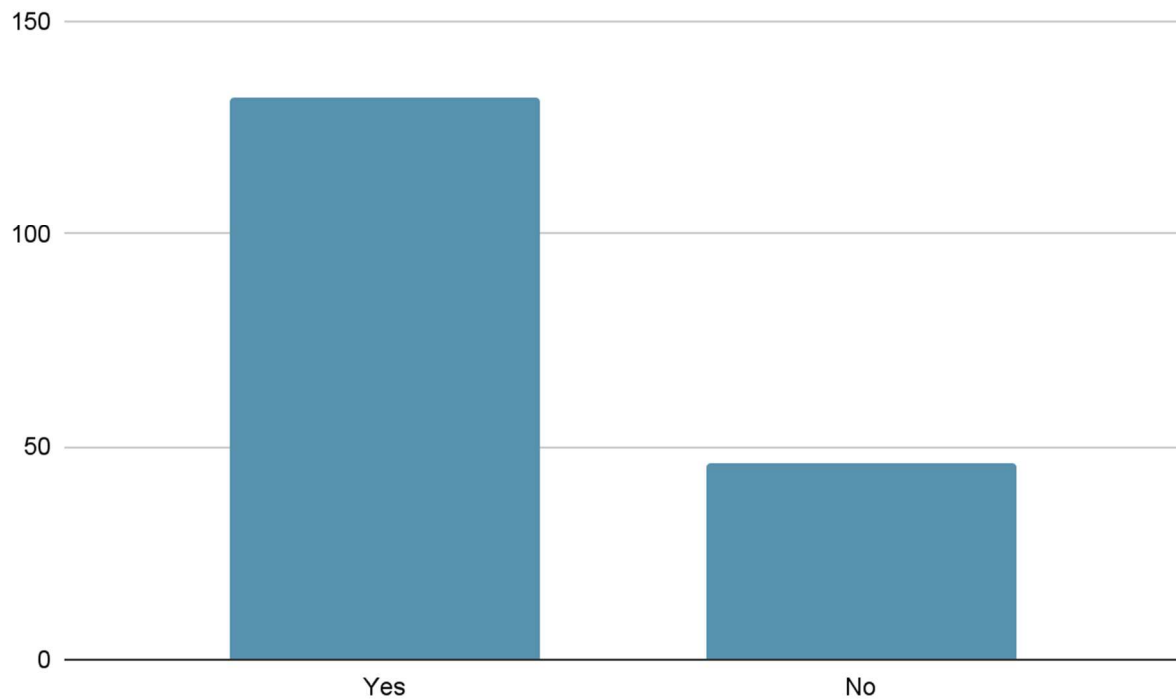
Very Effective	127
Somewhat Effective	45
Unsure	2
Somewhat Ineffective	2
Very Ineffective	2

To culminate the key components identified in this specific study, 71% of the respondents felt their overall experience was very effective in preparing them for a career in public education while 25% felt the experience was somewhat effective. Of the total respondents, .011% felt the overall experience was very ineffective, .011% felt it was somewhat ineffective, and .011% felt unsure of the effectiveness of the overall experience as a SC Teaching Fellow.

Figure 4 is the culmination of the entire study in determining if the graduates experience as a SC Teaching Fellows had any impact on their decision to remain in the education profession even after satisfying the requirements for loan forgiveness.

Figure 4

Do you believe that your experience as a SC Teaching Fellow had any impact on your decision to remain in the education profession even after satisfying your requirements for loan forgiveness?



The most significant data obtained as part of this study is based on the question which asked graduates if they believed that their experience as a SC Teaching Fellow had any impact on their decision to remain in the education profession even after satisfying their requirements for loan forgiveness. Of the 178 completed surveys, 74% felt that their experience as a SC Teaching Fellow impacted their decision while 26% felt that being an SC Teaching Fellow did not have an impact on their decision to remain in the education profession.

Some respondents who felt the SC Teaching Fellows Program impacted their decision to remain in the classroom shared open-ended responses which included “Teaching Fellows is an incredible program. It could be better, but it is definitely a reason I became (and stayed) a SC educator,” “I have always wanted to be a teacher and have never doubted my role in this profession. Teaching Fellows neither spurred me on

nor deterred me from teaching. Teaching Fellows ultimately helped me financially, and for that, I am the most grateful” and “I feel like the retention part (loan forgiveness) of Teaching Fellows is what has really kept me in the profession this long. If it was not for that loan forgiveness requirement, I wonder if I would have made a career change. I do enjoy teaching, but there are many things about the profession that sometimes can be overwhelming and make you feel like you can't achieve that work life and personal life balance.”

The key component of the satisfaction item revealed statistically significant results for the following experiences (Cohort Model, Director (s), Professional Development Opportunities, Leadership Opportunities, and School/Community Experiences). For example, 88% of the respondents who received leadership opportunities said they found these opportunities to be very helpful or somewhat helpful. This means that the second binary (y/n) items also aligns with most of the subcategories. The overall agreement between this binary item and the overall satisfaction item provides support that the factors that the researcher believes are affecting the candidates' perceptions are authentic.

The two items about satisfaction (overall and the binary (y/n) belief item triangulate with each other. This provides internal, independent support of the validity of factors that influence the candidates' satisfaction with the experience. There is no apparent, statistically significant role that race, gender or age plays in the candidates' satisfaction with the experience.

A key factor influencing all of these variable categories is the fact that each consist of small sample sizes. There is one dominant category and very few individuals in the other categories. The lack of statistical significance may be real or the product of a sampling error. There is no way, at this time, to determine which, and thus the researcher felt there it was not significant enough to investigate in this research study.

Part I.

The components that were identified as significant in terms of the impact on the candidates' general satisfaction with the SCTF program were subjected to a Cohen's d analysis. This statistical test is used to determine the practical or real impact of a treatment or factor (Cohen, 1998). In the context of this study the Cohen's D test was used to determine which if any components have a relatively small, medium, or large impact on the candidates' perceptions of the SCTF program. A Cohen's d value of .2 indicates the component(s) have a limited, small impact on the candidates' perceptions of and attitudes toward of the program. A value of .5 indicates a moderate impact and a value of .8 or greater indicates a large effect on the candidates' perceptions and attitude toward the program.

The scores obtained from the Cohen's d analysis range from values obtained by comparing overall satisfaction between the factors/categories ranged from .01 to a high of .12. To give context for these numbers, a Cohen's D value of .2 is considered to be a small effect difference, .5 is a medium effect difference, and .8 is a large effect difference. Thus, from this present survey analysis, one is unable to discriminate between the factors and determine which if any have a larger effect than the others. All of the values are below the level of small practical impact (.2) which means the statistical analysis did not detect any

differences, small, medium or large, of any of the components on the candidates' perceptions and attitudes toward the SCTF program. These results do not necessarily indicate that there are not differences between the components. It is possible that the analysis was not sensitive enough to detect any differences and further studies could determine the impact and rank the components accordingly.

Part II.

The results reveal the five components placed on the survey which included cohort model, campus director(s), professional development opportunities, leadership development opportunities, and school/community experiences have a definitive impact on the candidates' perceptions of the SCTF program. However, the current study is limited in that it was not possible if any of the components have a greater impact on the candidates' perceptions. This information would be useful because in practice funding and time are limited. In light of these real-world constraints, it can be prudent for administrators of SCTF programs to focus on the program components which have the most efficacious impact on teacher performance and retention.

In order to more precisely determine the impact of program components on the success of the SCTF program, several refinements are needed for future research projects. First, it will be necessary to obtain a larger pool of graduates which will increase the chances of uncovering latent data patterns. Secondly, and more importantly, it will be necessary to develop more precise, targeted probes for each of the components that impact candidates' perceptions of the SCTF program. Specifically, what is needed are multiple item subscales (consisting of at least 5 items) probing questions of each of the components/constructs. This will allow for a more detailed and refined analysis of the

candidates' views because the cumulative score for each of the components will be based on at least 5 items. The scores will be less susceptible to outlier scores which can occur via mismarking or misinterpretations of an individual item. Scores based on such subscales are more likely to capture subjects' perceptions. The subscales can also produce a wider range of scores and more clearly differentiate the perceptions of the TF's. Subsequently, the nuances in the candidates' views will more be detectable to statistical analyses.

Furthermore, focus groups could also be included in further study to obtain more specific feedback from subjects related to each of the five key components.

CHAPTER 5

DISCUSSIONS, RECOMMENDATIONS, AND FUTURE IMPLICATIONS

Discussion

The purpose of this study was to explore the key components of the South Carolina Teaching Fellows programs that are most valued by graduates who have remained in the profession of education. The researcher used a mixed methods approach through the development of a survey instrument in consultation with the Center for Educator Recruitment, Retention, and Advancement (CERRA), that identified five key components of the Teaching Fellows program. The participants of the study were asked to rate the components using a Likert scale to indicate how helpful the key components were in the overall experience of the Teaching Fellows program. The survey was launched through CERRA on behalf of the researcher to intentionally increase response rates from the graduates who remained in the education profession. The participants were asked to provide examples of how each key component identified in the survey impacted their experience during their time as a Teaching Fellow and after they started their career in public education. Throughout this study, the researcher was able to identify the research gap related to the key components identified from the survey and provided findings about the impact of more opportunities for the key components to be implemented at the preservice level at all teacher education programs throughout the region.

The key findings of this study proved that some of the components identified in the survey proved to have an impact on TF graduates who completed the program. As a result of these findings, the researcher has determined that the key components can be replicated and generalized to other teacher education programs to help retain teachers in

the education profession at a longer rate. The analysis of the data yielded a theme that all five key components played a role in the majority of the graduates' experience as a Teaching Fellow at their specific institution.

The key components as outlined in Chapter 4, proved very helpful and somewhat helpful for more 80% of the participants who completed the survey. Regardless of the school attended, the specific opportunities offered, or the campus director overseeing the program, the 5 key components yielded a positive outcome for at least 80% of the students in all key areas.

Interpretation of the Findings

The findings of this study are interpreted in relation to the literature review presented in Chapter 2 which focused on the key components of cohort model, director (s), professional development opportunities, leadership opportunities, and school/community experiences. The area of diversity awareness was studied as part of the literature review but was not focused on as part of the survey instrument that was administered due to a few reasons. The first being that diversity awareness has always been a concept that the SCTF program but the definition of diversity changed 5 years so graduates of the program that were surveyed, which did not included students beyond the 2013 cohort as part of this particular study. Therefore, that group of students may or many not have had formal diversity awareness training as part of their fellowship at their specific institution. Secondly, the researcher made the conscious decision to include the five key components that were identified by both the content experts from CERRA as well as the components that are known to have spanned across all 7 institutions that were identified as part of this particular study and what was believed to be most important.

The findings linked to the specific research question: Which key components of the South Carolina Teaching Fellows Program are most valued by program graduates who have remained in the education profession? The components were analyzed, interpreted, and recommendations and future implications were determined by the researcher. As we consider the findings of the data, it is important to understand that there are specific future opportunities for those who participated in the program to provide further insights about their experience. The researcher, in partnership with the Center for Educator Recruitment, Retention, and Advancement, plans to conduct focus groups with willing participants. The long-term goal of this research is to help retain more teachers in the teaching profession to combat the attrition issues currently in the state of South Carolina.

Recommendations

The researcher found that the results derived from this study indicate that the key components identified through the survey instrument proved to have a significant impact on the overall Teaching Fellows experience and in turn, had an impact on the career of the respondents. As noted in Chapter 4, the data analysis illustrated that all five components showed a statistically significant impact for TF graduates who remained in the education profession once they satisfied their loan forgiveness to stay in the profession.

As the researcher analyzed the data, real-world applications for teacher education programs emerged that will be shared through the continuation of the research with the researcher, CERRA team, and researcher's dissertation chair. The five key components can all be replicated in teacher education programs to combat the retention issue that the public-school education system is currently facing.

As discussed in Chapter 2 of statement of the problem, many teacher preparation programs are under intense scrutiny for failing to adequately prepare their graduates for the public-school classroom, perhaps by implementing many of the key components highlighted in this specific study can begin to combat against teachers leaving the classroom. The components identified in this research could be utilized to enhance and strengthen the quality of teacher education programs and help retain valuable new teachers in the teaching profession after their induction period. The key components in the South Carolina Teaching Fellows program may provide a more defined, research supported structure for preparing teachers to be both resilient and committed to the teaching profession (Hallman, 2018).

To achieve a fundamental transformation of education while supporting students to meet the higher performance expectations, the basic philosophy of how teachers are supported must change. This will require clear incentives and structures to attract, develop, and retain the best teachers within the teaching profession. This starts with offering more incentive-based programs to attract them into the field of teaching. The challenge of preparing all students for the current workplace begins with emerging a shared capacity of an entire profession to address the needs of all students and teachers. "Teaching conducted largely out of the sight and hearing of other teachers must cease to be the norm. A new paradigm is needed for powerful systems of professional learning by which a clear vision of effective teaching informs the entire program and new teachers receive comprehensive induction and access to school-based collaborative learning" (Haynes, M., 2014 p. 1). Given the success that the South Carolina Teaching Fellows Program demonstrated in the retention of new teachers, the question becomes what does

this specific merit-based program provide to students that leads to its graduates remaining in the classroom? The researcher was able to determine from the study that the components identified all played a role in the significance of the effectiveness of TF's experiences based on their perceptions of how the components impacted their overall experience.

As discussed in Chapter 2, Grissmer and Kirby (1997) highlight in their research that teacher turnover rates followed a U-shaped distribution pattern, illustrating the highest attrition taking place in earlier and later years in teachers' careers. As a result of these findings, it is crucial that we examine how to lower the percentage of trained, qualified, new professionals who leave the field of education. Thus, the purpose of this study did as the researcher discussed which was to specifically investigate the components of the South Carolina Teaching Fellows preparation program and impact on teacher retention. The South Carolina Teaching Fellows merit-based program has a positive impact on teacher retention and this study identified and examined the specific components of the Teaching Fellows Program which sought to identify its' specific contributions to retaining quality educators entering into the teaching.

Future research from this particular study will expand on the five key components identified through the study. Next steps for this study will include focus groups and interviews with the participants from the survey who self-identified both by name and email that they would be interested in continuing this research with the research team. Of the 178 individuals who completed the survey, 134 self-identified that they would be interested in continuing the research by participating in focus groups and interviews in the future. This is a 75% response rate from those graduates who completed the survey.

As the researcher considers practical implications of this study, the most confounding variable to the entire study is the fact that this specific program is a merit-based program which means that students are receiving monetary funding as part of their fellowship. Students are required to participate in the cohort model, extra professional development, leadership opportunities, and early/community experiences as a requirement to receive the \$24,000 fellowship while participating in the program. The question that has surfaced as a future implication is how can this incentive-based model be replicated for more individuals who choose to enter the teaching profession.

One suggestion that the researcher has identified through the research process is for the state to re-allocate funds for teacher education programs across the state to provide resources to provide all students going through teacher education programs the key components that are most significant to help new teachers be more prepared when entering their classroom and combat the retention issue that exists in South Carolina public education today. More specifically, resources for a campus director can be allocated to each of the 11 public comprehensive institutions of higher education across the state of South Carolina to specifically work with all freshman and sophomores who enter as pre-professional education majors as a role model to help them navigate their first two years of their university pathway and in turn, hopefully, these students will matriculate into the teacher education program in their respective schools. This individual would be a different resource than that of an academic advisor and would solely focus on helping students to begin to form relationships with someone who can help guide and support them as they progress through their first two years of their college career path.

Retention rates in South Carolina public school districts according to the most recent departure data and inflation rates, is anywhere between \$32.5 and \$70.6 million each year. The range of this data is based on the size, poverty index, and geographic setting of the individual district. According to CERRA, the average allocation needed to begin a program similar to the SCTF Program once scholarships, salaries/fringes, travel, printing, collections, etc. are factored, is just under \$5 million (\$4.98) each year. When compared to the annual cost of turnover, it is abundantly clear how beneficial the SCTF Program is, especially with the retention data.

As the research continues to expand from this project, the researcher suggests the following new variables be introduced into the study to obtain a wider perspective from teachers who are currently teaching in a South Carolina public school.

*A new survey to be launched that would include a control group consisting of the perspective of current teachers that did not participate in the SCTF program and their views on how the key components would have changed their experience going through their teacher education program.

*A wider sample size to include teachers of different race and gender. The current population of the SCTF program is predominantly white females with a very small percentage of male or different race populations. By expanding the research sample size and population, this would address the limitation identified in Chapter 1.

*As part of the further continuation of this current research, it would be interesting to investigate the five key components as compared to the graduates' institutions. More specifically, the researcher would use both the quantitative and qualitative results from the survey to investigate for common themes that emerge for each of the 7 institutions that

were identified as part of the research study. Due to the scope and time constraints of this particular study, the researcher did not feel that enough time existed to dive into this detailed research. However, the researcher along with the CERRRA research team has plans to develop this area of the research prior to moving into the focus groups portion of next action steps in this action research.

*The research team has already committed to continuing this research study to gather more robust data through focus groups and interviews with those practicing teachers who have identified themselves by both name and email address at the conclusion of the survey instrument. This will allow for more opportunity to look for themes and patterns which in turn, will help develop the key components further and also provide support for the research to continue.

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Appendix A: Letters of Cooperation

Letter of Cooperation from Organization Research Partner

December 15, 2021

Dear Amanda Darden,

Based on my review of your research proposal, I give permission for you to conduct the study entitled A Study Investigating the Key Components of the South Carolina Teaching Fellows Program that Most Impact Teacher Retention. As part of this study, we will send the survey to graduates on your behalf and provide access to archival data as identified pertinent to this study.

We understand that our organization's responsibilities include sending emails on your behalf and giving you access to documents related to this program. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Coastal Carolina University IRB.

Sincerely,

Teaching Fellows Graduates:

We recently partnered with Amanda Darden, Ph.D. candidate, to conduct a study focused on the components of the Teaching Fellows Program that are most valued by Program graduates who have remained in the education profession. As a graduate who is currently employed in a South Carolina public school district, your participation is needed. Please review the email below as well as the attached "Informed Consent" document to learn more about the study and your role. Here is the link for the survey: [Survey Link](#). Please note that the survey will close on March 1st.

Should you have any questions about the study, please contact Mrs. Amanda Darden at by phone 843-349-2699 or email at adarden1@coastal.edu.

Thanks!

Jenna Hallman

Dear Teaching Fellows Graduate,

I hope this email finds you well. My name is Amanda Darden. I am a doctoral student in Coastal Carolina University's Doctor of Philosophy in Education program. I would like to share some information with you about a doctoral research study that I am conducting in cooperation with the Center for Educator Recruitment, Retention, and Advancement (CERRA), in hopes that you would consider being a participant.

The study that I am conducting is focusing on which key components of the SC Teaching Fellows Program are most valued by program graduates who have remained in the education profession. As part of this study, I am conducting a survey with Teaching Fellows graduates from seven institutions who are loan satisfied and still employed in a South Carolina public school district. As graduates of the program, I would like to ask you to take part in this survey which should take no more than 20 minutes to complete.

Participation is completely voluntary and the study will be anonymous. Therefore, you are not required to provide your name or any other identifying information unless you choose to do so for follow-up interviews (which will be conducted by CERRA). In this case, your identifying information will be stored separately from your survey responses.

If you would like to participate in the study please read the attached Informed Consent document.

Thank you for your time and participation.

Appendix B: Survey Instrument

SC Teaching Fellows Survey

Thank you for agreeing to complete this survey. Please answer the questions honestly and know that your responses will be kept confidential. If you have any questions or concerns, email Amanda Darden at adarden1@coastal.edu.

Demographics

Q1. Gender

Female

Male

Other

Prefer Not to Answer

Q2. Race

American Indian or Alaska Native

Asian

Black or African American

Hispanic or Latino

Native Hawaiian or other Pacific Islander

White

Other

Prefer Not to Answer

Q2. Current Age

Q3. What year did you complete the SC Fellows Program?

Q4. Which SC Teaching Fellows Institution did you attend?

Anderson University

Charleston Southern University

College of Charleston

Lander University

U of SC Columbia

U of SC Upstate

Winthrop University

Q5. Please select your current role.

Classroom Teacher (including SPED and related arts)

Curriculum/Instructional/Technology Coach

District-Level Administrator

School-Level Administrator

School Service Positions (including counselor, librarian, and speech language pathologist)

Other

Q6. How many years have you been employed in a SC public school/district? Include your total years of experience in any SC public school/district? South Carolina Public School?

SC Teaching Fellows Program Components

For the purpose of this survey, the SC Teaching Fellows Program includes five key components:

- Cohort Model
- Campus Director
- Leadership Development
- Professional Development
- School/Community Involvement

In the following questions, you will be asked to reflect on these components. Specifically, think about their impact during your time as a Teaching Fellow and after you started your career in public education.

- Cohort Model

Participants in the SC Teaching Fellows Program enter as a group (cohort) and experience the Program together. Based on the number of Fellows at the institution, some small schools combine all current Fellows into one cohort, while larger schools may provide specific experiences for individual cohorts. Answer the following questions based on your cohort experiences.

Q7. Thinking back to your SC Teaching Fellows cohort, how helpful was the cohort model during your time in the Program?

Very Helpful

Somewhat Helpful

Unsure

Somewhat Unhelpful

Very Unhelpful

Please list examples, if any, of how the cohort model impacted your career.

- Campus Director

Each SC Teaching Fellows Program is facilitated by a Campus Director. Campus Directors are expected to provide support and guidance to the Fellows during their time in the Program. Answer the following questions based on your experiences with your Campus Director(s).

Q8. Thinking back to your experiences with your Campus Director(s), how helpful were they during your time in the SC Teaching Fellows Program?

Very Helpful

Somewhat Helpful

Unsure

Somewhat Unhelpful

Very Unhelpful

Please list examples, if any, of how having a Campus Director(s) impacted your career.

- Leadership Development

One of the goals of the SC Teaching Fellows Program is to help participants recognize and develop leadership qualities. Answer the following questions based on any leadership development opportunities you were provided.

Q9. How helpful were the leadership development opportunities provided to you through the SC Teaching Fellows Program?

Very Helpful

Somewhat Helpful

Unsure

Somewhat Unhelpful

Very Unhelpful

Please list examples, if any, of how these leadership development opportunities impacted your career.

- Professional Development

Another goal of the SC Teaching Fellows Program is to provide participants with advanced professional development opportunities. These opportunities may have taken many forms (speakers, school visits, videos, etc.) and could have been included in your Teaching Fellows meetings. Topics covered may have included but are not limited to classroom management, curriculum development, differentiated instruction, advocacy, professionalism, diversity, and instructional technology. Answer the following questions based on any professional development opportunities you were provided.

Q10. How helpful were the professional development opportunities provided to you through the SC Teaching Fellows Program?

Very Helpful

Somewhat Helpful

Unsure

Somewhat Unhelpful

Very Unhelpful

Please list examples, if any, of how these professional development opportunities impacted your career.

- School/Community Involvement

A final goal of the SC Teaching Fellows Program is to provide participants with opportunities to observe and interact with teachers, administrators, students, parents,

and families. These extra opportunities for involvement may have occurred in school or community settings and were provided in addition to traditional field experiences/internships. During these experiences, you may have observed in a classroom, tutored students, taught small-group lessons, worked with families, participated in community outreach, etc. Answer the following questions based on any experiences you had to work with these groups.

Q11. How helpful were the school/community experiences provided to you through the SC Teaching Fellows Program?

Very Helpful

Somewhat Helpful

Unsure

Somewhat Unhelpful

Very Unhelpful

Please list examples, if any, of how these school/community experiences impacted your career.

- Program Effectiveness

Based on your overall experience as a SC Teaching Fellow, how effective was the Program in helping to prepare you for your career in public education?

Very Effective

Somewhat Effective

Unsure

Somewhat Ineffective

Very Ineffective

- Do you believe that your experience as a SC Teaching Fellow had any impact on your decision to remain in the education profession even after satisfying your requirements for loan forgiveness?

Yes

No

Explain your response to the previous question.

- Follow-Up Request

The Center for Educator Recruitment, Retention, and Advancement (CERRA) may conduct follow-up interviews with groups of graduates. If you are willing to participate, provide your name and email below. By sharing this information your responses will still be kept confidential.

Name: First Last

Email

Appendix (C)

ANOVA Oneway Overall Experience Tables Combined

	Source	Sum of Squares	DF	Mean Square	F	Sig
Race	Between Groups	.936	5	.187	.414	.838
	Within Groups	76.922	170	.452		
	Total	77.858	175			
Age	Between Groups	2.652	7	.379	.825	.568
	Within Groups	78.050	170	.459		
	Total	80.702	177			
Cohort Worthiness	Between Groups	18.870	4	4.718	13.199	<.001**
	Within Groups	61.832	173	.357		
	Total	80.702	177			
Director	Between Groups	20.567	4	5.142	14.792	<.001**
	Within Groups	60.135	173	.348		
	Total	80.702	177			
Leadership	Between Groups	5.697	4	1.424	3.921	.005**
	Within Groups	58.842	162	.363		
	Total	64.539	166			
Professional Development	Between Groups	17.089	4	4.272	20.863	<.001**
	Within Groups	33.788	165	.205		
	Total	50.876	169			
Community	Between Groups	11.628	4	2.907	8.654	<.001**
	Within Groups	54.083	161	.336		
	Total	65.711	165			

Note: **Significant at the $p < .01$ level

Appendix (D)

ANOVA “Believe” Tables Combined

	Source	Sum of Squares	DF	Mean Square	F	Sig
Race	Between Groups	.335	5	.087	.344	.886
	Within Groups	33.159	170	.195		
	Total	33.494	175			
Age	Between Groups	.814	7	.116	.594	.760
	Within Groups	33.298	170	.196		
	Total	34.112	177			
Cohort Worthiness	Between Groups	2.700	4	.675	3.717	<.006**
	Within Groups	31.413	173	.182		
	Total	34.112	177			
Director	Between Groups	3.623	4	.908	5.139	<.001**
	Within Groups	30.490	173	.178		
	Total	34.112	177			
Leadership	Between Groups	1.400	4	.350	1.920	.109
	Within Groups	29.534	162	.182		
	Total	30.934	166			
Professional Development	Between Groups	2.518	4	.630	3.633	.007**
	Within Groups	28.593	165	.173		
	Total	31.112	169			
Community	Between Groups	.570	4	.143	.815	.518
	Within Groups	28.183	161	.175		
	Total	28.753	165			

Note: **Significant at the $p < .01$ level