

ABSTRACT

Kirby Aaron Maness, EXAMINING THE EFFECT ON BEGINNING TEACHER SELF-EFFICACY THROUGH CULTURALLY RESPONSIVE TEACHING PROFESSIONAL DEVELOPMENT (Under the direction of Dr. Lawrence Hodgkins). Department of Educational Leadership, May 2024.

High teacher turnover rates and less students entering into the teacher preparation programs has increased the need to better prepare and retain beginning teachers. The purpose of this mixed methods inquiry is to focus on the effect of Culturally Responsive Teaching professional development on beginning teacher self-efficacy relative to African American student engagement in this rural Eastern North Carolina elementary school. Researched-based strategies to increase Culturally Responsive Teaching include setting high standards and expectations, critical self-reflection, and continued professional development. This inquiry encompassed an explanatory sequential mixed methods design organized through Action Research Cycles involving the Plan-Do-Study-Act model. This inquiry included multiple quantitative data instruments (Ohio State Self-Efficacy Survey, Walk-through Observation Instrument, and lesson plans) to collect and analyze data about engaging African American students on beginning teacher self-efficacy. This inquiry explained the quantitative data with qualitative data collected through beginning teacher interviews and a journal kept by the scholarly practitioner. The results indicated that the professional development series, observations, and post-conferences positively impacted the beginning teacher self-efficacy of the participants in this inquiry through the lens of their African American students.

EXAMINING THE EFFECT ON BEGINNING TEACHER SELF-EFFICACY THROUGH
CULTURALLY RESPONSIVE TEACHING PROFESSIONAL DEVELOPMENT

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by
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DEDICATION

This dissertation is dedicated to my wife Alayna, my daughter Kinsley Kate, and my dog Kam. The love and support that you all have shown me through this journey has been incredible and I have been able to accomplish this goal because of you all. My mother, Marie and father, Gilbert, thank you for teaching me about the value of education and always showing me your love. You both have always supported me and I cannot thank you enough for your unconditional love.

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CHAPTER 1: INTRODUCTION

A critical issue affecting the United States is a shortage of teachers, with a reported 110,000 open vacancies in the 2017-2018 school year (García & Weiss, 2019a). Additionally, due to a lower number of qualified teachers entering into the teaching pipeline, schools will continue to experience difficulties filling their vacancies in the future. Nationally during the time period between 2008-2009 to 2015-2016, there was a 37.8% reduction in the number of students enrolled in a teacher preparation program, a 27.4% reduction in number of students that completed a teacher preparation program, and a 15.4% reduction in number of students awarded an educational degree (BA, MA, PhD) (García & Weiss, 2019a). Compounding this critical teacher shortage is the overall turnover rate for teachers at 13.2% nationally compared to 11% for all other professions (Bland et al., 2016). These statistics demonstrate the challenges for school administrators and educators with regard to preparing and retaining teachers that are entering into the profession.

Ingersoll et al. (2021) found that 44.6% of beginning teachers left within the first five years of teaching, with 30.6% leaving within the first three years. Inadequate professional development opportunities, student discipline problems, lack of support from school administration were all leading causes for beginning teachers leaving the teaching profession. Additionally, the COVID-19 pandemic has required many school districts to hire teachers that are not certified and lack experience during the 2021-2022 school year (Dos Santos, 2021). Some teachers left the profession because they were forced to return to face-to-face instruction despite their personal health and safety concerns (Dos Santos, 2021). In fact, Diliberti et al. (2021) found that 44% of teachers surveyed that left after March 2020 prior to retirement listed the COVID-19

pandemic as their primary reason for leaving the profession. The risk of infection from COVID-19, increased family responsibilities for children that could not attend school face-to-face, health, and safety protections from governmental agencies, administrative response to the COVID-19 pandemic, and increased compensation opportunities from the private sector all factored into teacher turnover rates during the COVID-19 pandemic (Dos Santos, 2021). More teachers are needed to lessen the strain of high turnover rates and the reduced rates of college students entering into teacher preparation programs.

The focus of practice for this inquiry centered around the high number of teachers that are leaving the profession in comparison to the decreasing number of teachers entering into the teaching profession. This dichotomy impacts the value of new teachers staying in the profession. School administrators will need to revisit how they prepare and support their beginning teachers for the classroom, especially with regard to educating our many diverse populations of students. Beginning teachers have lower self-efficacy with culturally diverse students than veteran teachers (Cruz et al., 2020). This is especially true for the performance of African American and Latino students relative to achievement in Math from elementary to high school (Boykin & Noguera, 2011). As such, this inquiry will examine the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development. Through this specific professional development, this inquiry aimed to increase beginning teacher self-efficacy by providing tools for teachers to increase student engagement for the African American student population. Principal support and professional development are important factors for teachers deciding whether to remain in the teaching profession (Norris et al., 2019). Participation in Culturally Responsive Teaching professional development for African American students provides educators avenues to better serve this historically marginalized sub-group of students

(Mallinson & Hudley, 2018). Engagement is the single-most important factor with regards to learning since students that are disengaged have barriers that prevent them from learning the content (Stembridge, 2019). Engagement even outweighs increasing the amount of instructional time for students (Boykin & Noguera, 2011). However, student engagement cannot be fully conceptualized without understanding the impacts of both the student and the teacher with their impact on engagement in the classroom (Vallee, 2017). The more in-depth that teachers understand their students, the deeper the impact on their particular learning styles they will have for their students (Franklin & Harrington, 2019). Improved teacher understanding of students will help combat the system where students that are labeled as disadvantaged will continue to suffer in the educational setting as they will receive less rigorous and lower cognitive learning activities (Hammond, 2014). Ultimately, improving beginning teacher self-efficacy will positively impact retention rates over time (Podolsky et al., 2017).

The remainder of this chapter will be devoted to describing the background of the Focus of Practice, providing context for the inquiry, the statement of Focus of Practice, the Focus of Practice guiding questions, an overview of the inquiry, the inquiry partners, the theoretical framework for the inquiry, defining of key terms, the assumptions for the inquiry, the scope and delimitations, the limitations, and the significance of the inquiry.

Background of Focus of Practice

The basis of this inquiry was to examine the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development. This Focus of Practice (FoP) had several main components that will be explained in detail throughout the inquiry to include professional development, teacher efficacy, and student engagement. The Every Student Succeeds Act, or ESSA (2015), made professional development a priority for school

improvement plans and the use of effective evidence based professional development that is continuous, personalized, data-driven, and evaluated regularly. This federal statute requires schools to constantly evaluate their professional development activities in their school improvement plans to ensure that they are impacting student performance in the classroom. Beginning teachers have the capability to ingest large quantities of professional development to increase their productivity and ability to stay in the educational field (Bastain & Marks, 2017). Subsequently, research indicates that there is a correlation between effective professional development and lowering the teacher turnover rate for beginning teachers (Bastain & Marks, 2017). In addition to implementing professional development, this inquiry also focused on the implications of teacher self-efficacy.

Teacher self-efficacy can be defined as how well teachers believe they are able to accomplish the tasks of impacting student achievement (Coban et al., 2020; Kim & Seo, 2018). Teachers with high self-efficacy are better prepared to face challenges in the classroom and provide rigorous expectations for their students (Cansoy & Parlar, 2018). There is a direct impact on teacher self-efficacy when school leadership focuses on vision and setting goals for their teachers (Fackler et al., 2021). Many studies have explored the positive relationship between high teacher self-efficacy and productive classroom management (Hettinger et al., 2021; Holzberger & Prestele, 2021; Lazarides et al., 2020; Zee & Koomen, 2016; Zee et al., 2017). The ultimate goal of this inquiry was to determine the effect of professional development to engage African American students on beginning teacher self-efficacy.

One of the most prominent factors in achievement levels for students is their engagement with the coursework (Boykin & Noguera, 2011). A couple of the major obstacles for African American students to engage with their coursework relate to different demands from their

teachers towards curriculum and a lack of Culturally Responsive Teaching practices. Low socio-economic, minority, and English Language learning students are more likely to face a curriculum that has less rigor and concentrate on the lower critical thinking skills (Hammond, 2014). This is not a new topic but one that has been discussed in detail for decades with regard to the United States educational system. For example, the African American population in the United States is entitled to an education that is on par with the white population not because they are African American but because they are human (Du Bois, 1935). A successful approach to help with rigor in the classroom is for school leaders to ensure that their teachers are trained in Culturally Responsive Teaching practices in order to provide an equitable learning environment for their historically marginalized students (Khalifa, 2018). Hammond (2014) defines Culturally Responsive Teaching as “an educator’s ability to recognize students’ cultural displays of learning and meaning making and respond positively and constructively with teaching moves that use cultural knowledge as a scaffold to connect what the student knows to new content” (p. 15). For this inquiry, Culturally Responsive Teaching was the primary focus of the professional development provided to teachers to engage African American students, in the hopes of positively affecting beginning teacher self-efficacy.

Context of the Inquiry

The site of the inquiry was at Eagle Springs Elementary School, a pseudonym, in Eastern North Carolina. The elementary school is one of 38 schools in the Williams County Schools, also a pseudonym, a district of approximately 23,000 students. This elementary school has roughly 750 students with 43.4% Black/African American student population (see Figure 1). Additionally, 40% of their students are economically disadvantaged. Data collected during the 2018-2019 and 2021-2022 school years from the show that students with disabilities, African

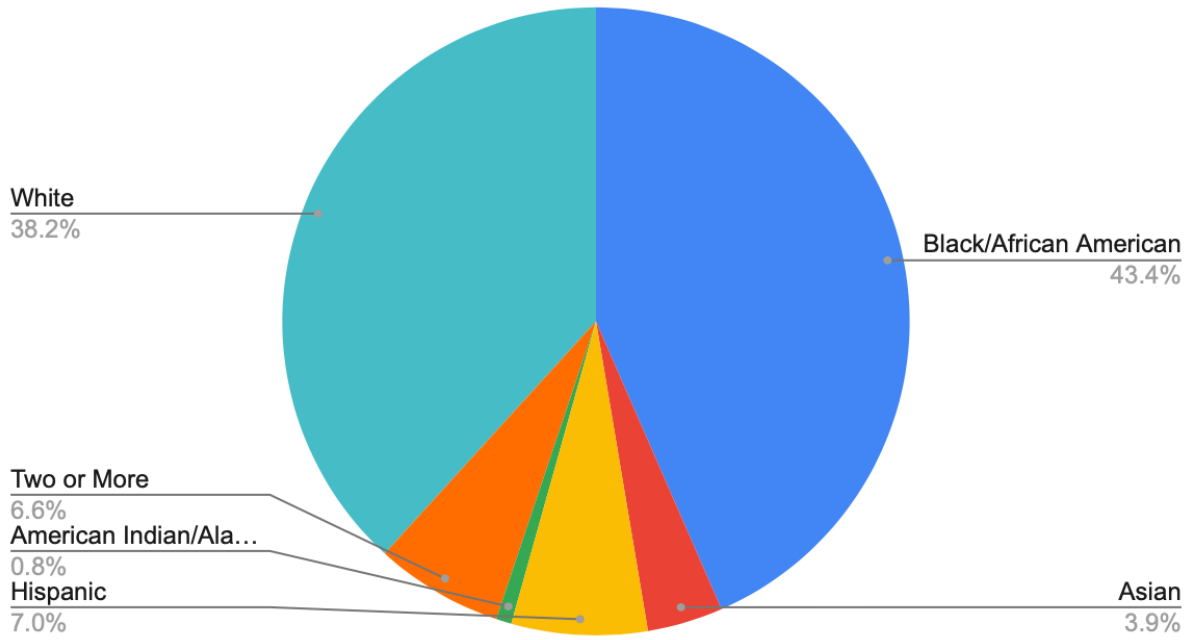


Figure 1. Eagle Springs Elementary School demographics 2022.

American students, and economically disadvantaged students performed the lowest on the North Carolina End of Grade (EOG) assessments compared to the remaining populations at Eagle Springs Elementary School (North Carolina Department of Public Instruction, 2019; North Carolina Department of Public Instruction, 2022b). See Figure 2 for 2018-2019 data and Figure 3 for 2021-2022 data. For the 2020-2021 school year, this elementary school had four beginning teachers in tested grade levels (3rd-5th) and saw a disconnect between the percentage of students that passed their ELA and Math classwork (73%-100%) compared to the percentage of students that passed the EOG assessments (19%-56%; see Table 1).

This inquiry sought to provide professional development on African American student engagement to increase beginning teacher self-efficacy. Teachers with high levels of self-efficacy are able to impact the academic performance of their students through their confidence in their own abilities to motivate, manage behavior, and take action even in situations where the student's predictive success is low (Zee et al., 2017). The professional development also included evidence driven ways to incorporate Culturally Responsive Teaching into their daily teaching pedagogy. Hammond (2014) stated an answer for educators looking to re-enter our minority students into the educational arena is to incorporate Culturally Responsive Teaching into their classroom as a way to help address the achievement gap.

Incorporating Culturally Responsive Teaching is amplified by the demographic incongruence of the teaching force and the student population. The teaching force is 80% White despite the student population in the United States being majority-minority (La Salle et al., 2020). This is true of the demographics at Eagle Springs Elementary as the percentage of White teachers equals 83% while the majority-minority population equals 61.8%. This disparity in demographics magnifies the need to establish culturally inclusive classrooms to reduce

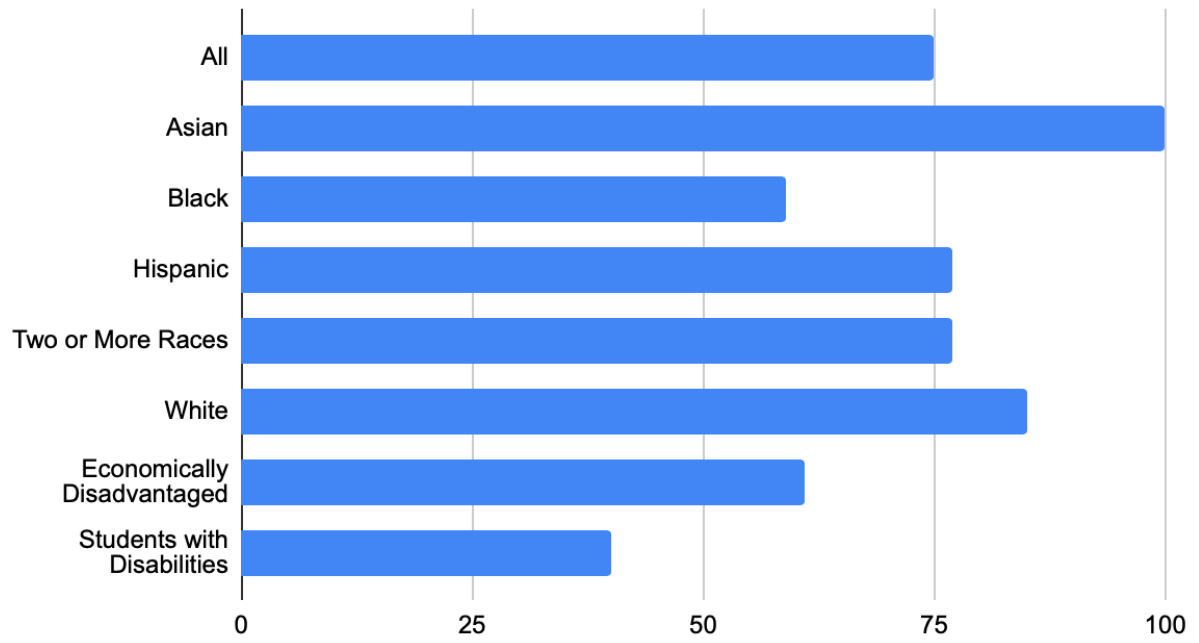


Figure 2. 2018-2019 performance grade score by subgroup for Eagle Springs Elementary School (pre-COVID).

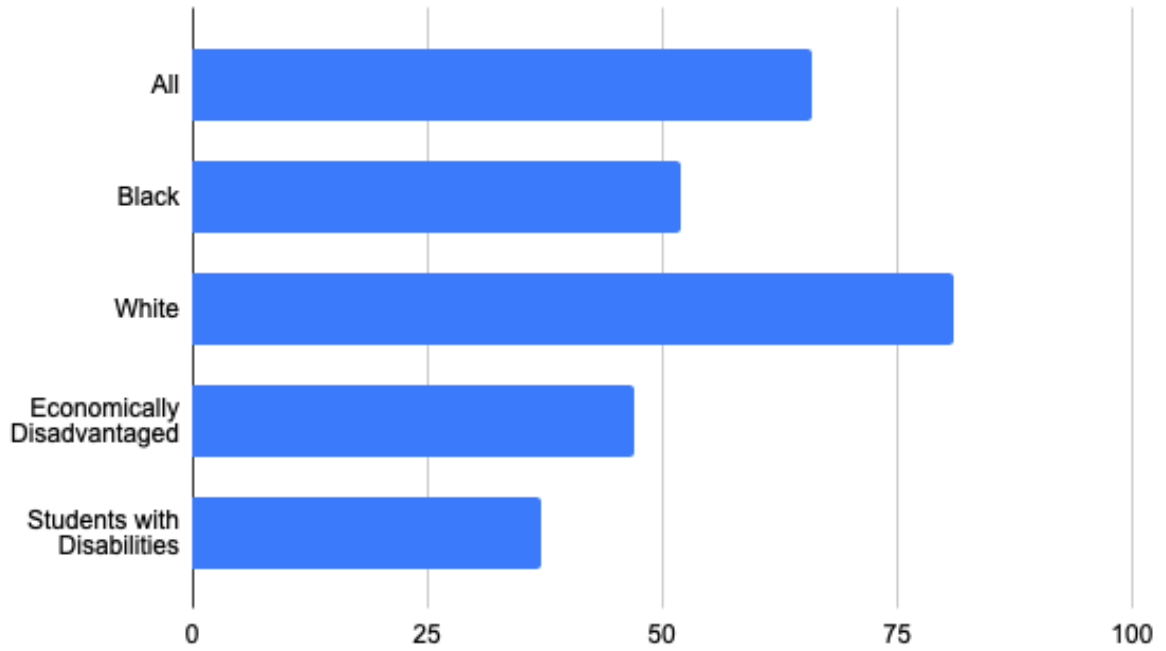


Figure 3. 2021-2022 performance grade score by subgroup for Eagle Springs Elementary School (post-COVID).

Table 1

Disconnect between Classroom Rigor and End-of-Grade Assessments

Beginning Teacher	ELA Classroom % of Students Passed	ELA EOG % of Students Passed	Math Classroom % of Students Passed	Math EOG % of Students Passed
Teacher 1	100%	21%	100%	47%
Teacher 2	94%	28%	94%	19%
Teacher 3	73%	56%	77%	29%
Teacher 4	93%	36%	93%	29%

achievement gaps for all students (Cherng & Davis, 2019). Furthermore, lack of acknowledgement in the cultural identity of African American students by White teachers could be an important factor in their academic success (Douglas et al., 2008). The inclusion of Culturally Responsive Teaching has the potential to impact the academic success of African American students at Eagle Springs Elementary as 82% of the beginning teachers are White demographically.

The professional development sessions also incorporated restorative practices to improve classroom management. Teachers with high levels of self-efficacy in relationship to classroom management are able to provide students with a safe, inclusive environment that focuses on the needs of the individual students (Hettinger et al., 2021). This is especially important for beginning teachers as they are at risk of having low self-efficacy with regard to classroom management at the beginning of their careers (Lazarides et al., 2020) and therefore are at-risk for leaving the profession.

Statement of Focus of Practice

The focus of this inquiry was to examine the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development. Overall it is estimated to cost large districts over \$20,000 per teacher to replace experienced teachers and close to \$8.5 billion per year across the United States (Podolsky et al., 2017). Schools provide support for beginning teachers through professional development opportunities, on-boarding programs, and mentors (Stewart et al., 2021). This investment in time and resources represents costs for the school districts. Therefore, professional development designed to engage African American students has the potential to greatly impact beginning teacher self-efficacy with the hope that they will stay in the profession. Consequently, this will reduce the burden on districts to replace these teachers.

School leaders are seen as pivotal for developing teachers into leaders within the building (Szeto & Cheng, 2018) and increasing the likelihood that they remain in the profession. The purpose of this inquiry was to examine the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development.

Focus of Practice Guiding Questions

This inquiry was guided by the following questions:

1. What is the effect of implementation of professional development in Culturally Responsive Teaching practices on engaging African American students?
2. What is the effect of implementation of professional development in Culturally Responsive Teaching practices on beginning teacher self-efficacy?
3. What influence does conducting this action research inquiry have on the leadership skills and development of the scholarly practitioner conducting this inquiry?

Overview of Inquiry

To answer these guiding questions, I used an action research mixed methods design. Included within this design was the implementation of a professional development series that was ongoing and continuous in order to establish consistent results that are long lasting (García & Weiss, 2019b). More specifically, the beginning teachers at Eagle Springs Elementary School examined how confident they felt currently with engaging African American students in their classroom using a teacher self-efficacy survey before beginning the professional development sessions. The beginning teachers involved in this inquiry then received multiple rounds of a professional development series that focused on Culturally Responsive Teaching practices, restorative practices, and highly effective instructional strategies to engage their African American students. The professional development series challenged the current state of their

teaching pedagogies in relationship with how they engaged their African American students while providing opportunities for discussion of best practices to incorporate the Culturally Responsive Teaching practices and highly effective instructional strategies into their classroom lesson plans and daily activities. Therefore, the beginning teachers had the opportunity to learn how to incorporate the implemented strategies through cycles of planning and teaching followed by additional sessions that review their teaching through reflection and feedback to develop routines and understandings (Nolen & Clemmons, 2021). This ingrained the inclusion of the Culturally Responsive Teaching practices and highly effective instructional practices with their pedagogical mindsets.

The data collection for this inquiry incorporated a variety of sources to ensure the validity of the results and to encourage future applications of this inquiry in contexts that are similar to demonstrate reliability of the results. Additionally, replication of this inquiry in differing contexts will help to determine if it can be repeated across multiple settings and demographics. The data collection also consisted of triangulation of the data across multiple data sources to establish reliability and combat any inherent biases (Mertler, 2021). In particular, the beginning teachers presented lesson plans for their classes before the start of the professional development sessions and following the sessions to provide data of successful implementation. Additionally, I collected data through classroom observations to examine whether the beginning teachers were incorporating the Culturally Responsive Teaching practices and highly effective instructional strategies into their classroom lessons. Furthermore, the data collection plan encompassed notes from the discussions held during the professional development sessions, post-conferences following observations, and interviews to provide meaningful data to answer the inquiry questions. The teacher self-efficacy survey was readministered with the beginning teachers to

determine their confidence level with engaging African American students following the completion of the professional development sessions. Finally, the data collection plan involved the insights from my own journey through journaling the impact of the inquiry on my leadership skills and development.

Inquiry Partners

When examining the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development at Eagle Springs Elementary School there were several collaborative partners that were vital to the success of this inquiry. Those inquiry partners at Eagle Spring Elementary included: the beginning teachers, the instructional coach, the facilitating mentor for the beginning teachers, mentors in the building for the beginning teachers, the principal of the school, and non-participant inquiry partners to objectively analyze the data collected to mitigate any implication of bias on my part.

The beginning teachers were invited to participate in the professional development sessions that occurred at least once per month during the course of the inquiry for one to two hours per session. The beginning teachers were asked to complete surveys that rated their teacher self-efficacy at multiple points during the inquiry including before they begin the professional development to determine their baseline level of self-efficacy. The beginning teachers were also asked to participate in observing and being observed as they implement the professional development in their classrooms.

The instructional coach was asked to participate in the professional development sessions that occurred at least once per month during the course of the inquiry for one to two hours per session as an expert in the delivery of professional development at the school. The instructional

coach was also asked to give feedback and help refine the process between the cycles of improvement that were implemented with the beginning teachers.

The facilitating mentor was asked to work with me to find ways to incorporate the inquiry into their normal professional development requirements for beginning teachers by Williams County Schools to reduce the number of responsibilities on the beginning teachers. The mentors for the beginning teachers were asked to provide the beginning teachers a safe place for feedback and support during the inquiry. The principal was asked for their support and permission to complete the inquiry in their school. Non-participant inquiry partners were included to review and analyze the data collected to mitigate any implication of bias on my part.

Social Cognitive Theory

The theoretical framework for this inquiry comes from the social cognitive theory by Bandura which is an extension of the Social Learning Theory. Bandura (1977) describes the difference between individuals' knowledge of effective practices and their ability to enact those practices to achieve certain results. Individuals will avoid certain strategies if they do not believe they are capable of enacting them based on their own self-efficacy. Strong self-efficacy will allow individuals to attempt new and challenging tasks based on their own self-belief that they are able to accomplish the task therefore, reinforcing their self-efficacy when they successfully complete the task at hand. Repeated success or failures will determine the level of self-efficacy in the individual and if success is formulated early, then the rare failure will not affect self-efficacy due to the knowledge bank of success already established. The professional development of this inquiry will be applied with the intent of improving the levels of self-efficacy for the beginning teachers in order to produce repeated success for the teacher and enact positive results for the engagement of the African American students in their classrooms. The

social cognitive theory by Bandura that focuses on learning from social interactions in relation to personal, behavioral, and social/environmental factors will be explained in detail in Chapter 2 of this inquiry (Schunk & Usher, 2012).

The social cognitive theory incorporates four components of self-efficacy: mastery experience, vicarious experience, social persuasion, and affective states (Goddard et al., 2000). The professional development of Culturally Responsive Teaching practices and highly effective instructional strategies sought to increase these four components thus raising the overall self-efficacy of the beginning teacher participants. The application of the social cognitive theory in the educational realm implies that an increase in the teacher's self-efficacy will likely allow teachers to overcome obstacles and initiate innovative teaching activities which will lead in turn to an increased probability of success for their students (Goddard et al., 2004). Determining the extent that the professional development engages the African American students on beginning teacher self-efficacy depended on the successful implementation of the social cognitive theory in this inquiry.

Definition of Key Terms

The following key terms are used throughout this inquiry:

Academic Rigor - Four components of academic rigor are “active learning, meaningful content, higher-order thinking, and appropriate expectations” (Draeger et al., 2013, p. 272).

Collective Efficacy - The ability for the group to believe it can accomplish the task with regards to their collective knowledge and skills but also in regard to how the group can work together in unison (Bandura, 2000).

Culturally Responsive Teaching - “An educator’s ability to recognize students’ cultural displays of learning and meaning making and respond positively and constructively with

teaching moves that use cultural knowledge as a scaffold to connect what the student knows to new content” (Hammond, 2014, p. 15).

End of Grade (EOG) Assessments - “The North Carolina End-of-Grade Tests are designed to measure student performance on the goals, objectives, and grade-level competencies specified in the North Carolina Standard Course of Study” (North Carolina Department of Public Instruction, 2022a, para. 1).

Every Student Succeeds Act - made professional development a priority for school improvement plans and the use of effective evidence based professional development that is continuous, personalized, data-driven and regularly evaluated (ESSA, 2015).

Professional Development - “the purpose of professional learning is for educators to develop the knowledge, skills, practices, and dispositions they need to help students perform at higher levels” (North Carolina Department of Public Instruction, 2022d, para. 4).

Professional Learning Communities - “It is an ongoing process in which educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better results for the students they serve” (DuFour et al., 2016, p. 10).

Social Cognitive Theory - a theory by Albert Bandura of human behavior that focuses on learning from social interactions in relation to personal, behavioral, and social/environmental factors (Schunk & Usher, 2012).

Teacher Self-Efficacy - how well teachers believe they are able to accomplish the tasks of impacting student achievement (Coban et al., 2020; Kim & Seo, 2018).

Assumptions

A primary assumption for this inquiry suggested the implementation of professional development would increase engagement for African American students and consequently raise

the self-efficacy for the beginning teachers. Specifically, it was assumed that a lack of professional development related to Culturally Responsive Teaching was the reason why African American students were underperforming in beginning teachers' classrooms. This inquiry attempted to challenge this assumption. In order for this to occur, it was assumed that the beginning teachers would remain engaged in the professional development sessions as well as implementing the professional development with fidelity into their teaching pedagogy. Additionally, it was assumed that the beginning teachers would answer the teacher self-efficacy surveys and questions in the interviews honestly. I conducted observations to verify implementation in practice of the professional development in Culturally Responsive Teaching practices learned by the beginning teachers. Finally, it was assumed that the inquiry would occur completely in-person with minimum disruptions resulting from the ongoing COVID-19 pandemic. Online student instruction would greatly impact the overall goals of the inquiry due to the pedagogical changes in instruction for the students. This could severely impact the results of the inquiry and its ability to be replicated in the future.

Scope and Delimitations

Beginning teachers leave the teaching profession at a rate of 44.6% within the first five years of teaching (Ingersoll et al., 2021). Eagle Springs Elementary consists of 61.7% minority students. Moreover, the North Carolina End of Grade Assessments results documented that the African American subgroup was amongst the lowest performers at Eagle Springs Elementary as compared to the remaining populations (North Carolina Department of Public Instruction, 2019). Therefore, the scope of this inquiry involved engaging African American students in support of beginning teacher self-efficacy at Eagle Springs Elementary through focused professional development in Culturally Responsive Teaching practices.

Due to my position as an administrator of the school, I have direct access to the beginning teachers involved in the inquiry. Also, I have a mutual interest in the success of the inquiry to increase engagement of African American students on beginning teacher self-efficacy and Williams County Schools using it as a model for future studies. The small sample size of this singular inquiry at Eagle Springs Elementary does not allow it to predict similar results in other settings without future iterations with repeated results. As a delimitation, I did not examine other factors that may be impacting African American student academic outcomes. I also did not examine other factors that may impact beginning teacher retention. The scope of my inquiry was strictly efficacy as a result of professional development in Culturally Responsive Teaching.

Limitations

Even though I conscientiously developed the professional development series and collected data for this inquiry with the aid of non-participant inquiry partners, I am aware that limitations exist for this inquiry that require consideration. First, the implementation of the professional development and observations are intended to occur in the in-person classroom environment. However, the COVID-19 pandemic continued during this inquiry and virtual education remained a practical option for students. I sought to schedule observations during a period that in-person instruction was occurring to mitigate the limitation. Additionally, teachers without certification or experience were hired during the 2021-2022 school year resulting from the COVID-19 pandemic (Dos Santos, 2021). This was a limitation as these teachers have not had the experience of classroom experiences with students. Second, multiple inquiry partners were needed to accomplish this inquiry requiring multiple layers of coordination and collaboration. Beginning teachers already have an abundance of time obligations and the addition of this inquiry placed another burden for their already full schedules. I attempted to

embed opportunities for the beginning teachers to use this inquiry in place of other beginning teacher obligations. Third, I was a lead administrator at Eagle Springs Elementary for the beginning teachers. The North Carolina Department of Public Instruction requires multiple observations and a summative evaluation for the beginning teachers by the administrators at the school. Therefore, the beginning teachers may have been inclined to respond in line with how they believed the administrator desired the results to conclude. I assured the beginning teachers that this inquiry would not be reflected in their official evaluation required by the Department of Public Instruction. Fourth, I was aware that I had a natural disposition for the results to positively demonstrate that the professional development engages African American students and increases beginning teacher self-efficacy. I enlisted the assistance of non-participant inquiry partners to review the data to provide validity to the results and prevent any biases on my part.

Significance of Inquiry

This inquiry examined the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development. The motivation for the inquiry stemmed from studying how an exceedingly effective professional development program on best practices of Culturally Responsive Teaching and highly effective instructional strategies would affect the engagement of African American students. Resulting in an increase in the self-efficacy of the beginning teachers.

Ideally, the beginning teachers would implement the Culturally Responsive Teaching practices and highly effective instructional strategies in their classroom causing an increase in the engagement levels of their African American students. Therefore, increasing the self-efficacy of the beginning teachers through their newly acquired mastery experiences related to the social cognitive theory by Bandura (1997). Additionally, since public sector employees tend to rely on

service and altruism behaviors compared to factors relating more congruently with their self-interests (Mintrop & Ordenes, 2017), the beginning teachers would see the need to provide the support to their African American students as their internal duty to contribute an equitable education for students that have experienced lower educational results compared to other subgroups in this context (North Carolina Department of Public Instruction, 2022a).

Mintrop and Ordenes (2017) found that system-generated motives related to achieving organizational level goals, earning rewards, and avoiding additional oversight from outside entities. The professional development series that was implemented in this inquiry provided opportunities for the beginning teachers to achieve organizational level goals related to their African American students through increasing their engagement levels in the classroom and collectively increasing their self-efficacy in the process. The data for performance of African American students on End of Grade (EOG) exams in this context (North Carolina Department of Public Instruction, 2022a) provided evidence for the challenging task for the beginning teachers participating in this inquiry. However, mastery of complex and challenging tasks creates the opportunity to increase the self-efficacy for the individual (Bandura, 1977). Furthermore, there is a reciprocal causation between a teacher's sense of instructional self-efficacy and the environment of the students that encompass the school's demographics (Bandura, 1997). Thus, providing an opportunity for the beginning teachers in this inquiry to challenge their Culturally Responsive Teaching practices and highly effective instructional strategies for their African American students with the goal to increase their engagement while reciprocally increasing their self-efficacy in the process.

Advancing Equity and Social Justice

This inquiry examined the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development was intended to advance the issue of equity for African American students at this particular elementary school. The professional development had a focus of Culturally Responsive Teaching, highly effective instructional strategies, and how to successfully implement them into the classroom practice to affect change for their African American students. Alhanachi et al. (2021) stated that teachers will need to take into account the background, family history, language barriers, and culture of their students in order to build their teaching materials.

The professional development series challenged teachers to look inward at their own viewpoints and beliefs about African American student engagement and how confident they were in their abilities to enact real change for the betterment of those students. For example, to initiate real change for our students, educators must first confront their own experiences in order to create classrooms conducive to benefitting our culturally and linguistically diverse students (Hammond, 2014). Subsequently, the beginning teachers gained a greater conceptual understanding of Culturally Responsive Teaching by participating in the focused Culturally Responsive Teaching professional development and its impact on students in the classroom (Acquah & Szelei, 2018). It was imperative for this inquiry that the professional development occur continuously and cumulatively in design as professional development that focuses on one day learning of Culturally Responsive Teaching is not proven effective long-term (Barrett-Zahn, 2021).

Advances in Practice

The ultimate desire for this inquiry was to provide highly effective professional development which would increase the engagement levels of African American students thus elevating the self-efficacy of the beginning teachers in this particular context. The professional development focused on Culturally Responsive Teaching practices and highly effective instructional strategies. The continuous and cumulative professional development provided the beginning teachers with practical and straightforward approaches to engage their African American students in their classrooms. The professional development sessions, observations, post-conferences, teacher self-efficacy surveys, lesson plan artifacts, and interviews were all designed to advance the practice of engaging African American students while also assessing the current skills, knowledge and depositions around designing curriculum and teaching African American students by the beginning teachers.

Educators viewing the information and conclusions of this inquiry should view them through the lens of this particular context. Due to the limited size and relatively homogenous demographics of the beginning teachers in this particular inquiry, establishing a statistical relationship from the quantitative data of the beginning teacher self-efficacy survey would not be prudent for other contexts (Mertler, 2021). However, the goal of the inquiry from the outset was to drive conversations and discussions forward for how to provide equitable learning environments to engage African American students and facilitate needed training for beginning teachers to successfully transition from their teacher preparation program to the classroom (García & Weiss, 2019b).

Summary

High teacher turnover rates and less students entering into the teacher preparation programs has increased the need to better prepare and retain beginning teachers. This inquiry examined the effect of professional development on beginning teacher self-efficacy relative to African American student engagement in this rural Eastern North Carolina elementary school. Implementation of professional development opportunities for beginning teachers through this inquiry that attempted to increase their self-efficacy through sessions that incorporate Culturally Responsive Teaching practices, highly effective instructional strategies, classroom management, and setting high expectations. The inquiry applied the social cognitive theory to focus on learning from social interactions in relation to personal, behavioral, and social/environmental factors (Schunk & Usher, 2012). The Focus of Practice attempted to move forward issues of equity for the African American students at this elementary school by increasing their classroom engagement. Chapter 2 will review the literature for the main components of the Focus of Practice related to examining the effect of professional development on beginning teacher efficacy relative to African American student engagement. Chapter 3 will focus on the methodology with particular attention to the inquiry design and rationale, inquiry procedures, inquiry design rigor for the inquiry. Chapter 4 will provide a detailed overview of the implementation of the inquiry, including the professional development series, along with the results regarding the data collected and analyzed. Chapter 5 will offer a discussion of the summary, conclusions, and recommendations for this inquiry.

CHAPTER 2: REVIEW OF LITERATURE

This inquiry examined the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development at Eagle Springs Elementary School. Of beginning teachers 44.6% leave the profession within the first five years of teaching (Ingersoll et al., 2021). Effective professional development can lower the amount of teacher turnover for beginning teachers (Bastain & Marks, 2017). Teachers with high levels of self-efficacy are better prepared to face challenges in the classroom and provide rigorous expectations for their students (Cansoy & Parlar, 2018). One way to ensure rigorous expectations for teachers is to provide professional development in Culturally Responsive Teaching practices to foster an equitable learning environment for historically marginalized students (Khalifa, 2018). Alhanachi et al. (2021) stated that teachers will need to take into account the background, family history, language barriers, and culture of their students to build their teaching materials. With the goal to improve engagement as it is the single-most important factor with regards to learning since students that are disengaged have barriers that prevent them from learning the content (Umutlu & Kim, 2020).

Chapter 2 will review the literature of the main components related to the Focus of Practice of examining the effect of professional development to engage African American students on beginning teacher self-efficacy. The main components include a brief review of the social cognitive theory by Albert Bandura with emphasis on teacher self-efficacy as the theoretical framework for the inquiry. Additionally will cover the influence of school leaders, professional learning communities, mentors, and professional development on beginning teachers. Also, will focus on Culturally Responsive Teaching through how having high standards and expectations, self-reflection, and professional development will positively impact teachers.

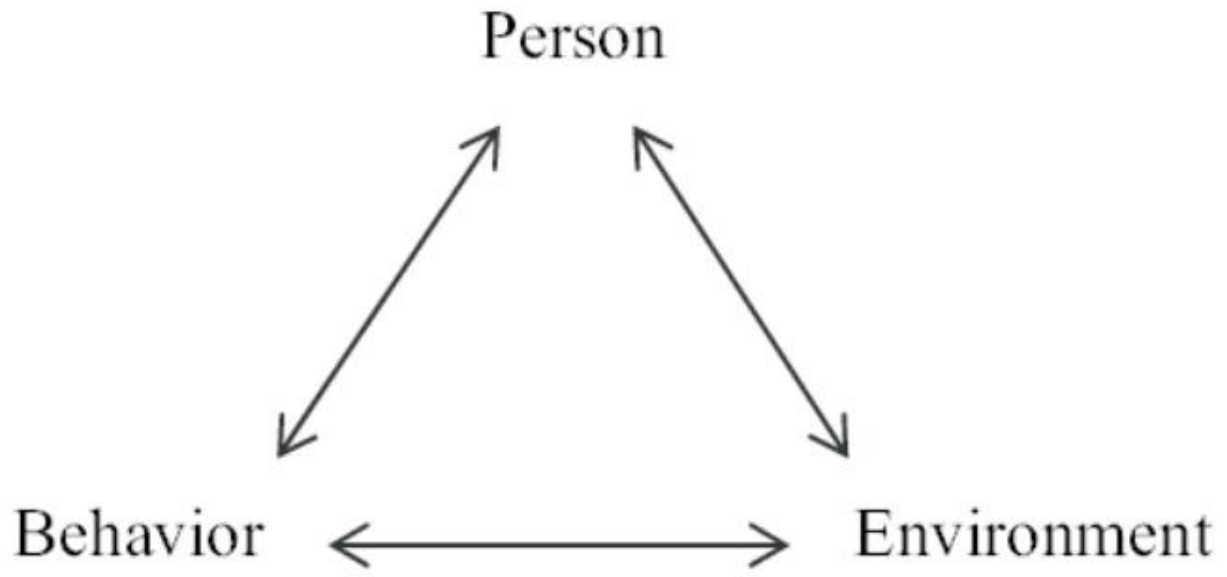
Furthermore, will detail elements of high quality teaching including academic rigor, use of instructional rounds, student engagement, and on-going professional development. Finally, Chapter 2 will review the existent literature regarding teacher self-efficacy and the impacts of classroom management, school leaders, collective efficacy, and professional development.

Social Cognitive Theory

Social cognitive theory by Albert Bandura is a triadic reciprocal causation (see Figure 4) of the interplay between cognition, affective, and biological events through interactions of environmental and personal influences (Bandura, 1997; Cansoy & Parlar, 2018). Preceding the social cognitive theory was the social learning theory by Julian Rotter that conceptualized the effects of reinforcement on whether a behavior is expected to be repeated in the future (Rotter, 1966). Rotter (1966) focused on internal vs. external locus of control and individuals' reinforcement behavior being stronger with regards to situations that they feel are internal. External areas seem to be justified away as luck or happenstance whereas internal gives the individual the thought process that their behaviors and skills can positively impact the achievement. The locus of control focuses on the interaction between actions and results.

However, the self-efficacy and locus of control are two separate entities that bear little resemblance to one another since the social cognitive theory does not accept that external rewards or punishments are the sole regulator of behavior (Bandura, 1997). Additionally, individuals can have a high locus of control and have a low level of self-efficacy (Bandura, 2006). The social cognitive theory includes personal goals, personal efficacy, how the environment enhances or constrains, and expectations for outcomes (Bandura, 1997).

According to the social cognitive theory there are four components to self-efficacy: mastery experience, vicarious experience, social persuasion, and affective states



Note. (Bandura, 1977).

Figure 4. Triadic reciprocal causation.

(Goddard et al., 2000). Mastery experiences include personal experience of success in overcoming barriers and continued over time (Bandura, 1997). Additionally, mastery experiences are the most impactful of the four major influences in the social cognitive theory while also being the least likely for beginning teachers to have since they are just entering the profession (Tschannen-Moran & Hoy, 2007). Beginning teachers are more at risk of having lower self-efficacy skills as they have fewer mastery experiences to rely on when dealing with classroom behavioral issues (Lazarides et al., 2020). Success breeds success as students and teachers accomplish success, the self-efficacy that they are able to repeat at regular and routine intervals increases which in turn continues to increase their self-efficacy (Cansoy & Parlar, 2018). Experienced teachers with high levels of self-efficacy benefit from their experiences with student achievement and engagement in their classrooms as they have the confidence to repeat those situations that they have already experienced during their tenure in the profession (Zee & Koomen, 2016).

Vicarious experiences can also increase self-efficacy, and modelling of behavior can give people a vicarious experience as it provides an opportunity to view an activity in action and gain skills/strategies to enact (Bandura, 1997). Beginning teacher self-efficacy can be improved through pairing with a highly trained mentor in their content area as they are able to model for them (Craig, 2021). Beginning teachers have to rely on this support and collaboration to increase their self-efficacy since they lack mastery experiences early in their careers (Tschannen-Moran & Hoy, 2007).

Bandura (1997) found that verbal persuasion can raise self-efficacy through the impact of acknowledging the person is capable of mastering a given task. High quality feedback that is honest and highlights their accomplishments can increase their self-efficacy through verbal

persuasion. For example, collaboration and frequent feedback were more likely barometers to increase teacher self-efficacy compared to quality of resources (Tschannen-Moran et al., 1998).

Physiological and affective states also affect self-efficacy through the judgement of their mental and emotional states (Bandura, 1997). Physiological and affective states can provide insight on how susceptible to dysfunction someone will be in a situation that is stressful or taxing. Beginning teachers may experience setbacks in their confidence levels as they fear they will not be able to impact students as well after the realities of the challenges the field of education can present for them which will lower their expectations of students and affect their self-efficacy (Tschannen-Moran & Hoy, 2007).

The social cognitive theory when applied to the educational world implied that the higher the teacher's self-efficacy is, the more likely they will overcome obstacles and initiate innovative teaching activities for their students which will lead in turn to an increased probability of success for their students (Goddard et al., 2004). The amount of energy that teachers invest into crafting their lessons, perseverance through challenges, and high standards they expect directly relates to teacher self-efficacy (Tschannen-Moran & Hoy, 2001). Teachers with high levels of self-efficacy leveraged their belief they can impact student performance and are eager to prove it which ultimately results in an increase in student achievement (Kim & Seo, 2018). For example, highly efficacious teachers believe that all students can improve through extra effort or testing out other instructional strategies whereas teachers that are lacking in efficacy believe low performing students are unteachable (Cansoy & Parlar, 2018). Additionally, teachers with higher levels of self-efficacy implement teaching strategies that cause higher order thinking from their students (Goddard et al., 2004). The cyclical nature of teacher self-efficacy could greatly increase or decrease teacher self-efficacy in future situations based on past success or failure (Tschannen-

Moran et al., 1998). Furthermore, higher self-efficacy can influence perseverance during challenging tasks (Zimmerman, 2000). However, a possible call for high beginning teacher turnover rates could relate to their level of self-efficacy (Tschannen-Moran & Hoy, 2007).

Teacher self-efficacy links to the task at hand and can vary from situation to situation (Bandura, 2006; Goddard et al., 2000). In particular, teacher self-efficacy refers to a person's individual belief in their performance capabilities and can vary based on the context (Zimmerman, 2000). Teachers can have knowledge of a particular learning situation; however, they do not trust they have the capabilities (teacher self-efficacy) to be successful in that situation (Bandura, 2006). This lack of teacher self-efficacy influences people to give over their sense of control in a situation and rely on outside help to complete the task (Bandura, 1997). Teachers will have higher teacher self-efficacy in social contexts in which they have high expectations and proven success compared to having lower teacher self-efficacy in social contexts where achievement has been lower in the past (Goddard & Goddard, 2001).

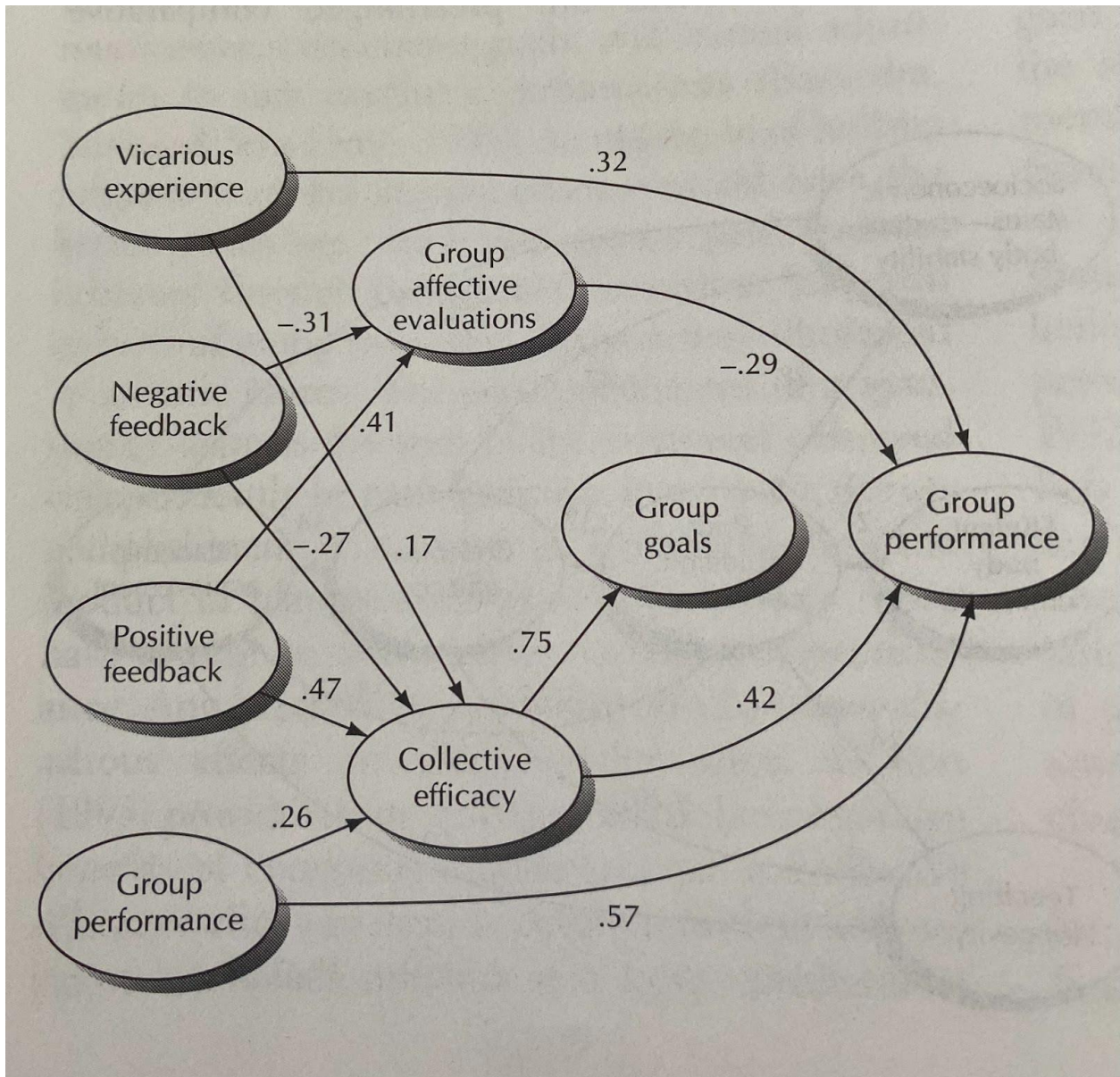
The social cognitive theory can be applied at the organizational level to discuss the collective efficacy of the group (Goddard et al., 2000). The social cognitive theory can be used to explain students' self-efficacy, teacher's self-efficacy, and the collective efficacy as interpretations of if they will be successful at future events based on past success or failure (Goddard et al., 2004). The behaviors of teachers are directly related to confidence in their self and team capability according to the social cognitive theory (Goddard et al., 2000). Additionally, groups with higher levels of collective efficacy were able to persevere in face of obstacles and challenges, sustain high levels of group investment, and produce higher accomplishments (Bandura, 2000). Moreover, there is a positive relationship between teacher collaboration and increased levels of teacher self-efficacy as the teachers are able to build off of the success of

each other and increase their own self-efficacy in the process (Coban et al., 2020). Figure 5 demonstrates the impact of modeling and feedback on the overall collective efficacy of the group (Bandura, 1997).

As the scholarly practitioner in this inquiry, I used the social cognitive theory as the lens that I viewed the Focus of Practice of examining the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development. The social cognitive theory impacted my implementation of professional development to focus on mastery experiences, vicarious experience, social persuasion, and affective states to increase the self-efficacy of the beginning teachers in relation to engaging African American students. Additionally, collecting data on the overall collective efficacy of the beginning teachers as well.

Beginning Teachers

Many public school students in the US are at a disadvantage with regard to building consistent relationships with their teacher. Over half of all teachers leave the profession for reasons that do not relate to retirement (Podolsky et al., 2017). This is especially true for high-level poverty schools as they have an increased level of teacher turnover compared to low-level poverty schools (García & Weiss, 2019a). The high rate of teacher turnover leads to an increased demand for new teachers to enter the profession; however, the number of new teachers entering the profession is decreasing (Podolsky et al., 2019). The morale in a school may be negatively impacted by the increase in demands placed upon veteran teachers since 30% of beginning teachers are not making it past year three (Stewart et al., 2021). Additionally, there is an expected decrease in the number of students in teacher preparatory programs as a result of COVID-19 and uncertainty of k-12 operations (Lachlan et al., 2020). Furthermore, teacher salary and compensation are factors that limit the number of teachers that want to enter the field of



Note. (Bandura, 1997).

Figure 5. Effects of feedback and modeling on collective efficacy and group performance.

education since beginning teachers expect to earn 20% less than similar education levels (Podolsky et al., 2019). Student achievement is impacted by students having beginning teachers instead of veteran teachers (Ingersoll et al., 2021). The aforementioned concerns paint a dim picture for the future of the educational system in the United States if efforts to address teacher shortages are not taken expeditiously.

To address the problem of teacher turnover, school leaders and districts need to have a better understanding of the reasons why teachers are leaving the profession. Factors that teachers attribute to the high teacher turnover rates include inadequate professional development opportunities, student discipline problems, the burden of school accountability measures, their level of satisfaction with their school leaders, and working conditions (Ingersoll et al., 2021; Podolsky et al., 2017; Podolsky et al., 2019). Also, the decision for many beginning teachers as to whether to remain in the field is directly related to their satisfaction with their current role and experience (du Plessis et al., 2020). Beginning teachers often have more culturally diverse students and students with the most academic needs assigned to their classrooms, leading to the students typically producing lower performance results with a less experienced teacher (Podolsky et al., 2019; Stewart et al., 2021). Beginning teachers have also had very little training in effective classroom management during their teacher preparation programs, which is one of the main causes for beginning teachers to leave the profession early in their careers (Cooper & Scott, 2017).

School leaders and school systems have resources available to them to prepare beginning teachers for the classroom and to keep them in the classroom (Podolsky et al., 2019). For example, five main approaches that could be used by school leaders and systems to encourage teachers to remain in the profession or convince people to enter the profession include stronger

pre-service preparation programs, strengthening hiring practices, increasing salaries, and benefits, providing strong onboarding programs for beginning teachers, and improving the working environment (Podolsky et al., 2017). Additionally, beginning teachers that have a sense they are well-prepared for the classroom environment have higher levels of teacher efficacy and obligation for student learning than those that feel less-prepared for the teaching environment (Nolen & Clemmons, 2021). Students with teachers with higher teacher efficacy benefit from engaging instructional practices that provide necessary support for lower performing students (Chizhik et al., 2018). Interventions for first year beginning teachers to become aware of their stress levels, resilience, ability to overcome setbacks and self-advocacy have been successful for this group of teachers (Stewart et al., 2021). Beginning teachers must also be cognizant of the cultural diversity in their classrooms and seek the knowledge and strategies necessary to meet the needs of diverse learners (du Plessis et al., 2020). The use of Culturally Responsive Teaching has been shown to be effective in this regard (Darling-Hammond et al., 2017).

Beginning teacher success is important for the long-term performance of the school as they become the experienced teachers over time. Students benefit from experienced teachers as they already have established - through trial and error - effective procedures for dealing with many of the everyday activities that occur in the classroom including: parent-teacher interactions, classroom management, and teaching students of diverse backgrounds (Ingersoll et al., 2021). Beginning teachers need training in these areas to become the expert teachers.

School Leaders

School leaders have an immense impact on beginning teachers in the areas of feedback, valuing their contribution, recognition, and acknowledgement (du Plessis et al., 2020; Stewart et al., 2021). School leaders are often described as the main reason whether teachers stay or leave

the profession as demonstrated through the level of support they provide to their teachers (Podolsky et al., 2017) and their mindfulness of the needs and challenges that affect teachers in the classroom (du Plessis et al., 2020). Over time, school leaders are seen as pivotal for developing teachers into leaders within the building (Szeto & Cheng, 2018).

School leaders that incorporate distributive leadership and focus on collaboration have seen lower levels of turnover (Podolsky et al., 2019). Szeto and Cheng (2018) identified that sharing one's vision with their teachers is an invaluable method for school leaders to develop rapport with their teachers and increase teacher leadership. This is a process that should occur often and in a variety of concepts. It is important for school leaders to explicitly state their ideas for improvement of instruction and the expectations they have for their teachers through their interactions. Having this process occur routinely can open the door for the teacher to participate in the goal of defining teacher leadership and provide their own feedback for what it should look like in the school setting. School leaders are able to impact the culture of the school through their routine sharing of their vision and expectations through their modelling of how interactions between school leadership and teachers should look like. A major part of the development of beginning teachers' leadership is the practices that are on display by their school leader. School leaders will need to understand the extra burden of teaching responsibilities on beginning teachers as they have not yet developed an efficient process for completing regular teaching tasks as compared to veteran teachers (Stewart et al., 2021). Furthermore, school leaders have an enormous effect on beginning teacher retention through their leadership style and support systems they put in place (Podolsky et al., 2019). An example of support systems put in place by school leaders is professional learning communities.

Professional Learning Communities

Organization for Economic Cooperation and Development (OECD) (2018) reported that school leaders need to provide quality feedback and professional learning communities (PLCs) for their teachers for student achievement and teacher attrition rates. The use of PLCs have a positive impact on student success (Chizhik et al., 2018). There is a strong connection between PLCs and increased student proficiency, higher attendance rates as well as a focus on equity in the educational setting (Darling-Hammond et al., 2017). In order for teachers to have the time to collaborate and improve their working conditions, most schools will need to make sure that they adjust their schedules to provide the necessary time for teachers to complete these tasks (Podolsky et al., 2017).

Teachers find value in collaboration with others in the profession, being an effective stakeholder in the school, and working on teams with common goals which can improve teacher efficacy and whether they stay in the profession (Podolsky et al., 2017). PLCs allow beginning teachers to collaborate and work on those teams. Beginning teachers learn how to teach through cycles of planning and teaching followed by reviewing their teaching through reflection and feedback to develop routines and understanding of the teaching profession (Nolen & Clemmons, 2021). PLCs, targeted professional development, induction and mentoring programs, and additional support for staff are seen as effective methods to retain quality teachers (Bland et al., 2016).

Mentors

A major issue plaguing many teacher education programs is the lack of high-quality mentors to assign to pre-service teachers (Chizhik et al., 2018). Craig (2021) found this makes mentoring an important aspect of any beginning teacher induction program. Mentoring provides

an avenue to achieve vicarious experiences for the social cognitive theory by Bandura through modelling which can improve teacher self-efficacy. Beginning teacher self-efficacy is higher when paired with a highly trained mentor. Beginning teacher self-efficacy is also higher when partnered with a mentor in the same content area. There is a relationship for 1st year teachers to have a mentor in a similar position to routinely interact with and their attrition rates (Bastian & Marks, 2017). These mentors provide opportunities for beginning teachers to develop their teaching pedagogy and increase their teacher self-efficacy (Chizhik et al., 2018).

Beginning teachers need intense support that focuses on mentoring, modelling and best practices as they begin their careers (Jenson et al., 2016). These teachers also benefit from having experienced teachers as their mentors (Ingersoll et al., 2021). Having highly effective mentors paired with beginning teachers and resources for support can impact their desire to stay in the profession long-term (Podolsky et al., 2017). The mentorship process of including timely and relevant feedback, demonstrating highly-effective classroom practices, and providing them with human capital resources they can lean on during their early career will increase their teacher self-efficacy during the challenging moments in the classroom (Chizhik et al., 2018). It is critical for schools to have mentorship opportunities, successful induction programs, and continuous professional development for beginning teachers as the first years have the largest learning curves for teachers, help to determine their success, and retention in the teaching profession (García & Weiss, 2019b).

Professional Development

Teachers with the guidance of mentors and professional development (PD) opportunities are better prepared to have success in schools that are low performing (OECD, 2018). Bastian and Marks (2017) found a strong correlation between a well designed and implemented PD and

positive teacher results. However, one day induction programs have not been seen as successful in retaining beginning teachers; a combination of on-going personalized PD, collaboration with colleagues, and well-designed induction programs are seen as more effective in retaining beginning teachers (Stewart et al., 2021).

Many studies have found a beneficial relationship between lengthy internships and positive beginning teacher experiences to prepare them for the classroom (Nolen & Clemmons, 2021; OECD, 2018; Podolsky et al., 2019). In particular, Podolsky et al. (2019) found that beginning teachers that observed others, received feedback, and had a full internship were two and a half times more likely to stay in the profession. In contrast, the response to the COVID-19 pandemic led to a decrease in opportunities for internships for pre-service teachers and the need for opportunities for them to develop their teaching practices to make-up for the loss (Lachlan et al., 2020).

Teacher self-efficacy is increased for beginning teachers that come from programs that they feel were effective and this will increase retention rates over time and student performance in the classroom (Podolsky et al., 2017). In contrast, many beginning teachers felt less than very well prepared with regards to assessing students, differentiating instruction, teaching students with special needs, handling classroom management, and using data from assessment to inform instruction (García & Weiss, 2019b). A major challenge for many beginning teachers relates to the successful management of their classroom diversity with sound teaching pedagogy (du Plessis et al., 2020). Induction and support can influence the quality of performance for beginning teachers as they switch from theory to practice (Podolsky et al., 2019).

The ESSA (2015) made PD a priority for school improvement plans and the use of effective evidence based PD that is continuous, personalized, data-driven and regularly

evaluated. Darling-Hammond et al. (2017) found effective PD that focuses on teacher improvement for teaching pedagogy and improvements for student achievement. Effective PD should focus on the content that the teachers are using in their classroom with regards to the demographics of the students that they teach. Teachers should engage in PD that they will be able to replicate in their classroom and relevant to their interests. PD that is tied to effective coaching can result in teachers using the PD in their classroom and in the correct manner. In addition to effective coaching, PD should be combined with effective feedback and time for self-reflection to give teachers the opportunity to improve on their craft. This aligns with how Guskey (2000) demonstrated that PD could be characterized through five levels. These levels included: participants' reactions, participants learning, organizational support and change, participants' use of new knowledge and skills, and student learning outcomes.

García and Weiss (2019b) stated that PD is vitally important to teachers as a method to ensure on-going learning, increase job satisfaction, professionalism, and student achievement. PD allows teachers to update their teaching practices with new research that ultimately positively impacts their diverse set of students. PD enables beginning teachers to transition from their teacher preparation program to the classroom successfully, and PD that is adequate, sustained, and meaningful to teachers may help schools improve and retain their workforce. Additionally, studies have correlated PD with higher rates of student performance (Jensen et al., 2016; OECD, 2018).

Feller and Brown (2018) described how providing PD for beginning teachers is a focus for Pitt County Schools. Pitt County Schools has implemented the Key BT programs as a way to identify beginning teachers to advanced teaching roles within the district. The Key BTs receive additional training and support with the added benefit of higher levels of influence. Pitt County

Schools initiated the R3 Framework: Recruit, Retain, Reward in 2013. Feller and Brown (2018) described the R3 Framework as “an innovative, relevant, and cost-effective initiative focused on developing high-performing educators through intensive professional learning, leadership opportunities, and differentiated compensation models” (p. 13). The PD has been designed to develop teacher leaders that are able to contribute influence in their schools.

PD is especially important for beginning teachers as they recognize the cultural diversity in their classrooms and the strategies that they will need to be successful (du Plessis et al., 2020). Cruz et al. (2020) found that beginning teachers have lower self-efficacy with culturally and linguistically diverse students than veteran teachers. Professional development for Culturally Responsive Teaching should include implementation activities and expand beyond basic understanding of Culturally Responsive Teaching (Cruz et al., 2020).

Culturally Responsive Teaching

Culturally Responsive Teaching is “an educator’s ability to recognize students’ cultural displays of learning and meaning making and respond positively and constructively with teaching moves that use cultural knowledge as a scaffold to connect what the student knows to new content” (Hammond, 2014, p. 15). Teachers that focus on Culturally Responsive Teaching will enact procedures in their classrooms that will not only improve the quality of learning for students of color but will impact learning for all of the students in the classroom (Barrett-Zahn, 2021). Culturally Responsive Teaching has positive effects on student achievement, student motivation, interest in curricula content, academic discourse, positive self-efficacy for students, and confidence for standardized testing (Aronson & Laughter, 2016). Therefore, a student's culture in the classroom should be viewed as a strength instead of as a hindrance to their learning (Lopez, 2017). Additionally, the use of multi-cultural literacy will enhance the educational

environment for both culturally and linguistically diverse (CLD) students and mainstream students (Martin & Spencer, 2020). Incorporating diverse cultures into the curriculum and building relationships increase the sense of belonging for students (Kumar et al., 2018).

There is a dissociation between teachers stating that they incorporate Culturally Responsive Teaching strategies in the classroom and actual observations of those strategies in practice (Civitillo et al., 2019; Guerra & Wubbena, 2017). Furthermore, limited exposure to CLD students impacts the self-efficacy for pre-service teachers with implementing Culturally Responsive Teaching practices (Siwatu, 2011). Boykin and Noguera (2011) found this problematic when a normalization of failure and feelings by educators that there is nothing that they can do to impact achievement for their students of color creates an environment where educators are complacent with low test scores for these subgroups of students. Where it becomes commonplace for students of color to fail become breeding grounds for educators to feel like there is nothing that they can do and justify their failing becomes an obstacle for affecting real change by raising their achievement levels. These same students are more likely to be in a special education classroom instead of advancement placement or honors level courses. Additional studies also connected CLD students with underrepresentation in advanced or honor courses while overrepresented in school discipline (Cruz et al., 2020; Hammond, 2014). For example, the increased use of suspensions has negatively affected African American populations in schools in the United States (Darder, 2016).

Students benefit from teachers that create equitable experiences for them and celebrate their innumerable cultural and linguistic gifts, raise high expectations for all students, and value their diversity (Barrett-Zahn, 2021). A critical component of Culturally Responsive Teaching is the teacher self-reflecting on their own beliefs regarding the topic (Civitillo et al., 2019).

Culturally Responsive Teaching may also contribute to the overall success of student engagement in the classroom (Franklin & Harrington, 2019). On-going PD for beginning teachers in the areas of multicultural literacy and Culturally Responsive Teaching is progressively important for working with CLD students (Martin & Spencer, 2020).

High Standards and Expectations

Students that are labeled as disadvantaged will continue to suffer in the educational setting as they will receive less rigorous and lower cognitive learning activities (Hammond, 2014). The use of teacher sympathy results in students perceiving themselves as unable to perform at a high standard and affect low-income students of color (Graham & Taylor, 2016). Rojas and Liou (2017) found teachers' use of sympathy resulted in students perceived notions of education as unachievable or elective based on their educational background. This leads to lowering of expectations and negatively affects low-income minority students. Based on lowering expectations and teacher perceptions of sympathy, it lowers the quality of education for students of color. Additionally, students are able to acknowledge when teachers lower expectations for them and this becomes especially problematic when they have high expectations for themselves but lack the people in their lives to show them how to achieve their goals (Liou et al., 2016). Teachers have lower expectations for students from low socio-economic status households and students with learning disabilities and those students expected to perform at lower levels were encountered with more negative interactions with teachers than students that were expected to perform higher academically (Wang et al., 2018).

Boykin and Noguera (2011) described how the relationship between teachers and students could either positively or negatively impact their performance in the classroom. Students that perform lower in the classroom are negatively affected by this relationship as they

receive less quality instruction resulting from these interactions providing a lower quality response compared to students that are performing higher in the classroom.

Teacher expectations over time can raise or lower student performance and students with teachers with higher expectations for them perform at higher levels than those with teachers that underestimate their potential (Rubie-Davies et al., 2020). Students who had teachers with high expectations and showed that they cared for them on a personal level performed higher in mathematics regardless of their ethnic subgroup, gender or socio-economic level (Rubie-Davies & Rosenthal, 2016). The achievement and beliefs were greater for students with teachers of high expectations compared to students with lower expectations in student perceptions of teachers' expectations, student academic competence, student satisfaction with school and student reading self-concept (Rubie-Davies et al., 2020). Students' confidence levels were also higher with teachers that demonstrated higher expectations (Wang, 2020). Culturally Responsive Teaching practices include having high expectations (Khalifa, 2018) and embracing their culture in the school (Cruz et al., 2020). High expectations consist of having goals that are challenging, progress monitoring with high quality feedback, and a thought process that all students are capable of performing in the classroom (Rubie-Davies & Rosenthal, 2016). There is a need for beginning teachers to receive PD on teacher expectations and its relationship with student achievement and student beliefs (Rubie-Davies et al., 2020).

The National Council of Teachers of Mathematics (2014) found teachers benefit by holding high expectations for their students and formulating a rigorous curriculum that challenges students to perform at their maximum potential instead of having low standards that allows students to underperform compared to their academic potential. Best practices for mathematical instruction include lessons that focus on academic discourse between the teacher

and the students and from students to students. Students also benefit from a curriculum that celebrates teaching practices that allow students to learn from their mistakes by confronting them head on while learning how to improve in the future. Furthermore, Hammond (2014) stated students will begin to engage in lessons more fully when they develop a growth mindset that allows them to view their errors as vehicles to learn more information. Teachers must model this behavior for their students to allow them to understand that errors are informative and allow the students to stretch their learning in ways that will create self-efficacy especially in the areas of math and science.

Tracking how teacher expectations, teaching pedagogy and interactions with students will help teachers with both student academic outcomes but their social-emotional well-being as well (Rubie-Davies et al., 2020). In addition, teachers should review their classroom practices and how they interact with their students to provide a more equitable environment for all of their students (Wang et al., 2018). Having a time in the school day for teachers and students to interact with one another about the goals and aspirations of the students could change the pathway for students resulting in higher educational gains (Liou et al., 2016).

Rojas and Liou (2017) flipped the paradigm of teacher sympathy by focusing on defining the meaning of sympathy for low-income minority students by using sympathy to raise expectations and concern for students of color. Teachers were scaffolding the instruction by lowering expectations as a method of sympathizing with students that are not meeting the academic goals set in the classroom. Teachers saw the interplay between high expectations and caring for their students. Thus, teachers view all students as having the academic ability, the value they bring to the classroom and knowledge making process to be successful. Sympathy for

their students related to the ability to have access to a rigorous curriculum that prepared them for life in a society that was not always equitable.

Self-Reflection

In order for teachers to set high standards and expectations, teachers must first self-reflect on their own beliefs regarding Culturally Responsive Teaching. Self-reflection for teachers in relations with student's culture is of foremost importance as classrooms become increasingly diverse in nature (Umutlu & Kim, 2020). Furthermore, the ability for teachers to self-reflect and challenge their own consciousness and assumptions regarding CLD students is important for teachers enactment of Culturally Responsive Teaching (Donahue-Keegan et al., 2019). However, critical awareness is a skill that is not accessible to the majority of pre-service teachers (Lopez, 2017).

Acquah and Commins (2017) found effective modelling will ensure that pre-service teachers will be able to understand how students will experience the lessons and what Culturally Responsive Teaching will look like from the student's perspective, along with critically analyzing their own self-discovery in the process. The importance of understanding conceptually and self-reflection, building on past experiences, and how it will connect to future learning by their students. Teachers could benefit from a safe place to share their own cultural identities and focus on how to affect real change with inequalities in today's classrooms.

Additionally, critical reflection and video recordings are important components for the success of teachers to implement Culturally Responsive Teaching in their daily practices (Civitillo et al., 2019). Teachers will need to not only be able to reflect after the fact but also reflect in the moment, especially for Culturally Responsive Teaching practices (Umutlu & Kim, 2020). Opportunities for pre-service teachers to openly discuss and self-reflect on Culturally

Responsive Teaching practices will support their implementation of those practices in the classroom (Civitillo et al., 2018). Self-reflection for teachers becomes uppermost important as it will influence their ability to enact Culturally Responsive Teaching in their classrooms (Martin & Spencer, 2020). How successful teachers are in developing their Culturally Responsive Teaching practices relates to the interchange of Culturally Responsive Teaching, self-reflection and beliefs about cultural diversity (Civitillo et al., 2019). School leadership has the obligation to improve the quality of teaching and motivation for their teachers (Khumalo, 2019). For example, implementing Culturally Responsive Teaching with fidelity in the classroom would improve the quality of teaching (Khalifa et al., 2016) and training on implementing with fidelity could be completed through PD with ongoing follow up and monitoring.

Professional Development

Pre-service teachers could benefit from receiving training beyond the instructional pedagogies of teaching and focus on how to make them a well-rounded educator prepared for multicultural classrooms (Acquah & Szelei, 2018). Siwatu (2011) found that to successfully implement Culturally Responsive Teaching into the classroom, pre-service teachers need to have both the knowledge relating to Culturally Responsive Teaching and the self-efficacy to administer the knowledge. Pre-service teachers do not feel like they were fully prepared to execute Culturally Responsive Teaching in their classrooms resulting from a lack of knowledge or experience from their teacher preparation program. Pre-service teachers had lower self-efficacy with identifying relationships between school and home culture for CLD students, how standardized tests are historically biased towards CLD students, and implementation of Culturally Responsive Teaching strategies to align with CLD students home culture. The lack of Culturally Responsive Teaching in many pre-service teaching programs may relate to the intense

training that would be required to effectively implement it in the classroom (Hollie, 2017). Additionally, PD that is not on-going and consistent will not be effective in the long-term (Barrett-Zahn, 2021; Civitillo et al., 2018). Teachers that meet routinely (four to six times) were able to extend beyond having an appreciation for the diversity in their classrooms to developing lessons that emphasized the role of Culturally Responsive Teaching practices to the betterment of their students (Chouari, 2016).

Khalifa et al. (2016) stated that school leadership should focus on Culturally Responsive Teaching practices in the same regards as student outcomes and instructional practices. School leaders should value the abundance of cultures that contribute to their school population and incorporate processes to include teaching practices with the goal to celebrate their diversity and benefactions to the school environment. Additionally, school leaders encroach beyond only implementing Culturally Responsive Teaching and ensure that their school has a culturally responsive school environment that allows the school and the community to work cohesively together. School leaders that are culturally responsive will positively impact students of color and students that have been historically marginalized in our society. Furthermore, school leaders should ensure that Culturally Responsive Teaching is at the center of their lesson plans and daily interactions with their students (Khalifa, 2018). School leaders should focus on areas for PD where teachers have low self-efficacy and Culturally Responsive Teaching is one of those areas (Cruz et al., 2020). PD that relates to Bandura's social cognitive theory in the areas of mastery experiences, vicarious experiences, verbal persuasion and psychological and emotional states could be beneficial to teachers implementing Culturally Responsive Teaching into their classrooms (Cruz et al., 2020).

PD should enhance the alignment between the teacher's voiced belief in Culturally Responsive Teaching practices and actual implementation of them in the classroom (Guerra & Wubbena, 2017). Teachers should be cautioned to not think that all learning strategies are Culturally Responsive Teaching as they could deviate based on the ethnic group or the execution of the activity (Tanase, 2020). Culturally Responsive Teaching practices should focus on forging a relationship between a student's cultural-self and academic-self (Stembridge, 2019). Incorporating students' real-world experiences is a logical method to increase the Culturally Responsive Teaching practices into the classroom (Tanase, 2020). Inequities exist when some students are able to relate the learning objectives to their culture and other students are not because their culture is seen as an outsider (Stembridge, 2019). Furthermore, Zwiers and Crawford (2011) stated students demonstrate their use of critical thinking skills in a way that goes beyond rote memorization of facts and to a world that allows them to be solution-minded while solving problems through complex thinking processes. In order for students to be prepared for life after high school, they develop their own thinking in a way that supersedes them recalling basic facts so they are able to survive advanced placement courses and jobs that are yet to be created. Teachers create classrooms that build on the diverse culture of their students so that as they interact they are able to learn from one another. Academic discourse is vital to the educational classroom and allows students to share insights from their own data bank of experience and knowledge base. Additionally, cooperative learning is a Culturally Responsive Teaching strategy as it allows the students to celebrate the unique classroom diversity and how each student can bring their own individual strengths to the table to achieve success beyond what is individually possible (Franklin & Harrington, 2019).

“Culturally responsive pedagogy is more than creating meaningful lessons. It is an intentional way of thinking, it is a community, it is a consistent practice, and it is commitment to culturally engaging and effective instruction” (Ticknor et al., 2021, p. 18). Ticknor et al. (2021) described three Culturally Responsive Teaching strategies for teachers to incorporate into their pedagogy and they include: instructional materials, instructional language, and reading response. Considerations for instructional materials involves knowing who is represented in the texts and how, providing windows and mirrors for students, and choice boards that connect school, home and community. Additionally, instructional language stipulates using student word choice, understanding student identities, and use of diverse materials throughout literacy instruction. Furthermore, reading response embraces choice, provide space to affirm student voice, actively reflecting on instructional practices.

Another important focus area for the PD of teachers related to how to successfully build competence and then how to implement Culturally Responsive Teaching into the classroom practice is through effective professional learning development related to professional learning communities (PLCs) (Alhanachi et al., 2021). Highly effective PLCs are used to energize teachers to focus on the cultural differences in their classroom and help gain knowledge and understanding of the diversity of their students (Chouari, 2016). Additionally, the PD may offer a method to help teachers differentiate their instruction to become high-quality instruction that meets the needs of all of their students (Smets, 2017).

High Quality Instruction

Pre-service teachers are likely to experience growing pains as they enter the teaching profession and learn how to transfer their theoretical knowledge to application in the classroom

(Clooney & Cunningham, 2017). The use of professional development and mentors helps connect theory to practice for beginning teachers (OECD, 2018).

Hattie et al. (2020) found the DIIE model for implementing high quality instruction which allows teachers to develop a common language for their teaching and learning practices that could positively affect collective teacher efficacy on student learning. The DIIE Model consists of diagnosis and discovery, intervention, implementation, and evaluation. Diagnosis and discovery allows teachers to understand the prior knowledge and gifts that students have through assessments. Intervention includes having multiple strategies available and having knowledge of when to apply each strategy. High-probability interventions are proven strategies that have high effect sizes on student learning. High-probability strategies include vocabulary programs, summarizing, elaborative interrogation, direct instruction, deliberate practice, rehearsal and memorization, effective feedback, and spaced versus massed practice with average effect sizes that range from 0.56 to 0.79. Implementation is understanding how to best apply the highly effective interventions into action. Evaluation is a collaborative process to understand the impact of the implementation of interventions on student learning and how to proceed forward for our students. Determining the effect size for students is beneficial with the evaluation of the implementation of interventions. Effect size consists of the average from the post-assessment minus the average of the pre-assessment and divided by the average standard deviation. Evaluations are a part of the learning process and not just the end result. Strategies that are implemented with an effect size greater than 0.40 have the ability to move learning forward. High quality instruction includes: academic rigor (Culver et al., 2021), instructional rounds (Shive, 2017), student engagement (Vallee, 2017), and inclusion of professional development (OECD, 2018).

Academic Rigor

Culver et al. (2021) found that academic rigor can be viewed from the standpoint of challenging cognitive thinking through higher order thinking or the volume of coursework. However, cognitively challenging students' thinking is more beneficial than increasing the amount of work the student has to complete. School administrators provide resources for teachers to enhance the higher order thinking for content, academic discourse, and assessments as a way to increase the academic rigor. Academic discourse is an immensely valued skill for students to learn (Colley & Windschitl, 2016). For example, indicators that students are engaged in higher-order thinking skills include: use of multiple solution methods, perseverance in the face of challenging tasks, use of multiple perspectives, collaboration, and clear academic discourse (Depka, 2017). Furthermore, academic discourse uses open-ended questions to generate a complexity of student thought to continue the conversation through paraphrasing, re-phrasing, and additional questions (Colley & Windschitl, 2016).

Four components of academic rigor are "active learning, meaningful content, higher-order thinking, and appropriate expectations" (Draeger et al., 2013, p. 272). Most questions in a classroom focus on recall instead of higher-order thinking (Depka, 2017). One explanation could be that rigor is routinely found in teacher preparation programs; however, it is not universally defined in those programs to prepare pre-service teachers to implement it in their own classrooms when they begin their careers (Gibbs, 2017). Another obstacle with academic rigor is that it is widely used and applied to many educational activities which complicates its understanding to both those inside and outside the education profession (Gibbs, 2017). Beginning teachers' use of Bloom's Taxonomy to create questions related to the standards, content, and learning objectives could be a solution as it increases academic rigor (Depka, 2017).

Differentiated instruction could also help with academic rigor since it matches the learning goal with the student's current performance level thus allowing students to perform at their highest level (Smets, 2017). This is especially important for African American, low socio-economic status students, and students with disabilities as they performed the lowest on End of Grade assessments in the 2018-2019 and 2021-2022 school years at Eagle Springs Elementary School (North Carolina Department of Public Instruction, 2019; North Carolina Department of Public Instruction, 2022b). Scaffolding the instruction is important for providing high-quality instruction that meets the needs of the students (Smets, 2017).

Instructional Rounds

Instructional rounds create a common understanding of high-quality teaching practices through observation and discussion (Hatch et al., 2016). Educators have been able to repurpose the medical field rounds that have been around for decades to work in classrooms (Fowler-Finn, 2013; Shive, 2017). Instructional rounds are an on the job style of training for teachers (Vandermark, 2018). In addition, instructional rounds provide an opportunity for school leaders to increase the teacher's self-efficacy, academic discourse, and support student achievement (Solan, 2020).

Teachers benefit from instructional rounds through collaboration with colleagues, professional learning opportunities that reduce their time out of the classroom, and communication with teachers outside of their grade level/department (Vandermark, 2018). Communication and collaboration around best practices are enhanced through instructional rounds (Shive, 2017). The instructional rounds rely heavily on the problem or focus of practice set forth by the facilitator (Roegman et al., 2017). The teachers and school leaders then have data

driven conversations based on their classroom observations (Allen et al., 2016). Information gained from instructional rounds impacts school improvement planning (Fowler-Finn, 2013).

School leaders can use instructional rounds to normalize their instructional practice with other school leaders to have a common viewpoint on instruction, student participation, and look for during classroom visits and observations (Hatch et al., 2016). Additionally there is a relationship between instructional rounds and increased teacher self-efficacy for both the observer and the observed (Solan, 2020). Furthermore, teacher self-efficacy and collective efficacy can be improved through instructional rounds that are implemented with fidelity (Shive, 2017).

Social networks formed during instructional rounds provide teachers with shared experiences and common language to work collaboratively to improve instruction (Hatch et al., 2016). Roegman et al. (2017) found instructional rounds can be a valued professional learning opportunity to address issues of equity if it is done explicitly and systematically. Addressing issues of equity in instructional rounds works well with team building activities that make the conversation more comfortable. Instructional rounds give the platform to discuss how issues of equity and instruction intersect. However, lack of discussion around race can further educational inequities for students that are African American and Latino. Moreover, instructional rounds can increase the quality of rigor and the equity in classrooms (Shive, 2017).

Student Engagement

Student engagement is a learned skill that requires developed skill and planning (Clooney & Cunningham, 2017). Methods to increase student engagement include fostering a classroom environment where the teacher and the student are co-constructors of the instructional strategies, activities that initiate higher critical thinking skills, and consistent self-reflection on how well

activities worked while constantly reviewing how to improve them in the future (Franklin & Harrington, 2019). Teachers therefore need to know that student engagement is multifaceted and consists of cognitive, affective, and behavioral components (Groccia, 2018).

Cognitive engagement is the thought processes of the students and how well they are able to concentrate on the activities (Xie & Xue, 2021). Teachers that focus on pedagogical reasoning will constantly reflect on their past practice and refine those skills as they continuously seek to improve student engagement and achievement (Loughran, 2019). For example, instructional tasks should include real-world applications, be innovative, engage the cognitive thinking process of the student, and connect to life beyond the classroom (Depka, 2017).

There is a positive relationship between student engagement and academic rigor (Culver et al., 2021). For instance, teachers can use academic discourse as a method to fully engage their students with their peers and evaluate their understanding of the content (Colley & Windschitl, 2016). Open ended and probing questions will increase academic discourse and engagement (Depka, 2017). Probing questions also allow the conversation to continue and clarify student thought (Colley & Windschitl, 2016).

Students with disabilities, low socio-economic status, and others may be at a disadvantage in the classroom resulting from exposure or learning ability and therefore will need support in place to provide an equitable learning environment (Depka, 2017). Differentiated instruction is a method to provide high-quality instruction to students in a personalized fashion (Smets, 2017). Scaffolding is a way to differentiate the instruction to meet the needs of the students (Colley & Windschitl, 2016; Depka, 2017). Moreover, teachers are able to engage their students by knowing their strengths and weaknesses to formulate lesson targets to meet their individual needs in the classroom (Franklin & Harrington, 2019). Furthermore, teachers need to

be aware that students of color and low socio-economic status students are at a disadvantage with regards to engagement through the traditional view of schooling in the United States (Vallee, 2017).

Emotional (affective) engagement is how connected the students are to the activities they are completing (Xie & Xue, 2021). Emotional support from the teacher is directly correlated with student engagement in the classroom (Pöysä et al., 2019). Teachers have an immense weight of being a role model placed on them due to the nature of the profession and demonstrate to students the true meaning of compassion, communication, and working collaboratively as a requirement instead of as a goal (Franklin & Harrington, 2019). There is a direct and significant correlation between teacher-student relationships and student engagement and achievement (Roorda et al., 2017). The more prominent the relationship between teacher and student leads to the level of engagement increasing for students and a corresponding reduction of undesirable classroom management behaviors (Quin, 2017).

Behavioral engagement is actively participating in the activities of the class (Xie & Xue, 2021). One major obstacle for students participating is the connection between classroom engagement and classroom management (Cooper & Scott, 2017; Franklin & Harrington, 2019; Inbar-Furst et al., 2021; Nagro et al., 2019). Increasing student engagement in the lesson will reduce the severity of undesired classroom behaviors (Nagro et al., 2019). Incorporating positive interventions, such as cooperative learning, strategies to increase student engagement and motivation are all ways to reduce misbehaviors (Franklin & Harrington, 2019). Additionally, ensuring students are responding often and throughout the lesson will increase classroom engagement (Cooper & Scott, 2017). For example, pair-share can be a successful tool for academic discourse for classrooms with lots of participants that may not all have time to share or

for classrooms with too few volunteers that may not want to share with the whole group (Colley & Windschitl, 2016). Additionally, the use of whole-group responses will increase the opportunities for students to be engaged in the lesson (Cooper & Scott, 2017; Nagro et al., 2019).

In order for teachers to engage their students, they need to know the reasons for why they are disengaged with the lesson material in the first place (Inbar-Furst et al., 2021). In particular, reactive responses will disengage students from the learning material and risk negative consequences for the class culture at-large (Nagro et al., 2019). Another concerning issue is that beginning teachers are less likely to seek help and understand the behavioral problem fully before responding to the student (Inbar-Furst et al., 2021).

Professional Development

Three elements of high quality PD for high-performing countries include: an extended teacher preparation program/internship, variety of PD opportunities, and continually focusing on teacher improvement (OECD, 2018). PD focused on these components of academic rigor will benefit teachers implementing them in the classroom (Culver et al., 2021). PD gives teachers the knowledge and strategies to provide high-quality instruction for their students (Smets, 2017). There is also a direct correlation between classroom management PD and student engagement (Inbar-Furst et al., 2021).

PD and instructional rounds are more effective when they are completed routinely instead of as a one-time event (Smets, 2017). Instructional rounds provide individuals the opportunity to increase their understanding of the instructional core as an on-going professional learning experience (Allen et al., 2016). This collaboration with school leaders with a focus on feedback can benefit teachers with student achievement (OECD, 2018).

Teacher Self-Efficacy

Teacher self-efficacy (TSE) refers to how well teachers believe they are able to accomplish the tasks of impacting student achievement (Coban et al., 2020; Kim & Seo, 2018). TSE impacts the behaviors of the teacher in the classroom and in turn will impact the overall achievement of their students (Goddard et al., 2000). Furthermore, teachers will increase their confidence (TSE) and will trust their teaching positively affects student achievement therefore improving student achievement (Ninkovic & Floric, 2018). Teachers with high levels of self-efficacy produce students that are able to meet high expectations as these teachers provide a curriculum that enables students to reach their maximum potential (Cansoy & Parlar, 2018). In addition to student achievement increases, TSE influences student's interest and value in the subject being taught (Tschannen-Moran et al., 1998). For example, there is a positive relationship between TSE and student enjoyment in mathematics classrooms (Hettinger et al., 2021).

TSE demonstrates the ability of teachers to believe that they can use their knowledge to plan, develop, and implement highly effective lessons in a way that produces measurable achievement goals for their students (Cansoy & Parlar, 2018). Teachers with higher levels of TSE may provide an explanation for how they perform at a higher level when compared to teachers of similar backgrounds, experience, and demographics (Coban et al., 2020). Moreover for beginning teachers, preliminary TSE positively impacts their early career in regard to their teaching practice (Lazarides et al., 2020). Additionally, TSE could impact the learning environment where teachers with similar experiences and background could perform differently based on their levels of TSE (Ninkovic & Floric, 2018; Zee & Koomen, 2016).

There are benefits for teachers with elevated TSE in reference to classroom behavior, student achievement, and overall confidence that the strategies implemented will lead to positive outcomes for the students in their class (Zee & Koomen, 2016). It is vital to begin developing TSE for classroom management for beginning teachers as quickly as possible as this may already be cemented during their teacher preparation studies (Lazarides et al., 2020). Managing classroom behavior is a foundational component for all teachers as it is intrinsically linked with instructional strategies for student achievement (Cooper & Scott, 2017). Teachers with lower levels of TSE in classroom management were more likely to avoid creating healthy warm relationships with behavioral prone students as they do not have the confidence in their ability to positively impact that student which in turn lowers their expectations of them both academically and behaviorally (Zee et al., 2017).

Factors that affect TSE include: classroom management (Fackler et al., 2021, Franklin & Harrington, 2019; Holzberger & Prestele, 2021), school leadership (Cansoy & Parlar, 2018; Coban et al., 2020; Ninkovic & Floric, 2018), collective efficacy (Coban et al., 2020; Goddard et al., 2004; Thompson, 2018) and professional development (Gotch et al., 2021; Ninkovic & Floric, 2018; Tschannen-Moran & Hoy, 2007).

Classroom Management

Teacher self-efficacy consists of the amount of engagement of students in regard to instruction, the number of resources and support for their instructional practices and how they are able to effectively manage the behaviors in their classrooms (Facker et al., 2021). Effectively managing classroom behavior is one of the substantial causes of stress and lack of TSE (Franklin & Harrington, 2019). In particular, teachers with lower levels of TSE may not have the knowledge bank to deal with the issues of classroom behavioral problems, burnout, and stress

which could impact their willingness to stay in the teaching profession (Zee & Koomen, 2016). Additionally, teachers that focus on classroom management and instructional strategies as two completely separate entities run the risk of feeling stressed and incapable of handling the classroom management problems when they occur (Nagro et al., 2019). An additional problem for beginning teachers is they receive classroom assignments that are less than desirable and often lead to a decrease in TSE and less motivation during their career (Tschannen-Moran & Hoy, 2001).

Teachers with high levels of TSE are more likely to stay in the teaching profession longer as they have more positive experiences with student success and limit the negative factors of classroom behavioral problems, burnout, and stress (Zee & Koomen, 2016). Classroom management begins with positive relationships built between the teacher and their students (Korpershoek et al., 2016). Furthermore, there is a relationship between TSE in classroom management and the ability to have positive teacher-student interactions through increased levels of productive classroom management (Hettinger et al., 2021). Teachers with higher levels of confidence in their own abilities design learning environments that provide rigorous lessons and activities, collaboration of student input into the lesson design process, and classroom management (Zee & Koomen, 2016). Best practices include shared ownership of classroom management rules by the teacher and the student (Korpershoek et al., 2016).

Teachers with advanced levels of classroom management TSE have knowledge of their own ability to manage student mis-behavior when it occurs, which will increase their time learning in the classroom compared to teachers with minor levels of classroom management TSE that may send that particular student out of class more often (Zee & Koomen, 2016). Preventive strategies have been proven as greatly more effective than reactionary punitive punishment

strategies (Korpershoek et al., 2016). For example, one way to lower classroom behavioral issues is for the teacher to move consistently around the room as it gives an opportunity for teachers to measure how well the students are engaged and provide prompting support for students that are likely to dis-engage with the lesson (Cooper & Scott, 2017). There is also a connection between classroom management TSE with students that enjoyed learning and were monitored effectively in regard to their behavior (Hettinger et al., 2021). Moreover, classroom management interventions that focus on the student's social-emotional development were more effective than interventions that do not have this component (Korpershoek et al., 2016)

Tschannen-Moran et al. (1998) found that beginning teachers sought help with classroom management more often when they expressed a higher TSE. Also, beginning teacher self-efficacy would benefit from having higher achieving students with smaller numbers of students during their first year of teaching. An important consideration since beginning teachers have had very minute training in effective classroom management during their teacher preparation programs and often is one of the main causes for beginning teachers to leave the profession early in their careers (Cooper & Scott, 2017).

School Leaders

School leaders can influence TSE through instructional and distributed leadership (Liu et al., 2020). Additionally, school leaders provide avenues for success by creating environments where the teachers are able to trust in them and their methods (Coban et al., 2020). Just as teachers will need to set high expectations of their students, school leaders set high expectations for their teachers and in doing so, students will benefit through increased performance measurables (Cansoy & Parlar, 2018). School leaders impact TSE through classroom walkthroughs, and intentional focus on the performance of their students (Coban et al., 2020).

Furthermore, school leaders can advocate for their teachers to county office administration and emphasize academics on the school level to improve TSE (Bandura, 1997). Another avenue for school leaders to influence TSE is through granting autonomy in the classroom, shared ownership of decision-making and a school-wide management system to curtail undesired behaviors from students (Tschannen-Moran & Hoy, 2007).

School leaders have the ability to affect both TSE and the collective efficacy of the school (Cansoy & Parlar, 2018). Collective efficacy is the ability for the group to believe it can accomplish the task with regards to their collective knowledge and skills but also in regard to how the group can work together in unison (Bandura, 2000). School leaders and teachers determine components that positively affect collective efficacy as this will help to determine future student success in the classroom (Ninkovic & Floric, 2018). School leaders have the ability to affect the collective leadership of their teachers through positive reinforcement and creating an environment that focuses on collaboration amongst the staff (Cansoy & Parlar, 2018). For example, school leaders are able to increase the collective efficacy of their school environment through high expectations, individual knowledge and support of their teachers, verbal acknowledgement, and providing collaborative experiences for the teachers to work together towards a collective goal and vision (Ninkovic & Floric, 2018).

TSE is impacted by school leaders and teacher collaboration with colleagues (Holzberger & Prestele, 2021). School leaders can directly impact collaboration amongst teachers through a steady focus on achievement of the students in their care (Coban et al., 2020). School leaders that focus on TSE will create a school with higher collective efficacy through knowledge that they have the skills and ability to lead those teachers to new heights (Cansoy & Parlar, 2018).

Collective Efficacy

There is a strong interrelatedness between TSE and collective efficacy (Cansoy & Parlar, 2018; Tschannen-Moran & Hoy, 2007). TSE has the ability to grow the collective efficacy of a school and therefore impact student achievement on an immense scale (Goddard et al., 2000). TSE can increase the confidence in teaching pedagogy which leads to increases in student performance and elevated confidence levels for the school as a whole (collective efficacy); however, the opposite is also true (Ninkovic & Floric, 2018). In addition, TSE has a positive relationship with student achievement and teachers, unlike many other careers, have a burning desire to increase the collective efficacy of their profession (Thompson, 2018). Teachers are able to affect the collective efficacy when they have increased TSE and this collective efficacy will change the way that teachers view their students therefore impacting performance levels of their students (Cansoy & Parlar, 2018).

Schools with elevated levels of collective efficacy will provide a social environment that dictates that new members escalate to their level of expectation and those that do not are often excluded from the faculty by way of social isolation or leaving the organization (Goddard et al., 2004). For example, collaborative learning may increase the collective efficacy of the group (Fisher et al., 2020). Also, the collective efficacy of a school could determine the individual TSE depending on the overall social structures in place (Goddard & Goddard, 2001). Moreover, collective efficacy impacts beginning teacher TSE more significantly resulting from their socialized nature of induction into the school culture (Tschannen-Moran et al., 1998).

Socioeconomic status and racial demographics of schools considerably impact student achievement by affecting the level of teacher's collective efficacy (Cansoy & Parlar, 2018). However, schools that have a majority population of students of color and low-socioeconomic

students with teachers that have a high sense of collective efficacy perform at the highest levels in reading and math (Bandura, 1997). Teachers are able to work together in collaborative ways to meet the needs of their students by leaning on one another through shared experiences, ideas and instructional activities (Coban et al., 2020). Furthermore, TSE can improve through collaboration with colleagues and a positive school culture that is supportive (Liu et al., 2020). For example, working collaboratively may improve the skills when people later work independently (Fisher et al., 2020).

Professional Development

Transformational school leaders impact the collective efficacy of their teachers by setting the direction of the school (vision) and providing PD opportunities for their staff (Ninkovic & Floric, 2018). An endless downward cycle of despair can occur when teachers lack TSE for how to impact certain students and it results in less effort, resolve through roadblocks, and implementation of evidence-driven strategies (Tschannen-Moran & Hoy, 2007). Therefore, it is important to have PD opportunities to increase TSE (Gotch et al., 2021). Additionally, teachers would benefit from PD designed around student achievement as it would increase their TSE causing increased student achievement (Tschannen-Moran & Hoy, 2001).

Summary

According to the social cognitive theory by Albert Bandura, there are four components to self-efficacy: mastery experience, vicarious experience, social persuasion, and affective states.

Lack of mastery experiences can negatively affect the self-efficacy of beginning teachers.

Teacher self-efficacy has positive implications for student motivation and achievement.

There is an increased need for beginning teachers resulting from teacher turnover.

Beginning teachers are influenced by school leaders, professional learning communities, high

quality mentors, and professional development aimed at transitioning them from theoretical knowledge to application. Culturally Responsive Teaching has positive effects on student achievement, motivation, and teacher self-efficacy. Ways to increase Culturally Responsive Teaching include setting high standards and expectations, critical self-reflection, and continued professional development. Students benefit from high quality instruction. Examples of high quality instruction consist of developmentally appropriate academic rigor, instructional rounds for teachers, increasing student engagement, and ongoing professional development for teachers. Finally, teacher self-efficacy can impact the quality of instruction provided to students. Teacher self-efficacy is impacted by classroom management practices, school leaders, the collective efficacy of the school, and teachers receiving professional development.

The basis of this inquiry was to examine the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development. Using the knowledge of Culturally Responsive Teaching and high quality instruction teaching pedagogy to design professional development to measure the levels of teacher self-efficacy for engaging African American students at Eagle Springs Elementary School. Chapter 3 will discuss the methods of inquiry which will include the Focus of Practice guiding questions for this inquiry as well as how I examined the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development.

CHAPTER 3: METHODS OF INQUIRY

The focus of this inquiry was to examine the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development. Overall, it is estimated to cost large districts over \$20,000 per teacher to replace experienced teachers and close to \$8.5 billion per year across the United States (Podolsky et al., 2017). Schools provide support for beginning teachers through professional development opportunities, on-boarding programs, and mentors (Stewart et al., 2021). This investment in time and resources represents tremendous costs for the school districts. Investment in professional development in Culturally Responsive Teaching has positive effects on student achievement, student motivation, academic discourse, and interest in curricula content (Aronson & Laughter, 2016). Beginning teachers have lower teaching self-efficacy with culturally diverse students compared to veteran teachers (Cruz et al., 2020). Therefore, professional development designed to engage African American students has the potential to significantly impact beginning teacher self-efficacy with the hope that they will stay in the profession, thus reducing the burden on districts to replace these teachers. School leaders are seen as pivotal for developing teachers into leaders within the building (Szeto & Cheng, 2018) and therefore increasing the likelihood that they remain in the profession. The purpose of this inquiry was to examine the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development. Chapter 3 will focus on the guiding questions that will be answered through the inquiry, the inquiry design and rationale for the inquiry, the procedures for the various phases of the inquiry, the inquiry design rigor, any delimitations, limitations, and assumptions, and my role as the scholarly practitioner of this inquiry.

Guiding Questions

The purpose of this inquiry was to examine the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development. As such, this inquiry was guided by the following questions:

1. What is the effect of implementation of professional development in Culturally Responsive Teaching practices on engaging African American students?
2. What is the effect of implementation of professional development in Culturally Responsive Teaching practices on beginning teacher self-efficacy?
3. What influence does conducting this action research inquiry have on the leadership skills and development of the scholarly practitioner conducting this inquiry?

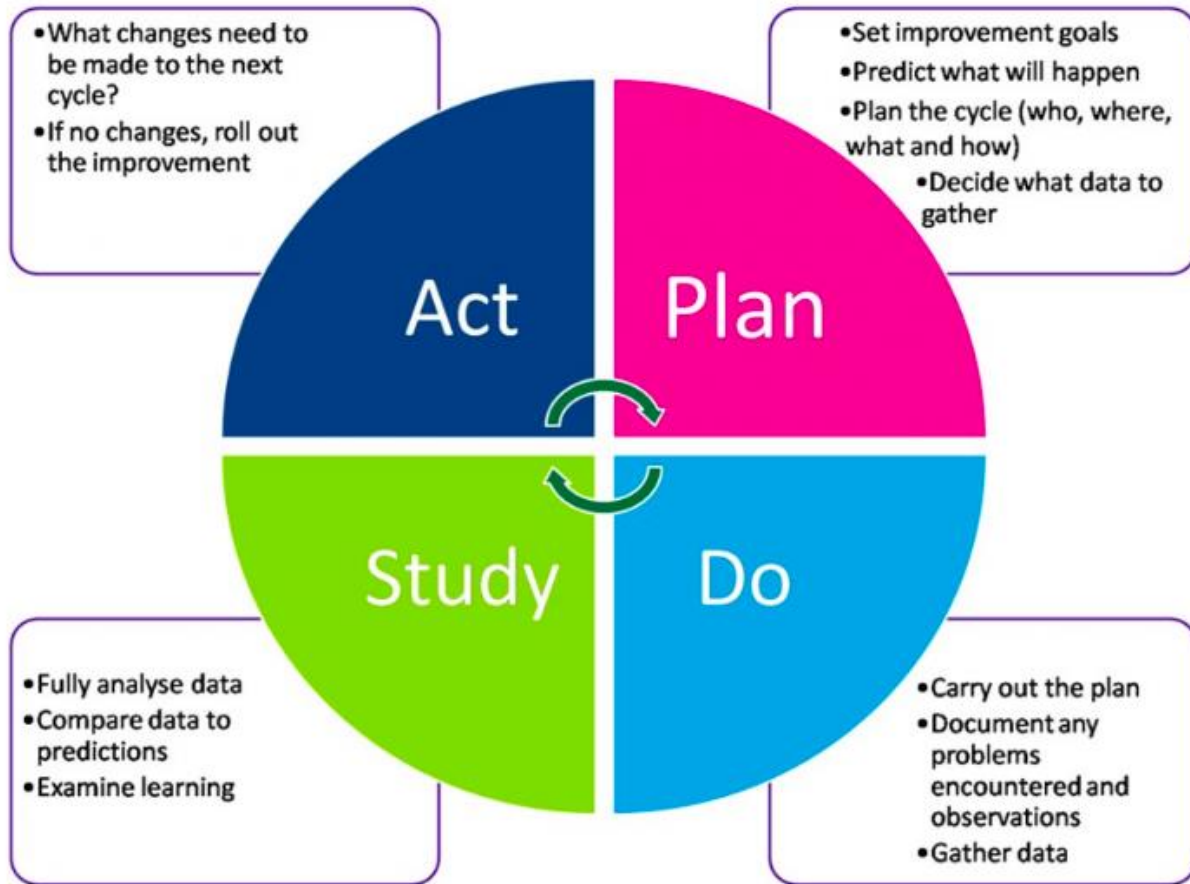
I used data from classroom observations as well as interview data to understand the effect of implementation of professional development on engaging African American students related to the first guiding question. I compared the data from classroom observations and post-conferences with the beginning teacher reflections during the interview sessions to determine if there is a relationship between these data points. Additionally, I used data from Teacher Self-Efficacy (TSE) surveys to understand the effect of implementation of the professional development on beginning teacher self-efficacy related to the second guiding question. The beginning teachers completed the TSE survey before beginning the professional development series to establish a baseline of data. The beginning teachers completed the same TSE survey at the conclusion of the inquiry to measure the effect of the professional development on their self-efficacy. Furthermore, I maintained a journal throughout the inquiry to detail impacts on my leadership skills and development related to the third guiding question. I focused on my growth

and the experiences that I learned as I completed the inquiry without identifying or using personal information gained from participants in the inquiry.

Inquiry Design and Rationale

To answer these guiding questions, I used an action research mixed methods design. “Action research is always relevant to the participants ... because the focus of each research project is determined by the researchers, who are also the primary consumers of the findings” (Sagor, 2000, p. 3). Additionally, the primary object of action research is to affect teaching and learning (Mertler, 2019). The professional development was modified throughout the course of the inquiry based upon the observations, feedback, and data to continually improve the inquiry. This occurred during each of the three action research cycles that encompassed this inquiry.

I chose a mixed methods design since it provided a solution to the biases or weaknesses of qualitative and quantitative methods by triangulating the data sources across methods (Creswell & Creswell, 2018). In particular, I chose an explanatory sequential mixed methods design which consisted of first collecting quantitative research during Action Research Cycle 2 of the inquiry and then using qualitative research to help explain those findings during Action Research Cycle 3 (Creswell & Creswell, 2018). I chose this method as it provided the opportunity to leverage the strengths of the traditional K-12 setting’s use of quantitative data analysis to understand the what and the how, while providing qualitative data to explain the why behind an outcome, in this instance, the effect of professional development to engage African American students on beginning teacher self-efficacy. The inquiry included multiple phases of inquiry of the PDSA Model (see Figure 6) that incorporated the steps of Plan, Do, Study, and Act for continuous improvement (Langley et al., 2009). First, the Plan step included setting



Note. (University of Illinois).

Figure 6. Plan-Do-Study-Act Model.

improvement goals, predicting what will happen, planning the cycle, and deciding what data to gather. Second, the Do step included carrying out the plan, documenting any problems encountered and observations while gathering data. Third, the Study step included analyzing the data, comparing the data to predictions, and examining the learning. Fourth, the Act step included what changes need to be made to the next cycle. Then the process was repeated through a continually improving process to the Plan step.

Action Research Cycle 1 established the baseline data for the inquiry. This included meeting with the inquiry partners to discuss the inquiry to understand the diverse panoramic views of the shared stakeholders for this inquiry. I gathered baseline data that included: previous North Carolina End of Grade (EOG) assessments, North Carolina School Report Cards, teacher self-efficacy surveys, and a pilot study related to the inquiry. I analyzed the baseline data with my inquiry partners to develop a general plan for continuous improvement to begin the inquiry.

Action Research Cycle 2 developed a comprehensive plan for implementation for my action research mixed method inquiry design. The comprehensive plan for implementation included a professional development series for beginning teachers in Culturally Responsive Teaching practices and highly effective instructional strategies (see Appendix F). Additionally, the implementation of these Culturally Responsive Teaching practices and highly effective instructional strategies were monitored through classroom observations, post-conferences, and lesson plan artifacts. Additional professional development sessions offered opportunities for teachers to reflect on their practice. Furthermore, I documented my leadership journey using journaling to understand the influence of this action research inquiry on my leadership skills and development. Non-participant inquiry partners helped analyze the data gained from the inquiry to

ensure the validity of the data. I used the analyzed data to make continuous improvement to the implementation of the PDSA Model (Langley et al., 2009).

During Action Research Cycle 3 I developed a plan to collect the outcome data for the inquiry. I directed the beginning teachers to complete an identical teacher self-efficacy survey from the beginning of the inquiry to understand their individual growth through this inquiry. Then I used a non-participant inquiry partner to conduct interviews to determine the impact of the Culturally Responsive Teaching practices and highly effective instructional strategies to engage their African American students on their teacher self-efficacy. After completing the professional development, the beginning teachers submitted their lesson plans to provide documentation of incorporating Culturally Responsive Teaching practices and highly effective instructional strategies into their classroom activities. All data points were used for triangulation, “a process of relating multiple sources of data to establish their trustworthiness or verify the consistency of the facts while trying to account for their inherent biases” (Mertler, 2021, p. 14). I used non-participant inquiry partners to analyze the outcome data and seek to examine the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development to determine the impacts of the social cognitive theory by Bandura in this inquiry. I also analyzed my journal entries to measure the influence of conducting this action research inquiry on my leadership skills and development. I shared the insights discovered from this inquiry with stakeholders at Eagle Springs Elementary School and the Williams County Schools District.

The implementation of this action research mixed methods design enabled the inquiry to provide a robust amount of useful quantitative and qualitative data. Additionally, action research provided an avenue to help beginning teachers implement Culturally Responsive Teaching

practices and highly effective instructional strategies from the professional development sessions while reflecting upon their craft. For example, "two characteristics that differentiate action research from other types of formal educational research are (1) the development of action plans and (2) the integration of reflection throughout the process" (Mertler, 2021, p. 165).

Furthermore, action research design allowed the participants to drive the equity discussion by improving the quality of learning for their African American students through conscientious design of instructional materials. For instance, "the process of studying a school, classroom, or teaching-learning situation with the purpose of understanding and improving the quality of actions or instruction. In this sense, it is the ultimate form of teacher reflection" (Mertler, 2019, p. 255). The professional development design for this inquiry not only allowed but encouraged the teachers to make heartfelt reflections on their current pedagogical mindsets while incorporating methods to enact real changes to their instructional practices to gain confidence in engaging their African American students.

Inquiry Partners

When examining the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development at Eagle Springs Elementary School, there were several inquiry partners that were vital to the success of this inquiry. Those inquiry partners at Eagle Springs Elementary School included: the beginning teachers, the instructional coach, the facilitating mentor for the beginning teachers, mentors in the building for the beginning teachers, the principal of the school, and non-participant inquiry partners to objectively analyze the data collected to mitigate any implication of bias on my part (see Table 2).

The beginning teachers were invited to participate in the professional development sessions that occurred at least once per month during the course of the inquiry for one to two

Table 2

Collaborative Inquiry Partners

Inquiry Partner(s)	Role in the Inquiry
Beginning Teachers	Inquiry participants
Instructional Coach	Invited to participate in the professional development, offered feedback to help refine the process between action research cycles.
Facilitating Mentor	Provided ideas to incorporate the professional development into the normal responsibilities for beginning teachers.
Mentors	Provided support to beginning teachers for a safe place for feedback and support.
Principal at Eagle Springs Elementary School	Provided support and permission to complete the inquiry at Eagle Springs Elementary School.
Non-Participant Inquiry Partners	Conducted interviews, aided in refinement of professional development, reviewed and analyzed the data collected to mitigate any implication of bias by the scholarly practitioner.

hours per session. I notified the beginning teachers that their participation was completely voluntary and they could have left the inquiry at any time without repercussions. The beginning teachers signed consent forms to be included in the inquiry. The beginning teachers were asked to complete a survey before they begin the professional development to determine their baseline level of self-efficacy for engaging African American students and a survey at the end of the third cycle to determine the effect of the professional development on their self-efficacy for engaging African American students. The beginning teachers were asked to participate in observing and being observed as they implemented the professional development in their classrooms. The beginning teachers were also invited to participate in an interview at the conclusion of the inquiry to provide qualitative data to evaluate the professional development.

The instructional coach was asked to participate in the professional development sessions that occurred during the course of the inquiry as an expert in the delivery of professional development at the school. Additionally, I requested feedback from the instructional coach to help refine the process between the cycles of improvement that were implemented with the beginning teachers.

I asked the facilitating mentor to incorporate the professional development training into the normal responsibilities of the beginning teachers of Williams County Schools to reduce their responsibilities. I asked the mentors of the beginning teachers for a safe place for feedback and support during the inquiry. I asked the principal for their support and permission to complete the inquiry in their school. Non-participant inquiry partners were included to review and analyze the data collected to mitigate any implication of bias on my part as both the scholarly practitioner and an administrator at the school.

Ethical Considerations

I anticipated the ethical considerations of the inquiry and imbed procedures to protect the participants involved in the inquiry and the reliability of the data using preemptive measures. I planned for these protections during Action Research Cycle 1.

A primary method to anticipate the ethical considerations of the inquiry encompassed the completion of the Collaborative Institutional Training Initiative (CITI) modules related to Social/Behavioral Research Investigators and Key Personnel. The 13 CITI modules I completed includes: Belmont Report and Its Principles, History and Ethical Principles, Defining Research with Human Subjects, The Federal Regulations, Assessing Risk, Informed Consent, Privacy and Confidentiality, Research with Prisoners, Research with Children, Research in Public Elementary and Secondary Schools, International Research, Internet-Based Research and Vulnerable Subjects - Research Involving Workers/Employees. I used these training modules by CITI to inform my inquiry practice through best practices in ethical principles, standards and guidelines to protect the participants in this inquiry.

Additionally, I submitted my inquiry to the Internal Review Board (IRB) at East Carolina University. This third party vetted my inquiry to ensure that all ethical considerations were in place and the participants involved in the inquiry were protected throughout the inquiry. IRB continued to monitor the progress of this inquiry throughout to ensure ethical considerations for the participants. The IRB approval letter is located in Appendix A.

The Williams County School District also required approval by the Educational Programs and Services department for all outside research requests. The Associate Superintendent of Curriculum and Instruction reviews the research requests and approves them on a case-by-case basis. This process was completed under local Board of Education policy.

I chose the participants for this inquiry based on their status as a beginning teacher at Eagle Springs Elementary School that worked with African American students in an instructional capacity. The beginning teachers had an in-depth knowledge of the student demographics at Eagle Springs Elementary School and instructional opportunities to impact the engagement levels of African American students. The beginning teachers included in the inquiry have all suffered impacts relating to the start of their careers because of the COVID-19 pandemic. The beginning teachers had knowledge of the purpose of the inquiry, its instrumentation, and the data collection processes before agreeing to participate. Furthermore, the beginning teachers received information regarding the teacher self-efficacy survey, professional development topics, observation protocol, post-conferences, interview protocols, and time commitments before voluntarily agreeing to provide their informed consent to participate in the inquiry (see Appendix B). The beginning teachers had the ability to opt out of the inquiry at any point in time without any repercussions. I utilized a password-protected database to ensure reliability for the inquiry, data collection, and findings. In order to protect the identities of the participants, I used pseudonyms for the school district, school, and participants to mask their identities for confidentiality purposes.

Throughout the process, I followed the advice and direction of my university advisor/dissertation chair to ensure that all ethical considerations were being implemented to protect the rights and privileges of the participants in this inquiry. I received approval from IRB for any modifications needed following their initial approval to begin the inquiry.

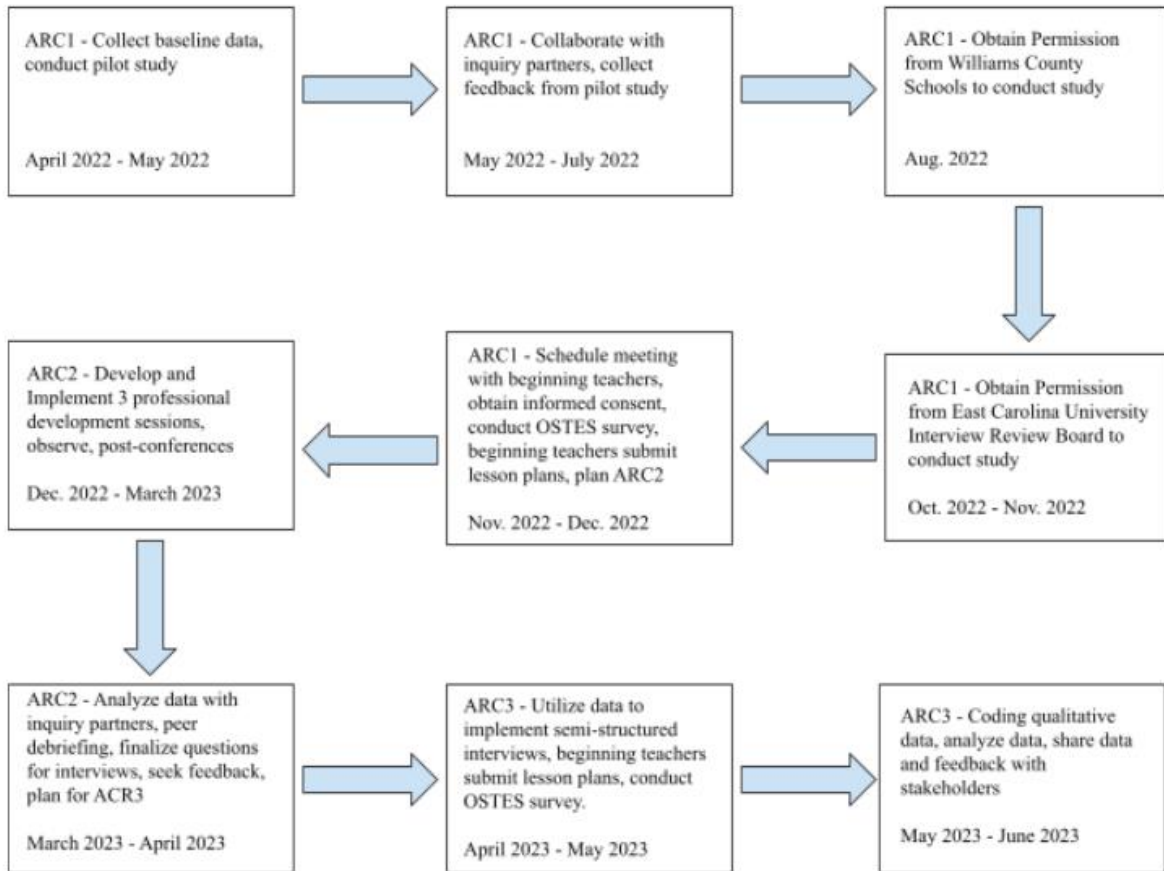
Inquiry Procedures

The inquiry procedures were designed to examine the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development. Action Research

Cycle 1 established baseline data from pre-existing data points. Additionally, I completed a pilot study to test the validity of the instrumentation to be used in the action research inquiry. Furthermore, the beginning teachers completed the Ohio State teacher efficacy scale to understand their confidence level teaching African American students and submitted current lesson plan artifacts. Action Research Cycle 2 implemented the Culturally Responsive Teaching practices and highly effective instructional strategies professional development sessions. It also included observations and post-conferences with the beginning teachers. Action Research Cycle 3 included the beginning teachers re-submitting lesson plan artifacts and completing the Ohio State teacher efficacy scale a second time following the implementation of the professional development sessions. Action Research Cycle 3 also included interviews to collect data and feedback from the beginning teacher participants. Action Research Cycle 3 included the analysis of the data collected through the coding process. I used a personal journal throughout all three Action Research Cycles to measure the growth of my leadership skills and development. Figure 7 details the timeline for implementation of the Action Research Cycles.

Action Research Cycle 1

The purpose of this inquiry was to examine the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development. I first received approval from the Williams County Schools District to conduct this action research inquiry. I then applied for approval from the Internal Review Board at East Carolina University (see Appendix A). Following these approvals, I sent a letter inviting all beginning teachers at Eagle Springs Elementary School to participate in this action research inquiry. I let the beginning teachers know that their responses would remain confidential, their identities protected, they could



*Scholarly Practitioner will journal throughout the implementation process

Figure 7. Action research cycles implementation timeline.

opt out of the inquiry at any time without any repercussions from me and obtained their informed consent before participating in the inquiry (see Appendix B).

Description of Participants and Recruitment Strategies

Due to the limited number of beginning teachers at Eagle Springs Elementary School, all beginning teachers were invited to participate in the action research inquiry. Purposeful sampling was used in this action research inquiry to better understand the viewpoint of beginning teachers (Mertler, 2021). In particular, this action research inquiry used homogeneous sampling as all of the participants possessed the same characteristic of being a beginning teacher (Mertler, 2021). At the time, there were 11 beginning teachers at Eagle Springs Elementary School that were invited to participate in the action research inquiry.

Instrumentation

African American students at Eagle Springs Elementary School performed as one of the lowest subgroups on the North Carolina End of Grade assessments, along with students with disabilities and economically disadvantaged students, according to data from the North Carolina Department of Public Schools North Carolina Report Cards from 2018-2019 and 2021-2022 school years as compared to the remaining populations of the school. Additionally, the beginning teachers in the tested grade levels in 2020-2021 (3rd-5th) disproportionately passed most (73%-100%) of their students in ELA and Math classwork when compared to the low percentage of students that passed the EOG assessments (19%-56%). The purpose of this inquiry was for beginning teachers to implement Culturally Responsive Teaching practices and highly effective instructional strategies to engage their African American students thus improving their teacher self-efficacy.

The action research mixed methods approach included multiple quantitative data instruments to collect and analyze data pertaining to engaging African American students through Culturally Responsive Teaching practices and highly effective instructional strategies on beginning teacher self-efficacy. The Ohio State teacher efficacy scale (OSTES) long form (24 items) (see Appendix C) was implemented to measure the beginning teachers' self-efficacy for instructional strategies, efficacy for classroom management, and efficacy for student engagement through the lens of their African American students (Tschannen-Moran & Hoy, 2001). The inclusion of the OSTES survey was deemed appropriate in validity and reliability for the purpose of this inquiry. For example, "the OSTES could be considered reasonably valid and reliable. With either 24 or 12 items, it is of reasonable length and should prove to be a useful tool for researchers interested in exploring the construct of teacher efficacy" (Tschannen-Moran & Hoy, 2001, p. 801). The implementation of this survey occurred before the first professional development session to gain a baseline and followed the conclusion of the inquiry to measure any changes in the beginning teacher self-efficacy ratings. An identical OSTES survey was administered to maintain credibility and provide fidelity to the inquiry. Furthermore, an adaptation of the calling-on tool by East Carolina University Project i4 (see Appendix E) was used during the observational stage of the inquiry to measure the implementation of the Culturally Responsive Teaching practices and highly effective instructional strategies in the beginning teachers' classrooms (East Carolina University, n.d.). The modified calling-on tool enabled me to measure the number of interactions with each student as a method to determine African American student engagement as well as track Culturally Responsive Teaching practices and highly effective instructional strategies implemented by the beginning teachers. Responses recorded during this inquiry were kept confidential and were password protected.

Qualitative data instruments were also included to collect and analyze data pertaining to the Culturally Responsive Teaching practices and highly effective instructional strategies to engage African American students on beginning teacher self-efficacy. Teacher reflections during professional development sessions, post-conferences and personal reflections from me were recorded in a journal by the practitioner throughout the inquiry. Teacher interview questions (see Appendix D) were created by the practitioner and focused on teacher reflections from the professional development sessions, post-conferences, and the OSTES survey results. Results again remained confidential and the data collected were password protected. See Table 3 to demonstrate the connection between the inquiry questions and the instrumentation designed to answer them during the course of this inquiry.

Action Research Cycle 1 - Plan

For the first Action Research Cycle, North Carolina End of Grade (EOG) assessments for the 2020-2021 school year and North Carolina School Report Cards for 2018-2019 were used for baseline data. This represented the most recent data collection available resulting from interruptions caused by the COVID-19 pandemic.

Action Research Cycle 1 - Do

I conducted a pilot study to test the validity and reliability of the instrumentation for this action research inquiry to engage African American students on beginning teacher self-efficacy before the actual data collection to determine revisions needed to improve this inquiry (Creswell & Creswell, 2018; Mertler, 2019). In the pilot study, I used inquiry participants that would not be a part of the final inquiry to test the instrumentation. Specifically, I used a beginning teacher in their second year and teachers in their fourth and fifth years to test the Ohio State teacher efficacy scale (OSTES) long form (24 items) (see Appendix C). Using Qualtrics, I tested the

Table 3

Guiding Questions and Instruments Used to Gather Data Sets

Guiding Question	Instrument	# of Questions	Action Research Cycle (ARC)
1. What is the effect of implementation of professional development in Culturally Responsive Teaching practices on engaging African American students?	Ohio State teacher efficacy scale (OSTES)	OSTES Long-Form 24 questions: 3, 6, 9, 12, 15, 18, 21, and 24	ARC 1 and ARC 3
	Implementation Interviews: semi-structured	Questions 1, 2 and 5	ARC 3
	Beginning Teacher Lesson Plans	9 highly effective teaching strategies/ Culturally Responsive Teaching practices	ARC 1 and ARC 3
	Modified Project i4 Calling-on Protocol	11 behavior indicators and 9 highly effective teaching strategies/ Culturally Responsive Teaching practices	ARC 2
2. What is the effect of implementation of professional development in Culturally Responsive Teaching practices on beginning teacher self-efficacy?	OSTES	OSTES Long-Form 24 questions: 1-24	ARC 1 and ARC 3
	Implementation Interview: semi-structured	Questions 1, 3 and 5	ARC 3

Table 3 (continued)

Guiding Question	Instrument	# of Questions	Action Research Cycle (ARC)
3. What influence does conducting this action research inquiry have on the leadership skills and development of the scholarly practitioner conducting this inquiry?	Scholarly Practitioner Journal		ARC 1, ARC 2, and ARC 3
	Implementation Interview: semi-structured	Question 4	ARC 3

instrumentation to ensure that this teacher self-efficacy scale measuring self-efficacy for instructional strategies, efficacy for classroom management and efficacy for student engagement would provide informative data for the action research inquiry (Tschannen-Moran & Hoy, 2001). The pilot study participants gave productive feedback on the ease of use and question comprehension of the Qualtrics survey. I also tested the modified calling-on tool by East Carolina University Project i4 (East Carolina University, n.d.) to ensure the data collected are meaningful for this action research inquiry (see Appendix E). The pilot study process and participants were immensely important in the revision process of the modified calling-on tool to continually improve the instrument for the purposes of this inquiry. Through the pilot study process, elements of the observational tool needed revision to document the included Culturally Responsive Teaching practices and highly effective instructional strategies from the professional development sessions in Action Research Cycle 2. Additionally, the pilot study participants responded favorably to the modified calling-on tool as a method to track the engagement levels of their African American students through their use of questioning in the classroom.

The pilot study tested the interview protocol with the pilot study participants (see Appendix D). The pilot study participants were asked the interview questions for knowledge of content and comprehensibility of the questions. The pilot study participants provided feedback on the instrument's word choice and their personal preference for a non-participant inquiry partner to interview, which would increase open and honest responses from the beginning teacher participants. I measured the influence of the action research inquiry on my leadership skills and development using a personal journal. I obtained permission from Williams County Schools District to conduct the action research inquiry. I then obtained permission from East Carolina University Internal Review Board to conduct the inquiry.

Action Research Cycle 1 - Study

I used the baseline data and data collected from the pilot study to look for trends related to the guiding questions. I collaborated with non-participate inquiry partners to analyze the data. I recorded the trends observed and any connections to the guiding questions.

Action Research Cycle 1 - Act

I collected feedback from the beginning teachers in their second year and teachers in their fourth and fifth years to inform planning for Action Research Cycle 2. I scheduled a meeting with all beginning teachers to discuss the action research inquiry and presented the opportunity to participate through the informed consent form (see Appendix B). A detailed description of the action research inquiry was given to the beginning teachers to inform them of their requirements for the action research inquiry before signing the informed consent form. The beginning teachers then completed the Ohio State teacher efficacy scale (OSTES) to measure the beginning teachers self-efficacy' for instructional strategies, efficacy for classroom management, and efficacy for student engagement through the lens of their African American students (see Appendix C). The beginning teachers completed the OSTES on the Qualtrics platform. The beginning teachers also submitted current lesson plans to document their then current practice of including Culturally Responsive Teaching practices and highly effective instructional strategies in their classrooms.

Summary of Action Research Cycle 1

Action Research Cycle 1 used the baseline data from North Carolina End of Grade Assessments and the North Carolina School Report Cards as well as the pilot study to inform program planning for the implementation of the professional development that was used in Action Research Cycle 2. Additionally, the beginning teachers completed the Ohio State teacher efficacy scale to provide baseline data on how confident the beginning teachers felt regarding

their teaching pedagogy for engaging their African American students. The beginning teachers completed the same Ohio State teacher efficacy scale during Action Research Cycle 3 following the professional development and observation interventions installed in Action Research Cycle 2 to measure the effect of the interventions (see Figure 8).

Action Research Cycle 2

Action Research Cycle 2 implemented the professional development series on Culturally Responsive Teaching practices and highly effective instructional strategies (see Appendix F). In addition, each of the beginning teachers were observed at least once after each of the three professional development sessions using the modified calling-on quantitative data tool from East Carolina University Project i4 (East Carolina University, n.d.). Both inquiry partners and non-participant inquiry partners were used during Action Research Cycle 2 to provide credibility and validity to the action research inquiry.

Action Research Cycle 2 - Plan

I used information learned from Action Research Cycle 1 to develop a comprehensive plan for implementation of the action research inquiry. The comprehensive plan used feedback from inquiry partners to develop the professional development series in the action research inquiry.

Action Research Cycle 2 - Do

I implemented the Culturally Responsive Teaching practices and highly effective instructional strategies professional development with the beginning teachers. The professional development series occurred in three sessions for the beginning teachers to allow them the opportunity to implement it in their classrooms and reflect on their progress at the next professional development session (see Appendix F). This helped develop their teaching routine

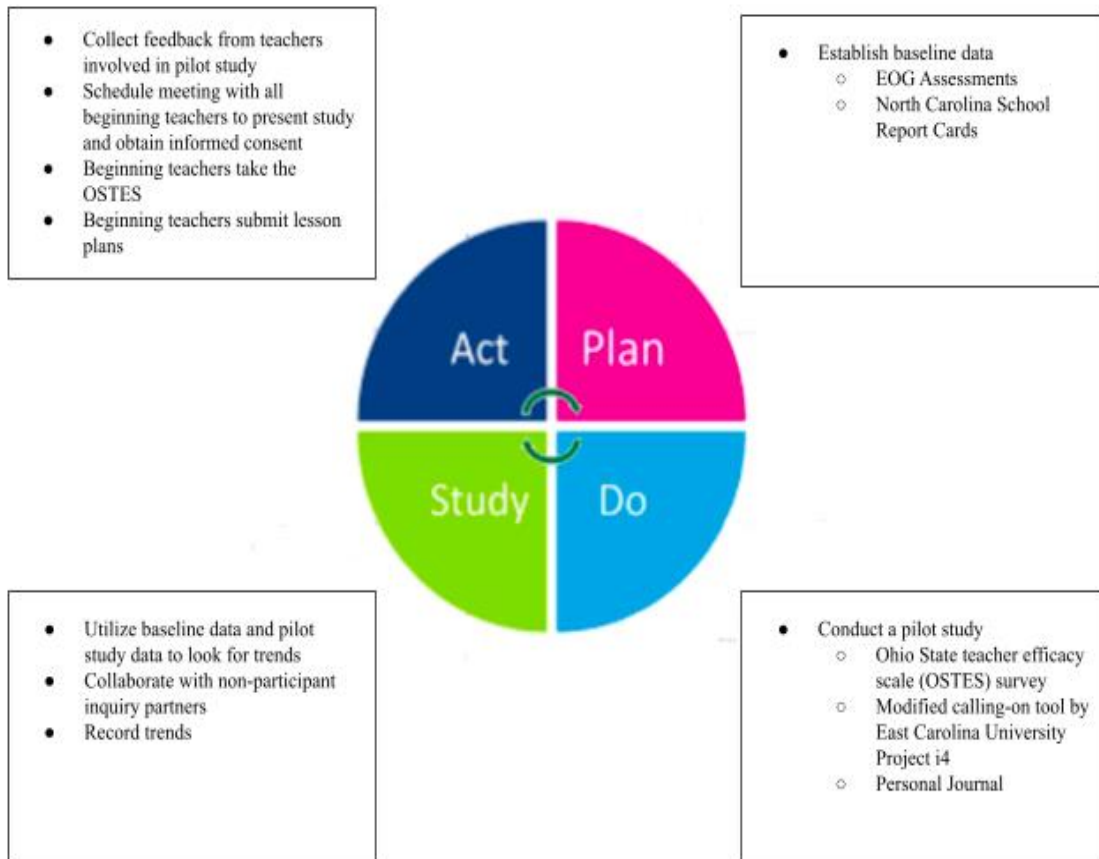


Figure 8. PDSA Model Action Research Cycle 1.

and understanding of the professional development content (Nolan & Clemmons, 2021). I observed the teachers using the modified calling-on tool from East Carolina University Project i4 (East Carolina University, n.d.) in between the professional development sessions and conducted data-focused post-conferences using the quantitative data from the observations. The beginning teachers were observed at least once between each professional development session for a total of at least three times during the action research inquiry. The beginning teachers were offered the opportunity following the third round of professional development to join me by observing another beginning teacher and participating in their post-conference. This enabled the beginning teachers to gain vicarious experience, social persuasion, and affective states according to the social cognitive theory through the observation of other beginning teachers as well as their own mastery experiences from the professional development implementation in their own classrooms (Bandura, 1997). I continued to document my leadership journey to understand the influence of implementing the professional development sessions, observing the beginning teachers, and conducting the post-conferences on my leadership skills and development.

Action Research Cycle 2 - Study

I used the quantitative data from Action Research Cycle 2 with my non-participant inquiry partners to look for trends, patterns, and relationships from the beginning teacher participants. This peer debriefing by non-participant inquiry partners was used to enhance the credibility of the action research inquiry (Mertler, 2021).

Action Research Cycle 2 - Act

I used information learned from the analysis of the quantitative data to formulate questions for the semi-structured interviews in Action Research Cycle 3. I used the collected

feedback and perspectives during Action Research Cycle 2 to inform planning for Action Research Cycle 3.

Summary of Action Research Cycle 2

I implemented Culturally Responsive Teaching practices and highly effective instructional strategies through professional development sessions with the beginning teachers. I followed the professional development sessions with observations and post-conferences with each beginning teacher participating in the action research inquiry (see Figure 9). I used this explanatory sequential mixed methods design to study the quantitative data from Action Research Cycle 2 and explained this quantitative data with qualitative data collected in Action Research Cycle 3.

Action Research Cycle 3

Action Research Cycle 3 used qualitative data from interviews with the beginning teacher participants to explain data previously collected from the teacher self-efficacy surveys, lesson plan artifacts, observations, and post-conferences. Non-participant inquiry partners were used to audit the data collected and analyzed externally to increase the credibility of the findings. Non-participant inquiry partners were also used to conduct the interviews to allow for honest discussion of the action research inquiry by the beginning teacher participants.

Action Research Cycle 3 - Plan

I developed a comprehensive plan to triangulate the data for this action research inquiry in order to provide validity while limiting inherent biases (Mertler, 2021). I used the quantitative data from Action Research Cycle 2 to implement interviews during Action Research Cycle 3.

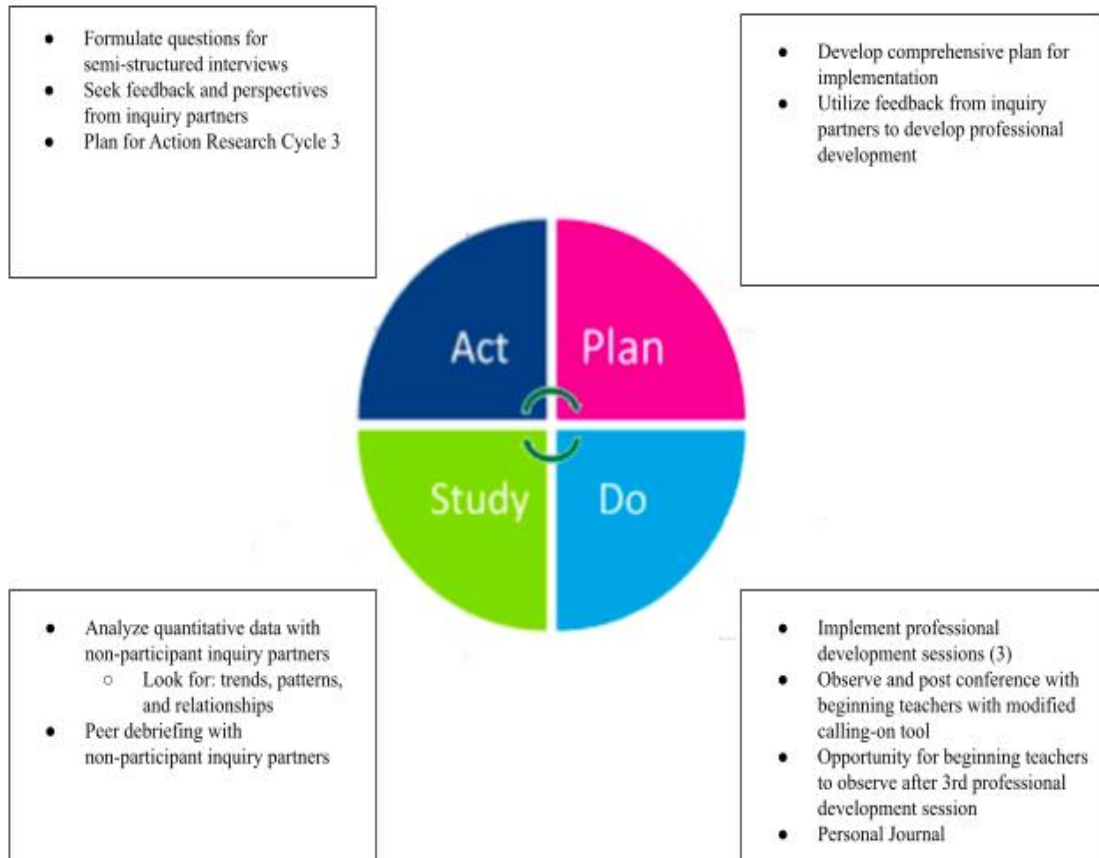


Figure 9. PDSA Model Action Research Cycle 2.

Action Research Cycle 3 - Do

The beginning teachers submitted lesson plans following the third professional development session to document evidence of the inclusion of Culturally Responsive Teaching practices and highly effective instructional strategies learned during the action research inquiry. The beginning teachers completed the Ohio State Teacher Efficacy Scale (OSTES) again on the Qualtrics platform to measure the effect of the professional development sessions on their teacher self-efficacy. The beginning teachers were invited to participate in a semi-structured interview. I selected an interview protocol since it is more conducive to enlisting participation and ensuring clarity due to the conversational style of this data collection method (Mertler, 2021). Prior to conducting interviews, I completed the following actions:

1. Invited all of the beginning teachers to participate in the interviews.
2. Determined the interview protocol and the semi-structured questions to use.
3. Located a suitable location for the participants that was conducive for the interviews.
4. Received permission from the participants to audio record the session (Mertler, 2021).

A non-participant inquiry partner conducted the interviews to enhance credibility of the action research inquiry as I was a lead evaluator for the beginning teachers. The interviews were recorded and transcribed to formulate patterns, themes, and relationships (Mertler, 2021). The beginning teachers were allowed to member check the accuracy of their responses from the interviews to ensure their ideas were presented accurately (Creswell & Creswell, 2018; Mertler, 2021). I finished documenting my leadership journey to understand the influence of implementing the professional development sessions, observing the beginning teachers,

conducting the post-conferences, and conducting interviews on my leadership skills and development.

Action Research Cycle 3 - Study

I used the transcripts from the interviews and personal journaling to provide codes for the qualitative data. “A code in qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data” (Saldaña, 2016, p. 3). An inductive analysis of the transcripts was used to look for patterns, categories, and themes from the qualitative data (Mertler, 2021). I used the NVivo v12 software to upload the transcripts and conducted the multiple phases of the coding process. I used the multi-level coding process to develop initial codes based on examining the data. Then I analyzed the initial coding to develop categories through focused coding. Finally, I used focused coding to develop highly refined themes through axial/thematic coding. I enlisted support from non-participant inquiry partners to review the analyzed data to conduct peer debriefing of the data and member checking from inquiry partners to ensure the accuracy of the thematic coding. Additionally, I compared the qualitative data (interviews) with the quantitative data (observations/teacher self-efficacy surveys) to triangulate the data to ensure the validity of the data.

Action Research Cycle 3 - Act

I used the data and feedback gained from the professional development sessions, observations, post-conferences, teacher self-efficacy surveys, and interviews to share with the K-5 staff at Eagle Springs Elementary School. The goal of sharing the data collected with Eagle Springs Elementary School staff was to detail the engagement of African American students on beginning teacher self-efficacy learned from the action research inquiry.

Summary of Action Research Cycle 3

Action Research Cycle 1 detailed the baseline data and pilot study used to plan the comprehensive plan for implementation in Action Research Cycle 2. Action Research Cycle 2 implemented the Culturally Responsive Teaching practices and highly effective instructional strategies professional development series with observations and post-conferences for the beginning teachers. Action Research Cycle 3 documented the results of the Ohio State teacher efficacy scale for the beginning teachers after the implementation of the professional development series. Furthermore, Action Research Cycle 3 produced qualitative data sources from interviews (see Figure 10). All of this data was compiled to produce themes for this action research inquiry.

Inquiry Design Rigor

“Rigor refers to the quality, validity, accuracy, and credibility of action research and its findings” (Mertler, 2021, p. 167). The inquiry design rigor for this action research inquiry strived to ensure the utmost attention for the quality, validity, accuracy and credibility of its findings were planned, implemented, and analyzed. This provided trustworthiness of the results of this inquiry through repeated cycles of inquiry, persistent observation, my experience with action research, triangulation of data, and member checking (Mertler, 2021). This inquiry design rigor further validated and deemed the Ohio State teacher efficacy scale reliable for this inquiry as previously reported (Tschannen-Moran & Hoy, 2001). In addition, this action research mixed methods design incorporated multiple phases of inquiry of the PDSA Model for continuous improvement (Langley et al., 2009). Within the second action research cycle were three iterations of professional development sessions followed by three rounds of observations to enhance the credibility of the quantitative data collected in this inquiry through persistent

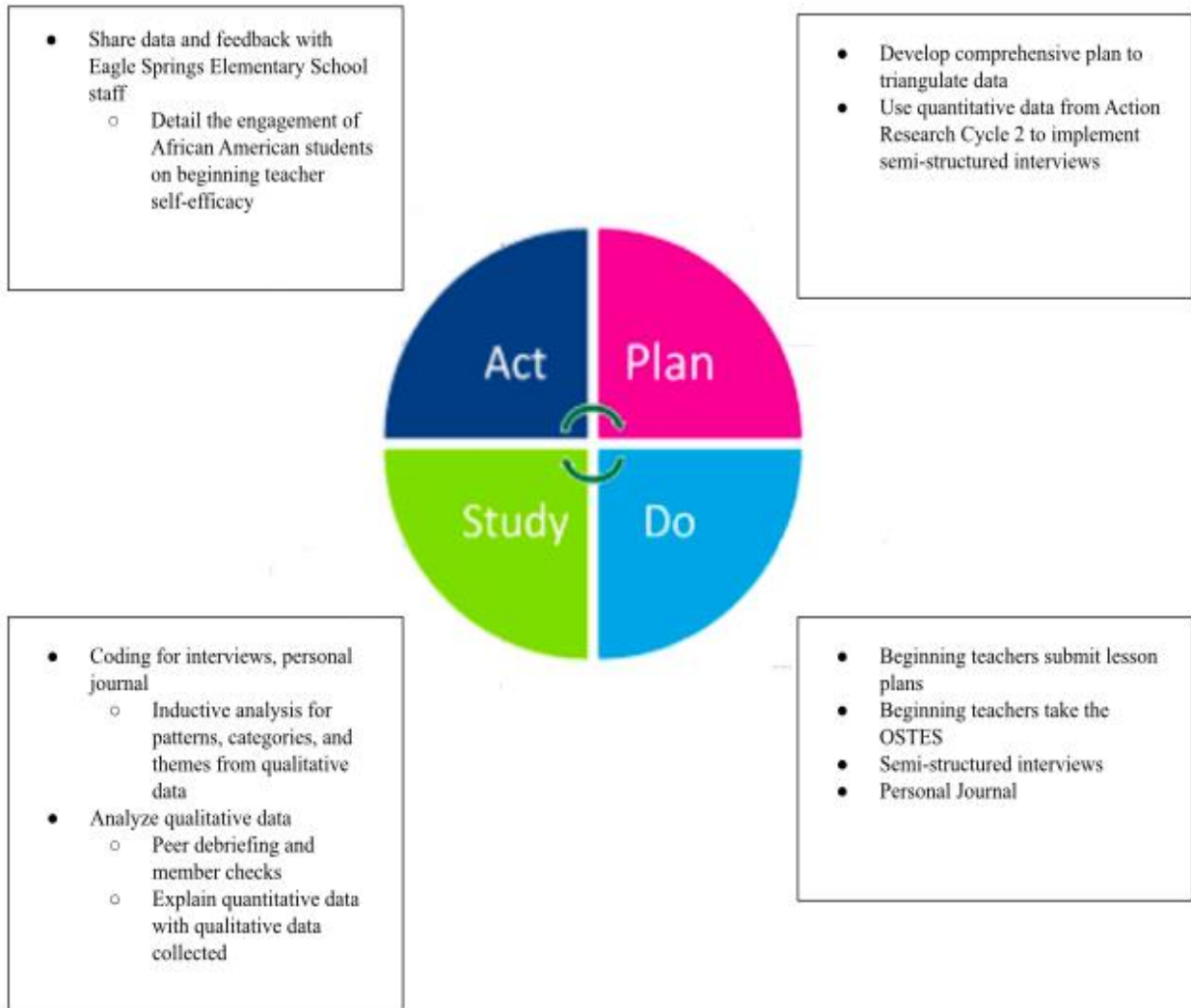


Figure 10. PDSA Model Action Research Cycle 3.

observation (Mertler, 2021). Throughout the action research cycles I practiced reflexivity through the practice of journaling. The reflexivity process incorporated my initial thoughts and interpretations during the data collection process (Mertler, 2021).

The credibility and rigor of this action research mixed methods design were increased through my preceding experience (Mertler, 2021). This previous experience with action research was twofold. First, my participation as an action researcher began with the Governor's Teacher Network established by former North Carolina Governor Pat McCrory in coordination with the North Carolina Department of Public Instruction in the 2014-2015 school year (North Carolina Department of Public Instruction, 2022c). I participated in the action research process with my Collaborative Learning Hybrid Classroom inquiry for my American History I course. Second, I completed a pilot study before full implementation to increase my experience with action research and test the instrumentation for this inquiry.

The inquiry design rigor for this inquiry was enhanced through triangulation of data that included multiple sources of data to verify the accuracy of the findings (Mertler, 2021). I used an explanatory sequential mixed methods design to explain the quantitative data results through qualitative data (Creswell & Creswell, 2018). I procured quantitative data using the Ohio State teacher efficacy scale, observations, and lesson plan artifacts. I used qualitative data from interviews to explain and verify the aforementioned quantitative data. This provided credibility, trustworthiness, dependability, confirmability, and verisimilitude of the results through the triangulation of multiple sources of data.

Finally, the inquiry design rigor included using non-participant inquiry partners for peer debriefing the data to prevent any biases on my part from affecting the validity and reliability of the results (Mertler, 2021). Furthermore, the beginning teacher participants were given the

opportunity to member check the raw data, analysis from non-participant inquiry partners and myself, and final reports prior to publication to verify the accuracy of their beliefs, perspectives, and experiences in this inquiry (Mertler, 2021). The member checking established credibility and trustworthiness of the results of this inquiry.

Delimitations, Limitations, and Assumptions

The area of focus was based on 44.6% of beginning teachers leaving the profession within the first five years of teaching (Ingersoll et al., 2021). Next, 61% of the school population at Eagle Springs Elementary School consisted of minority students. Additionally, the selection of African American Student engagement results from African American students, students with disabilities, and economically disadvantaged students performing the lowest on the North Carolina End of Grade (EOG) assessments compared to the remaining populations at this elementary school (North Carolina Department of Public Instruction, 2019). Therefore, the scope of this inquiry involved engaging African American students on beginning teacher self-efficacy. I did not examine other factors that may be impacting African American student academic outcomes, and I did not examine other factors that may be impacting beginning teacher retention. The scope of the inquiry was strictly on beginning teacher self-efficacy as a result of professional development in Culturally Responsive Teaching.

I had direct access to the beginning teachers at this school due to my position as a member of the administration at the school. Additionally, I had a beneficial interest in the success of this inquiry with the hopes that it would become a model for professional development of beginning teachers with an impact on the engagement of African American students that the Williams County Schools District and others will be able to replicate in future studies. Currently, due to the small sample size of beginning teachers and similar school

population demographics since the inquiry was completed at one elementary school site, the inquiry results are only valid for this particular school site without further iterations at other sites with varying demographics of beginning teachers and student populations.

Even though I conscientiously prepared the professional development and data for this inquiry with the aid of non-participant inquiry partners, I am aware that limitations exist for this inquiry that require consideration.

First, the implementation of the professional development and subsequent observations were designed to occur within the realms of the in-person classroom environment. However, during the course of the inquiry, the COVID-19 pandemic was still occurring with students learning in a virtual school environment as a practical option. This virtual environment would lead to fewer opportunities to demonstrate African American engagement as the synchronous teaching portions have additional time constraints compared to in-person learning. Additionally, the additional variable of evaluating the beginning teacher self-efficacy in a virtual environment could have impacted their self-efficacy in engaging African American students as the virtual platform could hinder accurate results for the inquiry. Furthermore, the COVID-19 pandemic required many school districts to hire un-certified teachers who lacked experience during the 2021-2022 school year (Dos Santos, 2021). Therefore, the pandemic impacted the varying ability levels of beginning teachers that came from traditional university preparation programs versus beginning teachers that did not have an education background.

Second, the inquiry required the coordination and collaboration of multiple inquiry partners to determine if the professional development to engage African American students impacted beginning teacher self-efficacy. The required meetings and obligations of beginning teachers could have impacted the success of the professional development implemented in this

inquiry. Beginning teachers were already required to meet monthly with the beginning teacher facilitating mentor and multiple times per month with their individual mentor as required by the Williams County Schools District. I asked to incorporate the implementation of the professional development sessions into the already scheduled beginning teacher obligations for the beginning teachers that agreed to participate in the inquiry to limit their time commitments and incentivize beginning teachers to participate in the inquiry.

Third, I was a lead evaluator for the beginning teachers that served as participants in this inquiry. North Carolina Department of Public Instruction requires multiple observations and a summative evaluation during the school year to determine continued licensure as a public school teacher. Therefore, the beginning teachers participating in this inquiry may have been inclined to produce answers on their teacher self-efficacy survey, interview responses, and post-conferences to satisfy how they believe their administrator would desire the results to conclude. I assured the beginning teachers that this inquiry would not be reflected in their official evaluation required by the Department of Public Instruction.

Fourth, I was aware of my desire for the culmination results of the inquiry to produce a positive relationship between the effect of professional development on engaging African American students and beginning teacher self-efficacy. To prevent any biases on my part, non-participant inquiry partners were used to analyze the data and confirm the results of the inquiry. Additionally, a non-participant inquiry partner completed the interviews to allow honest feedback from beginning teacher participants without feeling the need to respond favorably to me as their administrator and evaluator.

Through the course of this inquiry, it is assumed that the professional development implemented will positively impact engaging African American Students and therefore increase

the self-efficacy of the beginning teacher participants. It was assumed that a lack of professional development related to Culturally Responsive Teaching was the reason why African American students were underperforming in beginning teachers' classrooms. It was the purpose of this inquiry to test this assumption. It was also assumed that beginning teachers would be fully engaged in the professional development process with the desire to improve the engagement of their African American students since the improved engagement of their students should result in enhancement of their student data on formative and summative assessments. Additionally, it was assumed beginning teachers would utilize the professional development sessions, observations, and post-conferences to inform their lesson planning and classroom instructional activities to engage their African American students. Furthermore, it was assumed that the beginning teachers would answer honestly and with integrity on the teacher self-efficacy surveys at the beginning of the inquiry for the baseline data points and at the conclusion of the inquiry to accurately determine the impact of the professional development on their teacher self-efficacy results. Finally, it was assumed that the inquiry would fully occur in-person without having to complete observations or professional development sessions in virtual learning environments resulting from any disruptions of learning caused by the COVID-19 pandemic.

Role of the Scholarly Practitioner

My role as the scholarly practitioner in this action research mixed methods inquiry was to work collaboratively with inquiry partners to develop and implement Culturally Responsive Teaching practices and highly effective instructional strategies in professional development to examine the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development. I have 16 years of educational experience as a teacher and administrator.

in the North Carolina School System. I have direct knowledge of the beginning teachers at Eagle Springs Elementary School as one of their lead evaluators.

Relative to my positionality, I implemented systems in place to remove to the greatest extent possible any bias or presuppositions in data reporting as I was an administrator for the beginning teacher participants. I have completed the CITI modules to inform my research practice through best practices in ethical principles, standards, and guidelines to protect the participants in this inquiry. I received approval from the Educational Programs and Services department within the Williams County School district to conduct the inquiry. I also received approval from the East Carolina University Internal Review Board before beginning data collection and analysis. After approval, I arranged a meeting with all beginning teachers at Eagle Springs Elementary School to inform them of the inquiry, its purpose, and their rights. The inquiry was strictly voluntary, and I obtained informed consent from the beginning teachers before including them in the collected data, observations, and interviews. There were no penalties for non-participation in the inquiry or leaving the inquiry prior to its conclusion for any beginning teachers who did not wish to participate.

I worked with my collaborative inquiry partners and university supervisor to ensure the data collected, analyzed, and shared was completed with fidelity and trustworthiness. The goal of this inquiry was to remain unbiased and share data that was credible, reliable, transferable, dependable, and confirmable. I implemented the OSTES survey as both a pre-intervention and post-intervention assessment to measure the beginning teacher self-efficacy of the inquiry participants. I also implemented Culturally Responsive Teaching practices and highly effective instructional strategies to engage African American students through a professional development series to the beginning teacher participants. I observed and conducted post-conferences with the

participating beginning teachers using the modified calling-on tool. I used a non-participant inquiry partner to conduct interviews with the beginning teacher participants in this inquiry. I practiced reflexivity using journaling throughout the inquiry to capture my thoughts and interpretations throughout the inquiry. I analyzed the data with collaborative inquiry partners and non-participant inquiry partners while reporting the results to stakeholders at Eagle Springs Elementary School.

Summary

The focus of this inquiry was to examine the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development. To answer the guiding questions, I used an action research mixed methods design. In particular, I chose an explanatory sequential mixed methods design which consisted of first collecting quantitative research during Action Research Cycle 2 of the inquiry and then using qualitative research to explain those findings during Action Research Cycle. The action research mixed methods approach included multiple quantitative data instruments to collect and analyze data about engaging African American students through Culturally Responsive Teaching practices and highly effective instructional strategies on beginning teacher self-efficacy. This action research mixed methods design incorporated multiple phases of inquiry of the PDSA Model for continuous improvement. Action Research Cycle 1 established the baseline data for the inquiry. Action Research Cycle 2 developed a comprehensive plan for implementation for my action research mixed method design inquiry. Action Research Cycle 3 implemented a plan to collect the outcome data for the inquiry.

Many inquiry partners were included in this project at Eagle Springs Elementary School, and they included: the beginning teachers, the instructional coach, the facilitating mentor for the

beginning teachers, mentors in the building for the beginning teachers, the principal of the school, and non-participant inquiry partners. Additionally, I anticipated the ethical considerations of the inquiry and imbed procedures to protect the participants involved in the inquiry and the reliability of the data using preemptive measures. My role as the scholarly practitioner in this action research mixed methods inquiry was to work collaboratively with inquiry partners to develop and implement Culturally Responsive Teaching practices and highly effective instructional strategies in professional development to examine the professional development's effect on engaging African American students on beginning teacher self-efficacy. The inquiry design rigor for this action research inquiry strived to ensure the utmost attention of the quality, validity, accuracy, and credibility of its findings were planned, implemented, and analyzed. I worked with my collaborative inquiry partners and university supervisor to ensure the data collected, analyzed, and shared was completed with fidelity and trustworthiness. Chapter 4 will provide a detailed overview of the implementation of the inquiry, including the professional development series, along with the results regarding the data collected and analyzed.

CHAPTER 4: RESULTS

The focus of this inquiry was to examine the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development. The educational system is at a crucial moment in history with demoralizing number of teacher openings (García & Weiss, 2019a), a dwindling teacher preparatory candidate pool (García & Weiss, 2019a), a substantial percentage of beginning teachers leaving the field within the first five years (Ingersoll et al., 2021), and a higher than average national turnover rate compared to all other professions (Bland et al., 2016). The context of this particular site demonstrated that students with disabilities, African American students, and economically disadvantaged students performed the lowest compared to all other student sub-groups at Eagle Springs Elementary School (North Carolina Department of Public Instruction, 2019). This context combined with the beforementioned teacher shortage trepidation creates the essential need to implement professional development on best practices of Culturally Responsive Teaching and highly effective instructional strategies to raise the level of engagement of their African American students in an attempt to increase beginning teacher self-efficacy.

This inquiry incorporated continuous and cumulative professional development that provided the beginning teacher participants with practical and straightforward approaches to engage their African American students in their classrooms. The professional development series utilized the framework of the social cognitive theory by Albert Bandura and the four critical components to self-efficacy: mastery experience, vicarious experience, social persuasion, and affect states (Goddard et al., 2000). The social cognitive theory in the educational setting indicates that the higher the teacher self-efficacy, the more likely the teacher will overcome

obstacles and initiate inventive teaching practices for their students that will lead to an increased probability of success for their students.

The purpose of this inquiry was to examine the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development. As such, this inquiry was guided by the following questions:

1. What is the effect of implementation of professional development in Culturally Responsive Teaching practices on engaging African American students?
2. What is the effect of implementation of professional development in Culturally Responsive Teaching practices on beginning teacher self-efficacy?
3. What influence does conducting this action research inquiry have on the leadership skills and development of the scholarly practitioner conducting this inquiry?

This inquiry used an explanatory sequential mixed methods design which consisted of first collecting quantitative research during Action Research Cycle 2 of the inquiry and then using qualitative research to help explain those findings during Action Research Cycle 3 (Creswell & Creswell, 2018). This inquiry included multiple phases of inquiry of the PDSA Model that incorporated the steps of Plan, Do, Study, and Act for continuous improvement (Langley et al., 2009). The remainder of Chapter 4 will focus on the demographics of the beginning teacher participants, data collection, data analysis, and the results of the data analysis.

Participants

In Table 4, lists the beginning teacher inquiry participants. The table details the beginning teacher demographics to include: pseudonym, age range, BT classification, educational degree status, grade level taught, and their subject area. Fifty percent (50%) of the beginning teacher

Table 4

Beginning Teacher Demographics

Title	Age Range	Classification (BT 1-3)	Education Degree (Y/N)	Grade	Subject Area
Teacher 1	25-34	BT 1	N	Kindergarten	ELA/Math
Teacher 2	20-24	BT 3	Y	3 rd	ELA/Math
Teacher 3	25-34	BT 3	Y	Kindergarten	ELA/Math
Teacher 4	20-24	BT 2	Y	1 st	ELA/Math
Teacher 5	20-24	BT 3	Y	2 nd	ELA/Math
Teacher 6	20-24	BT 1	Y	3 rd	ELA/Math
Teacher 7	35-44	BT 2	N	4 th /5 th	Special Education
Teacher 8	25-34	BT 3	Y	5 th	ELA/Math

participants were in year 3 of their BT status. Twenty-five percent (25%) were in year 1 and 25% were in year 2 of their BT status. Seventy-five percent (75%) of the beginning teacher participants graduated from an accredited university with a teaching degree, while 25% of the beginning teacher participants are currently enrolled in a residency program to earn their teaching license.

The beginning teacher participants taught a wide range of student grade levels with at least 1 beginning teacher participant working with all students from kindergarten to fifth grade. 50% of the beginning teacher participants taught in non-state testing grades (K-2) and 50% taught in EOG state testing grades (3-5). 87.5% of the beginning teacher participants taught in a regular education setting with only 1 beginning teacher participant in the special education setting. All of the beginning teacher participants that taught in the regular education setting taught all subjects for their students. The special education beginning teacher participant used a district provided scripted program to provide direct instruction for their special education students in Reading and Math.

In Figure 11, shows the racial demographic breakdown for the beginning teacher participants. Sixty-two point five percent (62.5%) of the beginning teacher participants self-identified as White, 25% identified as African American, and 12.5% identified as multiracial Hispanic and White. The beginning teacher participants are slightly more diverse than the 82% of total beginning teachers and 83% of total teachers at Eagle Springs Elementary that identify as White. The vast majority of the beginning teacher participants identified as female (87.5%) with only one beginning teacher participant identifying as male (12.5%).

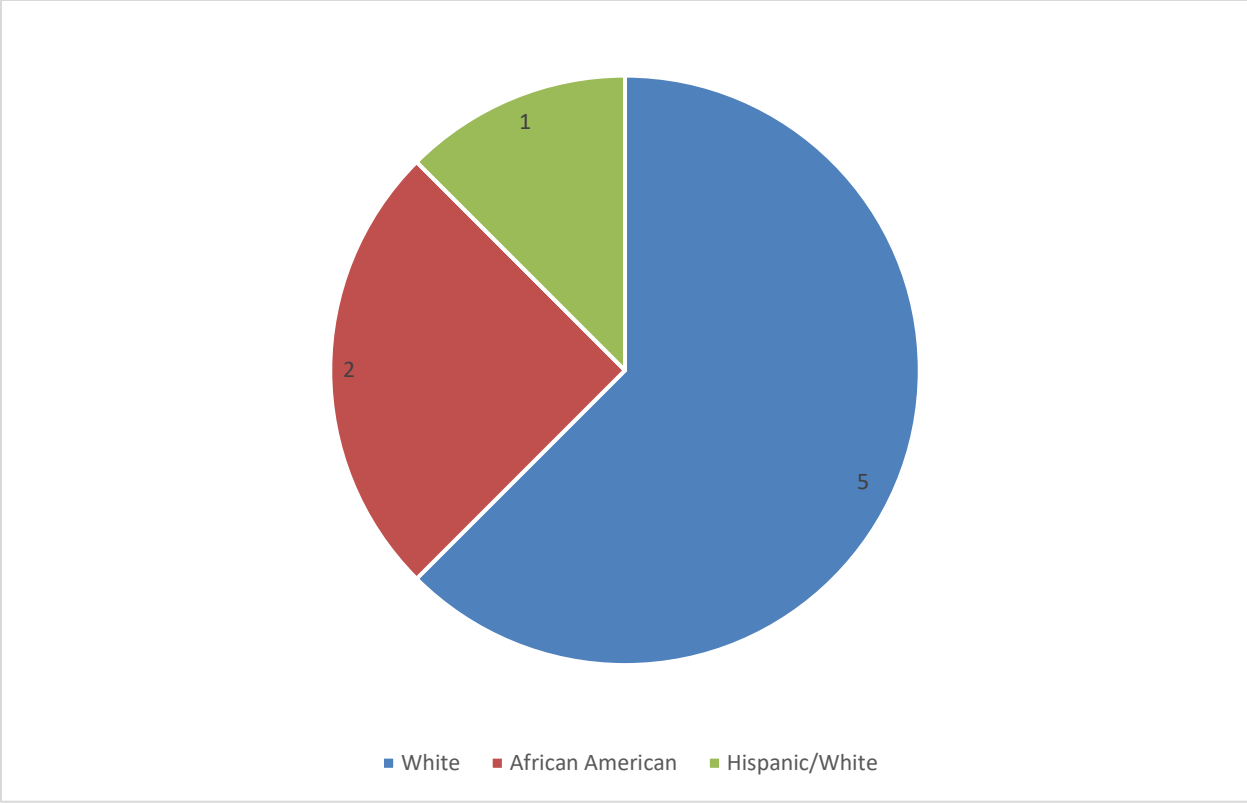


Figure 11. Beginning teacher participant count of race.

Data Collection

This inquiry utilized an explanatory sequential mixed methods design with multiple phases of inquiry of the PDSA Model to collect data. Action Research Cycle 1 established the baseline data for the inquiry. The inquiry incorporated a multitude of shareholder feedback during Action Research Cycle 1 including: previous North Carolina End of Grade (EOG) assessments, North Carolina School Report Cards, an implemented pilot study, beginning teacher self-efficacy survey, and non-participant inquiry partner feedback. I scheduled an informational meeting with all beginning teachers in November, 2022. Eight (8) of the 11 beginning teachers at Eagle Springs Elementary School agreed to participate in the inquiry by giving their informed consent, completed the pre-implementation OSTES survey, and submitted pre-implementation lesson plans.

Action Research Cycle 2 implemented a comprehensive plan that included a professional development series for the beginning teachers in Culturally Responsive Teaching practices and highly effective instructional strategies (see Appendix F), observations and post-conferences to monitor the effectiveness of the professional development series, submission of lesson plan artifacts, and my journaling in the capacity of the scholarly practitioner leading the inquiry to document their leadership journey. Peer debriefing with non-participant inquiry partners assisted in analyzing the data collected to ensure the validity of the data collected. This data and feedback from non-participant inquiry partners helped to finalize the questions for the semi-structured interviews in Action Research Cycle 3. Action Research Cycle 2 occurred between December, 2022 and March, 2023.

The 8 beginning teachers completed a post-implementation OSTES survey that was identical to their pre-implementation OSTES survey to understand their growth from the

explanatory sequential mixed methods design action research inquiry. All 8 of the beginning teachers agreed to participate in a semi-structured interview with a non-participant inquiry partner to determine the impact of the Culturally Responsive Teaching practices and highly effective instructional strategies to engage their African American students on their teacher self-efficacy. I used the NVivo v12 software to upload the annotations from post-conferences and the transcripts from the semi-structured interviews to conduct the multiple phases of the coding process. I used multi-level coding process to develop initial codes based on examining the data. Then I analyzed the initial coding to develop categories through focused coding. Finally, I used focused coding to develop highly refined themes through axial/thematic coding (Mertler, 2021; Saldaña, 2016). Data and feedback was shared with key stakeholders at Eagle Springs Elementary School related to the data collected in this Action Research inquiry. The original timeline for implementation of the Action Research Cycle 3 consisted of an April, 2023 to June, 2023 time period; however, the actual implementation timeline was March, 2023 to June, 2023.

Data Analysis

The participants for this inquiry were chosen based on their status as a beginning teacher at Eagle Springs Elementary School that works with African American students. 8 of the 11 beginning teachers at Eagle Springs Elementary School volunteered to participate in the action research mixed methods inquiry that included multiple quantitative data instruments to collect and analyze data pertaining to engaging African American students through Culturally Responsive Teaching practices and highly effective instructional strategies on beginning teacher self-efficacy. In particular, I chose an explanatory sequential mixed methods design to first collect the quantitative research during Action Research Cycle 2 of the inquiry and then use qualitative research to help explain those findings during Action Research Cycle 3 (Creswell &

Creswell, 2018). The inquiry included multiple phases of inquiry of the PDSA Model that incorporated the steps of Plan, Do, Study, and Act for continuous improvement (Langley et al., 2009).

Action Research Cycle 1 established baseline data from pre-existing data points. I implemented a pilot study to test the validity of the instrumentation that I planned to use in the action research inquiry. The beginning teacher participants completed the Ohio State teacher efficacy scale (OSTES) long form (24 items) (see Appendix C) as a pre-implementation survey to measure the beginning teachers' self-efficacy for instructional strategies, efficacy for classroom management, and efficacy for inquiry engagement through the lens of their African American students (Tschannen-Moran & Hoy, 2001). The beginning teacher participants also submitted lesson plan artifacts prior to the implementation of the professional development series.

Action Research Cycle 2 consisted of implementing the professional development series on Culturally Responsive Teaching practices and highly effective instructional strategies (see Appendix F). Action Research Cycle 2 also included observations using the modified calling-on quantitative data tool from East Carolina University Project i4 (East Carolina University, n.d.) (see Appendix E). Due to the complexities of the school schedule and availability of time along with normal everyday obligations placed on the beginning teachers, the beginning teacher participants did not have the opportunity to observe other beginning teacher participants with the modified calling-on observational tool as originally planned and discussed in Chapter 3.

Action Research Cycle 3 included beginning teacher participants re-submitted lesson plan artifacts and completed the post-implementation OSTES survey that was identical to the pre-implementation OSTES survey completed in Action Research Cycle 1. Action Research Cycle 3

also included interviews to collect data and feedback from the beginning teacher participants (see Appendix D). I kept a personal journal throughout all three Action Research Cycles to measure the growth of my leadership skills and development to go along with *Interview Question 4*: from the semi-structure interview that asked to reflect on what suggestions do you have for what I, as the scholarly practitioner leading this inquiry, could have done to help you through the implementation of the professional development to improve your instructional leadership.

Instrumentation

The data analysis for this explanatory sequential mixed methods design consisted of first reporting the quantitative research collected during Action Research Cycle 2 of the inquiry and then reporting the qualitative research collected during Action Research Cycle 3 as a method to organize the data collected and analyzed during the inquiry. The quantitative research leverages the strengths of the traditional K-12 setting's use of quantitative data analysis to understand the what and the how, while providing the qualitative data to explain the why of the results. In this context, the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development.

The Ohio State Teacher Efficacy Scale (OSTES) Long Form (24 items)

The OSTES survey was deemed appropriate in validity and reliability for the purpose of this mixed methods action research inquiry. For example, "the OSTES could be considered reasonably valid and reliable. With either 24 or 12 items, it is of reasonable length and should prove to be a useful tool for researchers interested in exploring the construct of teacher efficacy" (Tschannen-Moran & Hoy, 2001, p. 801). The implementation of this survey occurred before the implementation of the professional development series to gain a baseline during Action Research Cycle 1 and following the conclusion of the inquiry in Action Research Cycle 3 to measure any

changes in the beginning teacher self-efficacy ratings. An identical OSTES survey was administered to maintain credibility and provide fidelity to the inquiry.

The beginning teacher participants completed the Ohio State teacher efficacy scale (OSTES) to measure their self-efficacy' for instructional strategies, efficacy for classroom management, and efficacy for student engagement through the lens of their African American students (see Appendix C). The beginning teachers completed the OSTES on the Qualtrics platform. I enlisted the assistance of non-participant inquiry partners to review the data to provide validity to the results and prevent any biases on my part. The results from the pre- and post-implementation OSTES are organized in Tables 5, 6, and 7 according to questions that relate to the following categories: self-efficacy' for instructional strategies, efficacy for classroom management, and efficacy for student engagement through the lens of their African American students. The OSTES asked the beginning teacher participants to rate their ability on a scale of 1 to 9 with 1 being the lowest and 9 being the highest.

OSTES Survey Pre and Post Beginning Teacher Implementation Instructional Strategies

Table 5 compared the pre- and post-implementation of the OSTES survey on the beginning teacher participants' self-efficacy related to instructional strategies through the lens of their African American students. All 8 of the questions related to instructional strategies demonstrated an overall mean increase for the self-efficacy of the beginning teacher participants following the implementation of the professional development series. Additionally, the Qualtrics program that hosted the OSTES survey calculated the standard deviation for the data subset. The standard deviation represents the average distance of the scores on the OSTES survey from the mean as selected by the beginning teacher participants (Creswell & Creswell, 2018).

Table 5

OSTES Survey Pre and Post Beginning Teacher Implementation Instructional Strategies

#	Field	Pre-Mean	Pre-Std Deviation	Post-Mean	Post-Std Deviation	Mean Difference
1	To what extent can you use a variety of assessment strategies?	6.13	0.78	6.86	1.36	0.73
4	To what extent can you provide an alternative explanation or example when students are confused?	6.88	0.6	7.71	1.05	0.83
7	To what extent can you craft good questions for your students?	6.13	0.78	7.43	1.05	1.3
10	How well can you implement alternative strategies in your classroom?	6.25	0.66	7.57	1.29	1.32
13	How well can you respond to difficult questions from your students?	6.63	0.99	7.14	1.25	0.51
16	How much can you do to adjust your lessons to the proper level for individual students?	6.5	1.22	7	1.41	0.5
19	To what extent can you gauge student comprehension of what you have taught?	6.88	0.78	7.43	1.29	0.55
22	How well can you provide appropriate challenges for very capable students?	6	0.87	7.57	0.49	1.57

Table 6

OSTEST Survey Pre and Post Beginning Teacher Implementation Classroom Management

#	Field	Pre-Mean	Pre-Std Deviation	Post-Mean	Post-Std Deviation	Mean Difference
2	How much can you do to control disruptive behavior in the classroom?	6.13	0.78	7.57	0.9	1.44
5	How much can you do to get children to follow classroom rules?	6.63	0.99	7.71	0.88	1.08
8	How much can you do to calm a student who is disruptive or noisy?	6.75	0.83	7	1.2	0.25
11	How well can you establish a classroom management system with your students?	6.63	0.99	7.86	0.99	1.23
14	How well can you keep a few problem students from ruining an entire lesson?	6.75	1.39	7	1.31	0.25
17	How well can you respond to defiant students?	6.13	1.45	7	1.93	0.87
20	To what extent can you make your expectation clear about student behavior?	7.63	1.22	8.43	0.73	0.8
23	How well can you establish routines to keep activities running smoothly?	6.63	0.99	8	1.07	1.37

Table 7

OSTES Survey Pre and Post Beginning Teacher Implementation Student Engagement

#	Field	Pre-Mean	Pre-Std Deviation	Post-Mean	Post-Std Deviation	Mean Difference
3	How much can you do to get students to believe they can do well with their schoolwork?	7.63	0.7	7.57	0.9	-0.06
6	How much can you do to help your students value learning?	6	0.71	7.71	1.16	1.71
9	How much can you do to motivate students who show low interest in schoolwork?	6.25	1.2	7.14	1.12	0.89
12	How much can you assist families in helping their children do well in school?	7	1.22	7.43	1.05	0.43
15	How much can you do to improve the understanding of a student who is failing?	6.5	1.5	6.43	1.18	-0.07
18	How much can you do to help your students think critically?	6.5	1	7.86	0.83	1.36
21	How much can you do to foster student creativity?	6.38	1.11	7.14	1.25	0.76
24	How much can you do to get through to the most difficult students?	6.38	0.86	7	1.41	0.62

The areas that saw the highest growth were Question 22: How well can you provide appropriate challenges for very capable students?, Question 10: How well can you implement alternative strategies in your classroom?, and Question 7: To what extent can you craft good questions for your students? with a 1.57, 1.32, and 1.3 point increase respectively. The post-implementation standard deviation ranged from 0.49 to 1.41 for the questions associated to beginning teacher participants' self-efficacy related to instructional strategies. Question 22: How well can you provide appropriate challenges for very capable students? produced the standard deviation with the least amount of variance from the overall mean with 0.49. While Question 16: How much can you do to adjust your lessons to the proper level for individual students? produced the standard deviation with the most amount of variance from the overall mean with 1.41.

OSTES Survey Pre and Post Beginning Teacher Implementation Classroom Management

Table 6 compared the pre- and post-implementation of the OSTES survey on the beginning teacher participants' self-efficacy related to classroom management through the lens of their African American students. All 8 of the questions related to classroom management demonstrated an overall mean increase for the self-efficacy of the beginning teacher participants following the implementation of the professional development series. 4 of the 8 questions saw an overall increase of the mean by at least 1.08 points.

The areas that saw the highest growth were Question 2: How much can you do to control disruptive behavior in the classroom?, Question 23: How well can you establish routines to keep activities running smoothly?, Question 11: How well can you establish a classroom management system with your students?, and Question 5: How much can you do to get children to follow classroom rules? with a 1.44, 1.37, 1.23, and 1.08 point increase respectively. The post-implementation standard deviation ranged from 0.73 to 1.93 for the questions associated to

beginning teacher participants' self-efficacy related to classroom management. Question 20: To what extent can you make your expectation clear about student behavior? produced the standard deviation with least amount of variance from the overall mean with 0.73. While Question 17: How well can you respond to defiant students? produced the standard deviation with the most amount of variance from the overall mean with 1.93.

OSTES Survey Pre and Post Beginning Teacher Implementation Student Engagement

Table 7 compared the pre- and post-implementation of the OSTES survey on the beginning teacher participants' self-efficacy related to student engagement through the lens of their African American students. 6 of the 8 questions related to student engagement demonstrated an overall mean increase for the self-efficacy of the beginning teacher participants following the implementation of the professional development series. The 2 questions that saw a decrease in the overall mean consisted of less than a -0.07 decrease from the pre- and post-implementation of the professional development series.

Question 6: How much can you do to help your students value learning? resulted in the highest mean increase of the 24 questions on the OSTES survey with a 1.71 point increase. Question 18: How much can you do to help your students think critically? also demonstrated a 1.36 point increase from pre- and post-implementation of the professional development series. The post-implementation standard deviation ranged from 0.83 to 1.41 for the questions associated to beginning teacher participants' self-efficacy related to student engagement. Question 18: How much can you do to help your students think critically? produced the standard deviation with least amount of variance from the overall mean with 0.83. While Question 24: How much can you do to get through to the most difficult students? produced the standard deviation with the most amount of variance from the overall mean with 1.41.

Modified Calling-On Quantitative Data Tool from East Carolina University Project i4

The pilot study process and participants were vastly important in the improvement process of the modified calling-on tool from East Carolina University Project i4 (East Carolina University, n.d.) to continually advance the instrument for the purposes of this inquiry. Through the pilot study process, elements of the observational tool were modified to document the included Culturally Responsive Teaching practices and highly effective instructional strategies from the professional development series in Action Research Cycle 2.

I observed the teachers using the modified calling-on tool from East Carolina University Project i4 (East Carolina University, n.d.) in between the professional development sessions and conducted data-focused post-conferences using the quantitative data from the observations. The beginning teacher participants were observed once between each professional development session for a total of three times each during this mixed methods action research inquiry. This enabled the beginning teachers to gain vicarious experience, social persuasion, and affective states according to the social cognitive theory through the observation and post conference process as well as their own mastery experiences from the professional development implementation in their own classrooms (Bandura, 1997).

Table 8 summarizes the observational data collected from the 8 beginning teacher participant observations organized by the Culturally Responsive Teaching practices and highly effective instructional strategies demonstration in the first observation that were explicitly taught in the professional development series and the number of equitable strategies that were observed during the lesson. Each of the observations occurred after a professional development session that included the explicit teaching of 1 Culturally Responsive Teaching practice and 2 highly

Table 8

Modified East Carolina University Project i4 Calling-On Tool Observation #1 Data

Participant	Instructional Activity Demonstrated	# of Equitable Strategies Used
Teacher 1	Academic Discourse, Instructional Materials	6
Teacher 2	Academic Discourse, Instructional Materials	3
Teacher 3	Academic Discourse	1
Teacher 4	Academic Discourse	1
Teacher 5	None	1
Teacher 6	Academic Discourse	2
Teacher 7	Instructional Materials	0
Teacher 8	Academic Discourse	3
	Total	17

effective instructional strategies. The average time of each observation consisted of 15 to 20 minutes.

The beginning teacher participants immensely increased the quantity of instructional activities demonstrated in their observations from observation 1 to observation 3. The beginning teacher participants demonstrated from 0 to 2 Culturally Responsive Teaching practices and highly effective instructional strategies in observation 1. The beginning teacher participants averaged 1.13 Culturally Responsive Teaching practices and highly effective instructional strategies during observation 1. The most common Culturally Responsive Teaching practices and highly effective instructional strategies demonstrated were Academic Discourse and Instructional Materials. The beginning teacher participants used a total of 17 equitable strategies during observation 1 with an average of 2.13 equitable strategies per observation.

Table 9 summarizes the observational data collected from the 8 beginning teacher participant observations organized by the Culturally Responsive Teaching practices and highly effective instructional strategies demonstration in the second observation that were explicitly taught in the professional development series and the number of equitable strategies that were observed during the lesson.

The total number of Culturally Responsive Teaching practices and highly effective instructional strategies increased to 1 to 3 in observation 2. The beginning teacher participants averaged 2.13 Culturally Responsive Teaching practices and highly effective instructional strategies during observation 1. The most common Culturally Responsive Teaching practices and highly effective instructional strategies demonstrated in observation 2 were Academic Discourse and Deliberate Practice. The beginning teacher participants used a total of 30 equitable strategies during observation 2 with an average of 3.75 equitable strategies per observation.

Table 9

Modified East Carolina University Project i4 Calling-On Tool Observation #2 Data

Participant	Instructional Activity Demonstrated	# of Equitable Strategies Used
Teacher 1	Deliberate Practice	3
Teacher 2	Academic Discourse, Deliberate Practice	2
Teacher 3	Academic Discourse, Deliberate Practice	2
Teacher 4	Academic Discourse, Deliberate Practice	2
Teacher 5	Academic Discourse, Elaborate Interrogation, Deliberate Practice	4
Teacher 6	Academic Discourse, Deliberate Practice	10
Teacher 7	Academic Discourse, Deliberate Practice	3
Teacher 8	Academic Discourse, Deliberate Practice, Summarizing	4
	Total	30

Table 10 summarizes the observational data collected from the 8 beginning teacher participant observations organized by the Culturally Responsive Teaching practices and highly effective instructional strategies demonstration in the third observation that were explicitly taught in the professional development series and the number of equitable strategies that were observed during the lesson.

The number of Culturally Responsive Teaching practices and highly effective instructional strategies greatly increased to 2 to 7 demonstration in observation 3. The beginning teacher participants averaged 3.5 Culturally Responsive Teaching practices and highly effective instructional strategies during observation 3. This represents a mean increase from 1.13 in observation 1 to 3.5 instructional activities demonstration in observation 3. The most common Culturally Responsive Teaching practices and highly effective instructional strategies demonstrated in observation 2 were Academic Discourse, Deliberate Practice, Summarizing, and Reading Response. The beginning teacher participants used a total of 46 equitable strategies during observation 3 with an average of 5.75 equitable strategies per observation.

The modified calling-on tool also captured the number of questions asked to the beginning teacher participants' African American students at 186 over the 24 observations and 61.18% of the total questions asked to their students. The only questions that counted in this data were questions that were directly asked to a particular student and not questions that sought a collective response from the class as a whole. Additionally, the beginning teacher participants used a total of 93 equitable teaching strategies to encourage equitable participation from all of their students. This demonstrates a mean of 3.88 equitable teaching strategies per observation. The mean number of equitable teaching strategies used per observation increased from 2.13 during observation 1 to 5.75 during observation 3.

Table 10

Modified East Carolina University Project i4 Calling-On Tool Observation #3 Data

Participant	Instructional Activity Demonstrated	# of Equitable Strategies Used
Teacher 1	Academic Discourse, Deliberate Practice	2
Teacher 2	Academic Discourse, Summarizing, Instructional Materials	4
Teacher 3	Academic Discourse, Deliberate Practice, Summarizing	2
Teacher 4	Instructional Materials, Instructional Language	4
Teacher 5	Academic Discourse, Deliberate Practice, Rehearsal and Memorization, Effective Feedback, Summarizing, Reading Response	7
Teacher 6	Academic Discourse, Deliberate Practice, Summarizing, Instructional Materials, Reading Response	6
Teacher 7	Academic Discourse, Deliberate Practice	7
Teacher 8	Academic Discourse, Deliberate Practice, Summarizing, Instructional Language, Reading Response	14
	Total	46

Lesson Plans

All teachers in the Williams County School district are trained and expected to use the Learning-Focused Lesson Plan template when designing their lessons with their team. The Learning-Focused Lesson Plan template consists of the following components: Essential Standard, Students Will Know, Students Will Be Able To, Lesson Essential Question, Activating Strategy, Key Vocabulary to Preview and Vocabulary Strategy, Learning Activities, Assessment Prompts for Learning Activities, Graphic Organizer, Assignment, and Summarizing Strategy. The beginning teacher participants were asked to turn in an example of one of their lesson plans during Action Research Cycle 1 as a pre-implementation of the professional development series artifact and then another example of one of their lesson plans during Action Research Cycle 3 as a post-implementation of the professional development series artifact.

The beginning teacher participants pre-implementation lesson plan artifact were very similar in nature that the lesson plans focused mainly on the instructional learning components required to answer the Essential Standards for the state of North Carolina (see Appendix G). The lesson plans displayed few Culturally Responsive Teaching practices or equitable strategies for the students in their classrooms. Compared to the post-implementation lesson plan artifacts that focused on the instructional learning components and the instructional activities for how the students will complete the assignment. The second grade example also focused on the Culturally Responsive Teaching practices and highly effective instructional strategies explicitly taught in the professional development series and included: Academic Discourse, Elaborate Interrogation, Instructional Materials, Deliberate Practice, Rehearsal and Memorization, and Instructional Language (see Appendix H).

Beginning Teacher Participant Post-Conferences Qualitative Data

In this section, data from the interviews with the beginning teacher participants as part of Action Research Cycle 3 will be reported and analyzed. The data analysis plan comprises notes from the discussions held during the post-conferences following observations to provide meaningful data to answer the inquiry questions as part of Action Research Cycle 2. I used the NVivo v12 software to upload the anecdotal notes from post-conferences to conduct the multiple phases of the coding process. I used multi-level coding process to develop initial codes based on examining the data. Then I analyzed the initial coding to develop categories through focused coding. Finally, I used focused coding to develop highly refined themes through axial/thematic coding along with using the semi-structured interviews conducted with the beginning teacher participants (Mertler, 2021; Saldaña, 2016). “A code in qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data” (Saldaña, 2016, p. 3).

Mertler (2021) describes the inductive analysis process in meticulous detail. The coding of data requires that the scholarly practitioner read the narrative data many times, both before and after the initial codes become apparent. The scholarly practitioner then formulates the codes into categories to connect to the guiding questions for the inquiry. A very important aspect of this coding process is also acknowledging when information in the data contradicts or conflicts with the trends or patterns that have developed. The scholarly practitioner understanding how to interpret the data into highly developed themes that related to the inquiry questions becomes vastly important for the analysis of the data. I enlisted non-participant inquiry partners to review the analyzed data to conduct peer debriefing of the data and member checking from inquiry partners to ensure the accuracy of the thematic coding.

The beginning teacher participant post-conferences provided an in-depth formative assessment of the professional development series. There were several key components that became very apparent during the multiple cycles of the coding process. The beginning teacher participants focused on data from the observations, self-reflection, and practical applications of the professional development series. I will summarize the implications of the data findings.

All 8 of the beginning teacher participants reflected on the data from the observations. I provided the beginning teacher participants with concrete facts from the observations and allowed the beginning teachers to formulate their own conclusions from the data. Beginning Teacher 1 shared “glad you did the chart. Allows me to look back at who answered.” This was an overall sentiment from multiple beginning teacher participants throughout the inquiry. Beginning Teacher 4 shared “11 of my 14 students responded and 5 students responded more than once.” Beginning Teacher 5 shared a similar reaction when they said, “I think this is interesting seeing the data.” Almost identical in response by Beginning Teacher 3 when they shared, “makes me feel better seeing the data.”

Several of the beginning teacher participants were shocked at the data when it was presented to them during their post-conference. For example, Beginning Teacher 7 shared “this really happened 50 times?” This was in reference to expecting a response from all students when prompted with a question from the teacher (call and response). Beginning Teacher 3 also shared a similar response that they thought their 25 call and responses were extensive for their observation.

The focus on self-reflection during the post-conferences occurred with all 8 of the beginning teacher participants. All 8 of the beginning teacher participants mentioned increasing their use of equity strategies into their instructional practice. This varied from equity sticks,

think-pair-share, student choice, differentiation, to high expectations. For example, Beginning Teacher 4 shared a self-reflection that resulted in a change of practice when they said, “I feel like recently I do a mix of equity sticks and calling on someone that raised their hand. That’s the biggest difference from my previous lessons.” Additionally, Beginning Teacher 5 self-reflected on trusting the process of the inquiry despite their hesitations when they shared, “I was a little bit nervous because when they go to pairs it becomes socializing. It was high quality work and set them up for the next standard. It was cool to see it work. Not that I didn’t trust you [the scholarly practitioner].”

The beginning teacher participants concentrated on the practical applications of the professional development series on their teaching pedagogy. All 8 of the beginning teachers described how they were implementing the lessons learned from the professional development series in their classroom. For example, Beginning Teacher 7 shared that they were being more intentional about academic discourse, how to add in Culturally Responsive Teaching practices, and how to make the lessons more equitable since they started working in this inquiry. Beginning Teacher 6 shared that they have tried multiple ways to complete vocabulary in their room and felt that the students were very engaged when given choice. “It was more chaotic and it took more to hold them accountable but taking longer they believed helped the students learn it.” Beginning Teacher 3 shared in one of their post concerns that it is just a bunch of check boxes in their normal observations required by the State of North Carolina for teachers and that they normally do not write notes in a post conference. This observational tool seemed to be more individualized and less subjective.

Beginning Teacher Participant Interview Data

In this section, data from the interviews with the beginning teacher participants as part of Action Research Cycle 3 will be reported and analyzed. A non-participant inquiry partner conducted the interviews to enhance credibility of the action research inquiry as I am a lead evaluator for the beginning teachers. The interviews were completed in-person, recorded, and transcribed to formulate patterns, themes, and relationships (Mertler, 2021). The beginning teachers were allowed to member check the accuracy of their responses from the interviews to ensure their ideas were presented accurately (Creswell & Creswell, 2018; Mertler, 2021). I used the NVivo v12 software to upload the transcripts from the interviews to conduct the multiple phases of the coding process. I will summarize the implications of the data findings.

Interview Question 1: What are characteristics of effective professional development? When the beginning teacher participants were asked about the characteristics of effective professional development, all 8 of them shared having a hands-on or practical application for their classroom lessons. Beginning Teacher 4 shared, “for me it’s being able to take something concrete out of a professional development that you can actually apply.” The other important components mentioned were modeling (5), presenter being knowledgeable (4), and feedback (3).

Interview Question 2: How do you design lesson plans to engage your African American students? The beginning teacher participants were asked to turn in lesson plans during Action Research Cycle 1 and Action Research Cycle 3 as part of the inquiry. Six of the 8 beginning teacher participants shared that they did not previously design their lesson plans to specifically engage a particular subgroup of students (African Americans in the context of this inquiry). Elements that the beginning teacher participants now included in the lesson plan process included: strategies to engage African American students (5), instructional resources (4), focus

on data (2), and 1 beginning teacher shared that they focus on strategies for non-African American students because they teach primarily African American students.

Interview Question 2 a: How is this design process different for other groups of students you teach? The beginning teacher participants did not view the design process different for the other groups of students that they teach according to the interview data. The important elements of the design process mentioned by the beginning teacher participants were being inclusive (4), engaging (4), and incorporating their backgrounds (2). Beginning Teacher 8 shared that they make sure to incorporate their backgrounds that they learned from them (students) and about their lives. What they participate in and what they believe in.

Interview Question 2 b: How did your pre-service training prepare you to engage your African American students? Six of the 8 beginning teacher participants were educated through a university preparatory program and 2 of the 8 were earning their educational certification during the course of this inquiry. Of the 6 beginning teacher participants that earned an educational degree in college, only 3 of them mentioned their pre-service training program discussing Culturally Responsive Teaching practices. Two of the 3 mentioned that they only discussed it in the broad sense or only scratched the surface. One of the 3 shared that they were required to take a diversity in education class that “focused on valuing the different cultures and different backgrounds, and different experiences of all students.”

Interview Question 2 c: What highly effective instructional strategies do you use to engage your African American students? How do you know they are effective? The beginning teacher participants shared a variety of highly effective instructional strategies that included: the inclusion of music (3), think-pair-share (2), student choice boards (2), student movement (2), equity sticks (2), academic discourse (1), Culturally Responsive Teaching practices (1), elaborate

interrogation (1), and rehearsal and memorization (1). Beginning Teacher 1 shared, “what I think is highly effective in my grade level I’m teaching now is songs all children love, specifically in kindergarten, and if you sing a song that they have heard before.” Additionally, Beginning Teacher 3 shared that they were trying to incorporate student choice to give the students options for how to complete assignments or demonstrate their understanding. 4 of the 8 beginning teacher participants shared that they know the instructional strategies are effective based on the engagement levels of their students.

Interview Question 2 d: What Culturally Responsive Teaching practices do you use to engage your African American students? How do you know they are effective? Four of the 8 beginning teacher participants shared that the use of windows and mirrors in their classrooms was a Culturally Responsive Teaching practice that they use in their classroom to engage their African American students. Beginning Teacher 5 shared that windows and mirrors allows students to see themselves in the text and other cultures. The other important Culturally Responsive Teaching practices mentioned by the beginning teacher participants were instructional materials (2), academic discourse (1), global perspective (1), hands-on activities (1), and student movement (1).

Interview Question 3: How does professional development affect your beginning teacher self-efficacy? The beginning teacher participants shared a multitude of ways that professional development affects their beginning teacher self-efficacy. Four of the 8 beginning teacher participants mentioned how the school leader/professional development instructor improves their beginning teacher self-efficacy. For example, Beginning Teacher 6 shared that this particular professional development series was helpful based on the feedback provided by me. Another important element of professional development that was mentioned by 4 of the 8 beginning

teacher participants was the building of an educational toolbox to give them strategies or practices to implement with their students. The other important elements mentioned were self-reflection (3), data analysis (2), and practical applications (2).

Interview Question 4: What suggestions do you have for how the scholarly practitioner could have done to help you through the implementation of the professional development to improve their instructional leadership? The beginning teacher participants were able to share several suggestions for me to improve my instructional leadership. 6 of the 8 beginning teacher participants appreciated the engaging nature of this professional development series. Beginning Teacher 2 shared, “his lessons were engaging and his post-conference interviews were very helpful with the reflection of the academic discourse and different strategies.” Additionally, 4 of the 8 beginning teacher participants shared the modeling of the Culturally Responsive Teaching practices and highly effective instructional strategies during the professional development series allowed them to implement directly into their lessons. Two of the 8 beginning teacher participants mentioned that the professional development sessions were a little on the long side and could benefit from spacing them out more during the school year.

Interview Question 5: Is there anything that I have not asked that you would like to share about your participation in this inquiry? Not all of the beginning teacher participants elected to answer this question with 3 of the 8 sharing that they already expressed everything in the previous interview questions. Three of the 5 beginning teacher participants that choose to answer the question shared that they really enjoyed the professional development series. Other important elements shared were self-reflection (2), focus on data (1), well planned out (1), and beat expectations (1).

Results and Guiding Question Summary

The results from the mixed methods action research inquiry have been disaggregated according to key themes of the social cognitive theory by Bandura (1997) as well as the guiding questions. The first guiding question was “What is the effect of implementation of professional development in Culturally Responsive Teaching practices on engaging African American students? The theme, key findings, and quotes from the data have been synthesized in Table 11 for guiding question 1. The key findings and quotes are organized according to the social cognitive theory by Bandura (1997) through the four main themes of mastery experiences, vicarious experiences, social persuasion, and affective states. Through the use of the OSTES survey, Modified calling-on observation tool, lesson plan artifacts, and qualitative data from the post-conferences and interviews, the professional development series on Culturally Responsive Teaching practices and highly effective instructional strategies suggests an increase in the engagement levels of their African American students.

There was a 0.71 point increase in the mean score from pre to post implementation of the OSTES survey related to engaging students through the lens of their African American students. The modified calling-on observation tool and lesson plan artifacts demonstrated an overall increase in the strategies presented during the professional development series. All 8 of the beginning teacher participants shared that they were increasing their use of equity strategies and implementing the lessons learned from the professional development series into their classroom lessons.

Table 11

Guiding Question 1 and Key Findings

Mastery Experience Theme	Vicarious Experience Theme	Social Persuasion Theme	Affective States Theme
<p>Pre and Post OSTES demonstrated an overall 0.71 increase in the mean related to student engagement of their African American students.</p>	<p>Modeling and feedback were main components expressed by the beginning teacher participants.</p>	<p>“Our students no matter what race that they are, they could see those characters, and it’s not a central focus of the story is the color of their skin.”</p>	<p>The question with the greatest mean increase pre and post implementation was question 6, How much can you do to help your students value learning?</p>
<p>The number of Culturally Responsive Teaching practices and highly effective instructional strategies mean increased from 1.13 per observation during the first round of observations to 3.5 during the third round of observations.</p>	<p>Lesson plan artifacts progressed from being completely about instructional standards to also including Culturally Responsive Teaching practices.</p>	<p>Only 3 of the 8 beginning teacher participants discussed Culturally Responsive Teaching practices in a pre-service training program.</p>	<p>“I was a little bit nervous because when they go to pairs it becomes socializing. It was high quality work and set them up for the next standard. It was cool to see it work. Not that I didn’t trust you.”</p>
<p>All 8 of the beginning teacher participants mentioned increasing their use of equity strategies into their instructional practice.</p>	<p>“We also talked about during the PD was using windows and mirrors. So the windows are allowing students to see other people and other backgrounds and other experiences like in a book or read aloud. Or just an everyday class instruction and then the mirrors is how do they see themselves in the classroom.”</p>	<p>“I think that some of the characteristics that I draw from professional development is to take back into the classroom together, implement and work towards building what is a Culturally Responsive classroom.”</p>	
<p>“For me it’s being able to take something concrete out of a professional development that you can actually apply.”</p>			

The second guiding question was “What is the effect of implementation of professional development in Culturally Responsive Teaching practices on beginning teacher self-efficacy? The theme, key findings, and quotes from the data have been synthesized in Table 12 for guiding question 2. The key findings and quotes are organized according to the social cognitive theory by Bandura (1997) through the four main themes of mastery experiences, vicarious experiences, social persuasion, and affective states. Through the use of the OSTES survey and qualitative data from the post-conferences and interviews, the professional development series on Culturally Responsive Teaching practices and highly effective instructional strategies suggests an increase on beginning teacher self-efficacy.

Twenty-two of the 24 questions on the pre and post OSTES demonstrated a mean increase for the beginning teacher self-efficacy of the beginning teacher participants in this inquiry. Nine of the 24 questions on the pre and post OSTES demonstrated an over 1 point mean increase on a scale of 1 to 9. Four of the 8 beginning teacher participants shared that the school leader/professional development instructor improves their beginning teacher self-efficacy. All 8 of the beginning teachers appreciated the hands-on, practical applications of the professional development series and felt they could take the lessons learned to apply directly with their students.

The third guiding question was “What influence does conducting this action research inquiry have on the leadership skills and development of the scholarly practitioner conducting this inquiry? The theme, key findings, and quotes from the data have been synthesized in Table 13 for guiding question 3. The key findings and quotes are organized according to the social cognitive theory by Bandura (1997) through the four main themes of mastery experiences,

Table 12

Guiding Question 2 and Key Findings

Mastery Experience Theme	Vicarious Experience Theme	Social Persuasion Theme	Affective States Theme
<p>22 of the 24 questions on the Pre and Post OSTES demonstrated a mean increase. The 2 areas that saw a decrease were very minimal with -0.07 and -0.06 point decreases.</p>	<p>All 8 of the beginning teacher participants shared they liked having a hands-on or practical application for their classroom lessons.</p>	<p>“I just feel it helps me build an arsenal or become aware of things I can do. Things I can help. Every year I’m finding new challenges and kind of working through how to address them for the first time. So I guess every time I’m in a professional development, it’s just another opportunity for me to be like okay what can I do now with this situation.”</p>	<p>The beginning teacher participants appreciated the data discussions in the post-observation conferences and made them very more confident.</p>
<p>9 of the 24 questions on the Pre and Post OSTES demonstrated an over 1 point mean increase.</p>	<p>4 of the 8 beginning teacher participants mentioned how the school leader/pd instructor improves their beginning teacher self-efficacy.</p>	<p>“I would say providing effective practices while modeling them.”</p>	<p>“Makes me feel better seeing the data.”</p>
<p>4 of the 8 beginning teacher participants shared that the building of an educational toolbox to give them strategies or practices to implement with their students was important.</p>	<p>“I think what helps a lot during pd is giving practical applications. That was one thing I loved about this professional development was not only did Mr. Maness like to have us actually pretend to be students and give real scenarios, but he applied it to different subjects and had us talk out different scenarios as well as actually taking part in real experiences that we could apply to our rooms.”</p>		
<p>“I’ve always been a hands-on learner. So anytime I’m in a professional development scenario and they are teaching me something. If they can give me the opportunity to work hands-on ... is a wonderful characteristic of a great professional development.”</p>			

Table 13

Guiding Question 3 and Key Findings

Vicarious Experience Theme

Social Persuasion Theme

Four of the 8 beginning teacher participants shared the modeling of the Culturally Responsive Teaching practices and highly effective instructional strategies during the professional development series allowed them to implement directly into their lessons.

Many of the beginning teachers mentioned the presenter being knowledgeable and quality feedback as required leadership skills.

“His lessons were engaging and his post-conference interviews were very helpful with the reflection of the academic discourse and different strategies.”

“I think him being so engaging with us and making sure that it was not just paper and being lectured to. It was more like, hey we’re going to do this and this is what you could do in your classroom.”

“I think he did a good job at checking in with his team to make sure that the strategies are working.”

“I find it very helpful, especially this one was a lot of feedback from Mr. Maness. Which isn’t necessarily always possible, but it was very helpful to me to have the like oh this is what the data shows, here’s what we can learn from the data, and here are the next steps moving forward.”

Six of the 8 beginning teacher participants appreciated the engaging nature of this professional development series.

The beginning teachers liked the post-conference format and objectivity of the data being recorded.

“I really appreciated his attentiveness.”

“He allowed me to notice the trends first.”

vicarious experiences, social persuasion, and affective states. Vicarious experiences and social persuasion were the main themes related to guiding question 3.

Many of the beginning teacher participants mentioned the being knowledgeable and providing quality feedback as required leadership skills. Additionally, 6 of the 8 beginning teacher participants shared that they appreciated the engaging nature of this professional development series. Several of the beginning teacher participants shared that they liked the post-conference format and the objectivity of the data being recorded as compared to their normal evaluation instrument as a teacher in North Carolina. 2 of the 8 beginning teacher participants mentioned that the professional development sessions were on the longer side and could benefit from spacing them out more throughout the school year.

I annotated in their scholarly practitioner journal the impact of high quality feedback, modeling practical applications of the Culturally Responsive Teaching practices and highly effective instructional strategies, and the ability to embrace silence to allow the beginning teacher participants to think about their own data to draw conclusions as important aspects of their leadership skills and development for this inquiry. These insights were in sync with the feedback given by the beginning teacher participants through post-conference discussions and data from the interviews with the non-participant inquiry partner.

Summary

The data collected and analyzed in this explanatory sequential mixed methods action research inquiry shows the positive effects of the Culturally Responsive Teaching professional development series on beginning teacher self-efficacy for the beginning teacher participants in this inquiry. The need for a professional development series on Culturally Responsive Teaching practices due to the lack of discussion around this topic in their pre-service programs and more

of our beginning teacher candidates hired from non-educational degrees. All of the beginning teacher participants shared that they increased the number of equitable strategies in their teaching practices and incorporated the lessons learned from this professional development series directly into their classroom lessons. The beginning teacher participants appreciated the quality feedback, modeling, and engaging nature of the professional development series I was able to provide. Also, the ability to collectively work together with the other beginning teacher participants throughout the inquiry as a positive. The beginning teacher participants also connected with the hands-on, practical applications of the professional development series that allowed them to immediately put the lessons into action and receive coaching shortly after the observation through the post-conference format. Chapter 5 will expand upon the lessons learned from the data in Chapter 4 to offer recommendations and implications for future practice.

CHAPTER 5: SUMMARY, CONCLUSIONS, & RECOMMENDATIONS

The focus of practice for this action research inquiry is on the high number of teachers that are leaving the profession in comparison to the decreasing number of teachers entering into the teaching profession. This dichotomy intensifies the value of beginning teachers staying in the educational profession. Overall it is estimated to cost large districts over \$20,000 per teacher to replace experienced teachers and close to \$8.5 billion per year across the United States (Podolsky et al., 2017). This investment in time and resources represents costs for the school districts. Consequently, professional development designed to engage African American students has the potential to greatly impact beginning teacher self-efficacy with the anticipation that they will remain in the teaching profession. Consequently, this will help minimize the tremendous concern that many districts face with teacher turnover and teacher vacancies.

This inquiry aimed to increase beginning teacher self-efficacy by providing a professional development series on Culturally Responsive Teaching practices and highly effective instructional strategies. School administrator support and professional development are important factors for teachers deciding whether to remain in the teaching profession (Norris et al., 2019). Participation in Culturally Responsive Teaching professional development for African American students provided these beginning teachers the opportunity to better serve this historically marginalized sub-group of students (Mallinson & Hudley, 2018). This is imperative as engagement is the single-most important element with respect to learning since students that are disengaged have barriers that prevent them from learning the content (Stembridge, 2019).

The ultimate aspiration for this inquiry was to provide highly effective professional development to increase the self-efficacy of the beginning teachers in this particular context. The continuous and cumulative professional development provided the beginning teachers with

practical and straightforward methods to engage their African American students in their classrooms. The professional development sessions, observations, post-conferences, teacher self-efficacy surveys, lesson plan artifacts, and interviews were all designed to advance the practice of engaging African American students while also assessing the current skills, knowledge and depositions around designing curriculum and teaching African American students by the beginning teachers.

Summary of the Findings

The purpose of this inquiry was to examine the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development. As such, this inquiry was guided by the following questions:

1. What is the effect of implementation of professional development in Culturally Responsive Teaching practices on engaging African American students?
2. What is the effect of implementation of professional development in Culturally Responsive Teaching practices on beginning teacher self-efficacy?
3. What influence does conducting this action research inquiry have on the leadership skills and development of the scholarly practitioner conducting this inquiry?

Guiding Question 1

The first guiding question was “What is the effect of implementation of professional development in Culturally Responsive Teaching practices on engaging African American students? I collected a robust amount of quantitative and qualitative data that included: pre- and post-implementation of the OSTES survey, Modified calling-on observation tool, lesson plan artifacts, and qualitative data from the post-conferences and interviews for guiding question 1. The professional development series on Culturally Responsive Teaching practices and highly

effective instructional strategies was associated with an increase in the engagement levels of the participants’ African American students. The pre- to post-implementation of the OSTES survey related to engaging students through the lens of their African American students saw an increase of 0.71 points on a scale of 1 to 9. This is a nearly 8% increase in the reported self-efficacy of the beginning teachers related to classroom engagement through the lens of their African American students following the professional development series. Additionally, Question 6, how much can you do to help your students value learning? saw the greatest mean increase of 1.71 points from pre- to post-implementation.

The modified calling-on observation tool and lesson plan artifacts demonstrated an overall increase in the strategies presented during the professional development series. The number of Culturally Responsive Teaching practices and highly effective instructional strategies mean increased from 1.13 per observation following the first professional development session to 3.5 per observation following the third professional development session. The lesson plan artifacts by the beginning teachers evolved from completely focused on the instructional standards to also including the Culturally Responsive Teaching practices to drive their instruction.

All of the beginning teacher participants shared that they were increasing their use of equity strategies and implementing the lessons learned from the professional development series into their classroom lessons. The beginning teacher participants mentioned the use of modeling and feedback from me as effective strategies to reinforce the lessons learned through the professional development series. The lessons learned in the professional development series were relatively new for them as only 3 of the 8 beginning teacher participants mentioned that they

discussed Culturally Responsive Teaching practices in their pre-service training program. 2 of the 3 of them mentioned that they only scratched the surface.

Guiding Question 2

The second guiding question was “What is the effect of implementation of professional development in Culturally Responsive Teaching practices on beginning teacher self-efficacy? I used the OSTES survey and qualitative data from the post-conferences and interviews to understand the complexity of this guiding question. The professional development series on Culturally Responsive Teaching practices and highly effective instructional strategies demonstrated an overall increase on beginning teacher self-efficacy. Twenty-two (22) of the 24 questions on the pre- and post-implementation OSTES demonstrated a mean increase for the beginning teacher self-efficacy of the 8 beginning teacher participants in this inquiry. Over a third of the OSTES survey questions increased the reported self-efficacy of the beginning teachers by 11% or more.

Half of the beginning teacher participants shared during the professional development series that the school leader/professional development instructor improves their beginning teacher self-efficacy. All of the beginning teachers noted the hands-on, practical applications approach of the professional development series and felt they could immediately implement the lessons with their students in the classroom. The beginning teacher participants felt it was important to continue to build their educational toolbox to address new challenges that they had yet to experience. Additionally, the beginning teacher participants valued the data discussions during the post-observation conferences and thought that seeing the data increased their self-efficacy.

Guiding Question 3

The third guiding question was “What influence does conducting this action research inquiry have on the leadership skills and development of the scholarly practitioner conducting this inquiry? Key leadership skills identified by the beginning teacher participants for me were being knowledgeable, engaging, and providing quality feedback. The observational and post-conference process were seen as a strength of the professional development series by the beginning teacher participants as compared to their normal evaluation method. They liked the post-conference format and the objectivity of the data being recorded. They felt it was less checking the box and allowed for them to grow their confidence. It is important to note that 2 of the 8 beginning teacher participants felt the professional development sessions were on the longer side and could benefit from spacing them out more throughout the school year.

I recognized in my scholarly practitioner journal the impact of high quality feedback and modeling practical applications of the Culturally Responsive Teaching practices and highly effective instructional strategies as important teaching elements for beginning teachers. Also, the ability to embrace silent think time to allow the beginning teacher participants to draw conclusions from their observational data as important aspects of their leadership skills and development for this inquiry. This think time allowed the beginning teacher participants to reflect on their own practice. I felt this was very important for their educational growth and implementing real change to their instructional practices by self-identifying opportunities for improvement instead of being instructed by their educational leader.

Interpretation of the Findings

The purpose of this inquiry was to examine the effect on beginning Teacher Self-Efficacy (TSE) through Culturally Responsive Teaching professional development. There are benefits for

teachers with elevated TSE in reference to classroom behavior, student achievement, and overall confidence that the strategies implemented will lead to positive outcomes for the students in their class (Zee & Koomen, 2016). In the context of this inquiry, 22 of the 24 questions on the pre and post OSTES demonstrated a mean increase for the beginning teacher self-efficacy of the beginning teacher participants. In particular, 9 of the 24 questions on the pre and post OSTES demonstrated an over 1 point mean increase on a scale of 1 to 9. The OSTES incorporated the beginning teacher's self-efficacy in relation with classroom management, instructional strategies, and student engagement through the lens of their African American students.

This professional development series focused on providing Culturally Responsive Teaching practices for beginning teachers in the context of the social cognitive theory by Bandura (1997) to combat the related lack of pre-service training with the aid of the school leader as the professional development facilitator to increase their TSE. The professional development series relied heavily on Culturally Responsive Teaching practices by Ticknor et al. (2021) and highly effective instructional strategies by Hattie et al. (2020). The focus on Culturally Responsive Teaching practices and highly effective instructional strategies was a priority focus because teachers with high levels of TSE are more likely to stay in the teaching profession longer as they have more positive experiences with student success and limit the negative factors of classroom behavioral problems, burnout, and stress (Zee & Koomen, 2016).

With the goal to improve engagement as it is the single-most important factor with regards to learning since students that are disengaged have barriers that prevent them from learning the content (Umutlu & Kim, 2020). I observed an increase in the teacher self-efficacy related to student engagement. For example, 6 of the 8 questions related to student engagement demonstrated an overall mean increase for the self-efficacy of the beginning teacher participants

following the implementation of the professional development series as measured by the pre and post OSTES. Darling-Hammond et al. (2017) found effective PD that focuses on teacher improvement for teaching pedagogy and improvements for student achievement. Effective PD should focus on the content that the teachers are using in their classroom with regards to the demographics of the students that they teach.

Culturally Responsive Teaching Implementation

Teachers that focus on Culturally Responsive Teaching will enact procedures in their classrooms that will not only improve the quality of learning for students of color but will impact learning for all of the students in the classroom (Barrett-Zahn, 2021). I noted a change in educational practice by the beginning teacher participants during the course of the professional development series. Each of the observations occurred after a professional development session that included the explicit teaching of 1 Culturally Responsive Teaching practice and 2 highly effective instructional strategies. Six (6) of the 8 beginning teacher participants shared that they did not previously design their lesson plans to specifically engage a particular subgroup of students (African Americans in the context of this inquiry). Elements that the beginning teacher participants now included in the lesson plan process following the implementation of the professional development series included: strategies to engage African American students (5), instructional resources (4), focus on data (2), and 1 beginning teacher shared that they focus on strategies for non-African American students because they teach primarily African American students.

Siwatu (2011) found that to successfully implement Culturally Responsive Teaching into the classroom, pre-service teachers need to have both the knowledge relating to Culturally Responsive Teaching and the self-efficacy to administer the knowledge. Pre-service teachers do

not feel like they were fully prepared to execute Culturally Responsive Teaching in their classrooms resulting from a lack of knowledge or experience from their teacher preparation program. Of the 6 beginning teacher participants that earned an educational degree in college, only 3 of them mentioned their pre-service training program discussing Culturally Responsive Teaching practices. 2 of the 3 mentioned that they only discussed it in the broad sense or only scratched the surface. 1 of the 3 shared that they were required to take a diversity in education class that “focused on valuing the different cultures and different backgrounds, and different experiences of all students.” Therefore, beginning teachers must be cognizant of the cultural diversity in their classrooms and seek the knowledge and strategies necessary to meet the needs of diverse learners (du Plessis et al., 2020). The use of Culturally Responsive Teaching has been shown to be effective in this regard (Darling-Hammond et al., 2017).

Professional development that relates to Bandura’s social cognitive theory in the areas of mastery experiences, vicarious experiences, verbal persuasion and psychological and emotional states could be beneficial to teachers implementing Culturally Responsive Teaching into their classrooms (Cruz et al., 2020). The beginning teacher participants were observed once between each professional development session for a total of three times each during this mixed methods action research inquiry. This enabled the beginning teachers to gain vicarious experience, social persuasion, and affective states according to the social cognitive theory through the observation and post conference process as well as their own mastery experiences from the professional development implementation in their own classrooms (Bandura, 1997).

Of beginning teachers 44.6% leave the profession within the first five years of teaching (Ingersoll et al., 2021). Effective professional development can lower the amount of teacher turnover for beginning teachers (Bastain & Marks, 2017). Seven (7) of the 8 beginning teacher

participants that participated in this inquiry remain at Eagle Springs Elementary School including 4 out of 4 of the year 3 beginning teachers that have exited beginning teacher status. 1 of the beginning teacher participants left due to family relocation to a different part of the state and that beginning teacher is continuing to teach in the profession.

The Social Cognitive Theory to Application

The social cognitive theory when applied to the educational world implied that the higher the teacher's self-efficacy is, the more likely they will overcome obstacles and initiate innovative teaching activities for their students which will lead in turn to an increased probability of success for their students (Goddard et al., 2004). There was a 0.71 point increase in the mean score from pre to post implementation of the OSTES survey related to engaging students through the lens of their African American students. All 8 of the beginning teacher participants described how they were implementing the lessons learned from the professional development series into their classrooms.

Mastery experiences include personal experience of success in overcoming barriers and continued over time (Bandura, 1997). Additionally, mastery experiences are the most impactful of the four major influences in the social cognitive theory while also being the least likely for beginning teachers to have since they are just entering the profession (Tschannen-Moran & Hoy, 2007). The beginning teacher participants for this inquiry enjoyed the opportunity to create these mastery experiences in their own classrooms. One teacher shared, "I've always been a hands-on learner. So anytime I'm in a professional development scenario and they are teaching me something. If they can give me the opportunity to work hands-on ... is a wonderful characteristic of a great professional development." The ability to gain mastery experiences through this professional development series was vital as beginning teachers normally have to rely on mentor

support and collaboration to increase their self-efficacy since they lack mastery experiences early in their careers (Tschannen-Moran & Hoy, 2007).

Vicarious experiences can also increase self-efficacy, and modelling of behavior can give people a vicarious experience as it provides an opportunity to view an activity in action and gain skills/strategies to enact (Bandura, 1997). Modeling and feedback were main components expressed by the beginning teacher participants as helpful for their learning. For instance, one beginning teacher participant shared, “I think what helps a lot during PD is giving practical applications. That was one thing I loved about this professional development was not only did Mr. Maness like to have us actually pretend to be students and give real scenarios, but he applied it to different subjects and had us talk out different scenarios as well as actually taking part in real experiences that we could apply to our rooms.”

High quality feedback that is honest and highlights their accomplishments can increase their self-efficacy through verbal persuasion. For example, collaboration and frequent feedback were more likely barometers to increase teacher self-efficacy compared to quality of resources (Tschannen-Moran et al., 1998). In this inquiry, the beginning teachers liked the post-conference format and objectivity of the data being recorded. Six (6) of the 8 beginning teacher participants appreciated the engaging nature of this professional development series. The beginning teacher participants shared, “He allowed me to notice the trends first” and “His lessons were engaging and his post-conference interviews were very helpful with the reflection of the academic discourse and different strategies.” Teachers can use academic discourse as a method to fully engage their students with their peers and evaluate their understanding of the content (Colley & Windschitl, 2016).

Physiological and affective states also affect self-efficacy through the judgement of their mental and emotional states (Bandura, 1997). Six (6) of the 8 beginning teacher participants appreciated the engaging nature of this professional development series on my part. The beginning teacher participants shared, “I really appreciated his attentiveness.” I felt it was very important to check on the beginning teacher participants throughout the professional development series and see how they could help them to be successful.

Professional Development Impacts

Bastian and Marks (2017) found a strong correlation between a well designed and implemented PD and positive teacher results. However, one day induction programs have not been seen as successful in retaining beginning teachers; a combination of on-going personalized PD, collaboration with colleagues, and well-designed induction programs are seen as more effective in retaining beginning teachers (Stewart et al., 2021). When the beginning teacher participants were asked about the characteristics of effective professional development, all 8 of them shared having a hands-on or practical application for their classroom lessons. Beginning Teacher 4 shared, “for me it’s being able to take something concrete out of a professional development that you can actually apply.” The other important components mentioned were modeling (5), presenter being knowledgeable (4), and feedback (3). PD should enhance the alignment between the teacher's voiced belief in Culturally Responsive Teaching practices and actual implementation of them in the classroom (Guerra & Wubbena, 2017). The beginning teacher participants demonstrated a mean increase of Culturally Responsive Teaching practices and highly effective instructional strategies from 1.13 in observation 1 to 3.5 instructional activities in observation 3.

Students with teachers with higher teacher efficacy benefit from engaging instructional practices that provide necessary support for lower performing students (Chizhik et al., 2018). The pre-implementation lesson plans displayed few Culturally Responsive Teaching practices or equitable strategies for the students in their classrooms. However, the post-implementation lesson plan artifacts that focused on the instructional learning components and the instructional activities for how the students will complete the assignment. Additionally, the modified calling-on tool also captured the number of questions asked to the beginning teacher participants' African American students at 186 over the 24 observations and 61.18% of the total questions asked to their students. The beginning teacher participants also used a total of 93 equitable teaching strategies to encourage equitable participation from all of their students. Demonstrating a mean of 3.88 equitable teaching strategies per observation. The mean number of equitable teaching strategies used per observation increased from 2.13 during observation 1 to 5.75 during observation 3. Thus validating tangible evidence of their instructional practice including Culturally Responsive Teaching practices.

A real concern for beginning teachers is they may experience setbacks in their confidence levels as they fear they will not be able to impact students as well after the realities of the challenges the field of education can present for them which will lower their expectations of students and affect their self-efficacy (Tschannen-Moran & Hoy, 2007). Four of the 8 beginning teacher participants shared the modeling of the Culturally Responsive Teaching practices and highly effective instructional strategies during the professional development series allowed them to implement directly into their lessons and contradict this concern. Another important element of this professional development to mitigate this concern that was mentioned by 4 of the 8 beginning teacher participants was the building of an educational toolbox to give them strategies

or practices to implement with their students. Beginning Teacher 6 shared that they have tried multiple ways to complete vocabulary in their room and felt that the students were very engaged when given choice. “It was more chaotic and it took more to hold them accountable but taking longer they believed helped the students learn it.”

Beginning Teacher Pedagogy

Students benefit from teachers that create equitable experiences for them and celebrate their innumerable cultural and linguistic gifts, raise high expectations for all students, and value their diversity (Barrett-Zahn, 2021). All 8 of the beginning teacher participants mentioned increasing their use of equity strategies into their instructional practice. Equity strategies varied from equity sticks, think-pair-share, student choice, differentiation, to high expectations. For example, Beginning Teacher 4 shared a self-reflection that resulted in a change of practice when they said, “I feel like recently I do a mix of equity sticks and calling on someone that raised their hand. That’s the biggest difference from my previous lessons.” Similarly, Beginning Teacher 6 shared, “we also talked about during the PD was using windows and mirrors. So the windows are allowing students to see other people and other backgrounds and other experiences like in a book or read aloud. Or just an everyday class instruction and then the mirrors is how do they see themselves in the classroom.”

Another concern relates to beginning teachers needing intense support that focuses on mentoring, modelling and best practices as they begin their careers (Jenson et al., 2016). School leaders have an immense impact on beginning teachers in the areas of feedback, valuing their contribution, recognition, and acknowledgement (du Plessis et al., 2020; Stewart et al., 2021). In this inquiry, beginning teacher 6 shared, “I find it very helpful, especially this one was a lot of feedback from Mr. Maness. Which isn’t necessarily always possible, but it was very helpful to

me to have the like oh this is what the data shows, here's what we can learn from the data, and here are the next steps moving forward." School leaders have an obligation to either directly themselves or indirectly through teacher leaders to provide the resources for beginning teachers that focus on mentoring, modelling and best practices.

School Leadership Influence on Beginning Teacher Self-Efficacy

Khalifa et al. (2016) stated that school leadership should focus on Culturally Responsive Teaching practices in the same regards as student outcomes and instructional practices. School leaders should value the abundance of cultures that contribute to their school population and incorporate processes to include teaching practices with the goal to celebrate their diversity and benefactions to the school environment. The beginning teacher participants shared a variety of highly effective instructional strategies discussed during this professional development series that included: the inclusion of music (3), think-pair-share (2), student choice boards (2), student movement (2), equity sticks (2), academic discourse (1), Culturally Responsive Teaching practices (1), elaborate interrogation (1), and rehearsal and memorization (1). Four (4) of the 8 beginning teacher participants shared that the school leader/professional development instructor improves their beginning teacher self-efficacy. All 8 of the beginning teachers appreciated the hands-on, practical applications of the professional development series and felt they could take the lessons learned to apply directly with their students.

School leaders can also influence TSE through instructional and distributed leadership (Liu et al., 2020). Additionally, school leaders provide avenues for success by creating environments where the teachers are able to trust in them and their methods (Coban et al., 2020). Just as teachers will need to set high expectations of their students, school leaders set high expectations for their teachers and in doing so, students will benefit through increased

performance measurables (Cansoy & Parlar, 2018). Beginning Teacher 6 shared that this particular professional development series was helpful based on the feedback given from me. Beginning Teacher 2 shared, “his lessons were engaging and his post-conference interviews were very helpful with the reflection of the academic discourse and different strategies.” Beginning Teacher 7 shared, “I think he did a good job at checking in with his team to make sure that the strategies are working.”

I annotated in my scholarly practitioner journal the impact of high quality feedback, modeling practical applications of the Culturally Responsive Teaching practices and highly effective instructional strategies, and the ability to embrace silence to allow the beginning teacher participants to think about their own data to draw conclusions as important aspects of their leadership skills and development for this inquiry. These insights were in sync with the feedback given by the beginning teacher participants through post-conference discussions and data from the interviews with the non-participant inquiry partner. The beginning teacher participants focused on data from the observations, self-reflection, and practical applications of the professional development series. Beginning Teacher 1 shared “glad you did the chart. Allows me to look back at who answered.” Beginning Teacher 3 shared in one of their post concerns that it is just a bunch of check boxes in their normal observations required by the State of North Carolina for teachers and that they normally do not write notes in a post conference. The observational tool seemed to be more individualized and less subjective.

Limitations of the Inquiry

At the outset of the inquiry, I had very real concerns about the effect of the COVID-19 pandemic on the implementation of the professional development series and subsequently the observations following each round of professional development. While the COVID-19 pandemic

is still very real and seemingly becoming a fixture in our society, it had very little effect on the implementation of the professional development inquiry. A few observations were rescheduled due to teacher absences related to COVID-19. An unknown relationship is whether the number of student absences amongst their students due to COVID-19 would have affected the outcome of their answers if the inquiry occurred prior to the pandemic.

The inquiry required the coordination and collaboration of multiple inquiry partners to determine if the professional development to engage African American students impacted beginning teacher self-efficacy. The beginning teacher participants in this inquiry have a very time-consuming schedule of commitments that place heavy burdens on them throughout the school year. 2 of the beginning teachers are actively in school taking education related courses to earn their teaching credentials since they did not go to a traditional teacher preparation program. 1 of the beginning teachers was a part of a leadership training program sponsored by the district for beginning teachers that possess key traits that they would like to further develop to retain them in the profession. I attempted to incorporate the implementation of the professional development series as much as possible into their already time-crunched schedule and give autonomy to the beginning teachers to select the day of the professional development sessions; however, two of the beginning teachers did note that the professional develop sessions were on the longer side at the end of a busy day.

I am a lead evaluator for the beginning teacher participants that served as participants in this inquiry. Additionally, I transitioned from being the assistant principal of this Eastern North Carolina School to the principal of the school during the implementation of this inquiry. I am responsible for completing the North Carolina Department of Public Instruction required observations and summative evaluations for the beginning teacher participants that determines

their continued licensure as a public school teacher. I assured the beginning teacher participants multiple times and scheduled the observations in advance as part of this inquiry to delineate them from the required observations for their official evaluations. However, the transition to principal and completing their evaluations may have inclined the beginning teachers participating in this inquiry to produce answers on their teacher self-efficacy survey, interview responses, and post-conferences to satisfy how they believe their administrator desired the results to conclude.

Implications of the Findings for Practice

I gained enormous insights from the beginning teacher participants in this inquiry that will immensely affect their leadership practices in the future. The hope is that the beginning teacher participants also learned informative teaching strategies from this inquiry and will continue to implement them into their classroom lessons. The evidence from the classroom observations seemingly illustrates this statement as the beginning teacher participants demonstrated an increase from 1.13 Culturally Responsive Teaching practices and highly effective instructional strategies specifically taught in the professional development series to 3.5 per lesson observed at the conclusion of the inquiry. Additionally, the beginning teacher participants demonstrated an increase from 2.13 equity strategies observed per lesson to 5.75 at the conclusion of the inquiry. Overall, the mean increase for the beginning teacher self-efficacy by 0.71 points or approximately 8% growth from pre- to post-implementation. All 8 of the beginning teacher participants in this inquiry remain in the teaching profession. Seven (7) of the 8 remain at Eagle Springs Elementary School and 1 relocated to a different city due to a family move. These implications of these results produce the need to revisit the current practice of how we are supporting our beginning teachers to have them remain in the teaching profession.

Additionally, the inquiry has affected my approach with the lead mentor for the beginning teachers at their school. I have taken an increased active interest in the beginning teacher-mentor program at their school due to the results of this inquiry. For example, I work collaboratively with the lead mentor to implement aspects of the inquiry into their monthly meetings to alleviate the concern by the 2 beginning teacher participants that stated the professional development series was on the longer side. Thus allowing the information from the professional development series to spread out more through the school year.

I also have started discussing the Culturally Responsive Teaching practices and highly effective instructional strategies with their whole staff. The whole staff involvement has included cascading communications in a variety of settings to emphasize the importance of the instructional strategies to both increase engagement of their students and also build teacher self-efficacy. Throughout the school year, this will include introducing the strategies through weekly communication newsletters with the staff, professional development sessions in lieu of traditional monthly staff meetings, and through the Professional Learning Community process. I believe that the successful implementation of the professional development series for the beginning teacher participants will produce similar success with the whole staff and will change their practice to test this theory.

I also saw inestimable value in reflecting on their leadership skills and development through the course of this inquiry. They will continue to focus on this aspect of their leadership development in the future as an approach to continuously enrich their own professional growth. The reflective approach should provide opportunities to ensure that they have an open-mindset for meeting the needs of their students and staff. It is equally vital to cognize the areas where

their leadership skills can grow as well as actions that are inhibiting them from supporting their students and staff.

Implications of the Findings for Equity

This inquiry examined the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development intended to advance the issue of equity for African American students at Eagle Springs Elementary School. In particular, the professional development focused on Culturally Responsive Teaching, highly effective instructional strategies, and how to successfully implement them into the classroom practice to affect change for their African American students. Alhanachi et al. (2021) stated that teachers will need to take into account the background, family history, language barriers, and culture of their students in order to build their teaching materials.

The professional development series challenged the beginning teacher participants to self-reflect on their own viewpoints and beliefs about African American student engagement and how confident they are in their abilities to enact real change for the advancement of those students. Subsequently, the beginning teachers gained an understanding of how to implement Culturally Responsive Teaching practices into their classroom and produced tangible evidence of their use. The lesson plans, pre- and post-implementation OSTES, observational data, post conferences, and interview data all triangulate that the beginning teacher participants increased their self-efficacy through the lens of their African American students. These practices introduced in this inquiry validates a need to focus on African American students at Eagle Springs Elementary School in the future and the positive benefits for the self-efficacy of beginning teachers as well.

Recommendations for Practice

This inquiry has tremendously challenged and produced immeasurable growth for me. There are multiple recommendations that I can draw from the inquiry for suggestions to other practitioners and educational leaders that seek opportunities to grow their beginning teachers. The recommendations involve the intentional, active interest of the school-based leader in the development of their beginning teachers, emphasis of instructional leadership by the school-based leader, and on-going professional development for school staff.

First, school leaders must intentionally prepare and develop the teacher self-efficacy of their staff. Especially the case for beginning teachers that work with students that may come from a different background than them. The turnover rate for beginning teachers coupled with the decreasing number of prospective teachers entering into teacher preparation programs provides reason enough to seek intentional approaches to cultivate your own staff. The fact that all of the beginning teacher participants in this inquiry remain in the profession gives pause for me to continue this active interest and intentional growth of their beginning teachers.

Second, the beginning teacher participants in this inquiry craved the feedback and modeling of instructional strategies by the school-based leader. The vast majority of the beginning teacher participants mentioned the high-quality feedback as an area that they enjoyed from this inquiry. School leaders have the opportunity to affect the teacher self-efficacy of their teachers by providing real feedback that directly impacts the educational practices in their building. The high quality feedback is currently difficult with the evaluation instrument used to conduct observations. One of the beginning teacher participants in this inquiry shared that they had never taken notes in a post-conference previously using the state sponsored evaluative instrument. Specific, objective observations using the observational tool in this inquiry provided

a pathway for the beginning teachers to self-reflect on their data without the worry of checkboxes in traditional evaluative instruments. School leaders in North Carolina are required to observe using the state sponsored instrument; however, the evaluative process does not limit their ability to also take data-focused notations to lead the post-conference discussions. Furthermore, school leaders have the obligation to advocate for policy changes to lawmakers that will produce an evaluative instrument that will ultimately improve the educational practice of teachers while accurately evaluating them.

The beginning teacher participants in this inquiry also valued the modeling of the instructional strategies by the school-based leader. The beginning teacher participants shared that the school-based leader was able to model the instructional strategies so that they were ready to implement them directly in their classrooms. I would recommend for school leaders to model instructional practices that they desire to observe in classrooms by their teachers. Especially true for beginning teachers that do not yet process the mastery experiences of their veteran teachers as a method to increase their teacher self-efficacy. The conversations and modeling by the school leader will convey the instructional approaches that are important to them. Teachers will know the values and ideals of the school leader through these on-going conversations and will replicate them in their lessons based on the results of this inquiry. The modeling of these instructional strategies could occur through professional development similar to this inquiry or through monthly staff meetings, PLCs, or grade-level meetings.

Third, it is recommended to have on-going professional development for staff to continue to increase their teacher self-efficacy. There is no denying that teachers are overwhelmed, stressed, and burned out on the obligations placed on them as educational leaders. For example, teachers with lower levels of TSE may not have the knowledge bank to deal with the issues of

classroom behavioral problems, burnout, and stress which could impact their willingness to stay in the teaching profession (Zee & Koomen, 2016).

Having a plan to include on-going professional development to increase the teacher self-efficacy becomes critically important for school leaders. For instance, effective professional development can lower the amount of teacher turnover for beginning teachers (Bastain & Marks, 2017). However, school leaders should avoid thinking that one-time standalone professional development is enough to satisfy this concern. It is recommended for school leaders to include multiple opportunities for on-going professional development in a multitude of settings. The professional development should connect with one another to produce a common vision for the staff. For example, using monthly staff meetings for professional development is a great beginning for this journey. Utilizing this time to emphasize and model the professional development relays the importance to the teachers of the approaches valued by the school leader. While this is a significant start, it should only be seen as the initiation for the approach. School leaders need to encompass the professional development in multiple settings. The multiple settings could include having the goals of the professional development in their professional development plans, as part of the indicators of the School Improvement Plan, modeled by instructional coaches in a co-teaching lesson, as part of the beginning teacher-mentor program to name a few. The totality style will allow the school leader to over-emphasize the importance of the professional development with their staff and provide numerous venues to practice them for their staff.

Recommendations for Future Study

The small sample size of this singular inquiry at Eagle Springs Elementary does not allow it to predict similar results in other settings without future iterations with repeated results. It

would be my recommendation to replicate this particular inquiry in a variety of contexts to see if they produce similar results for increased beginning teacher-self efficacy and beginning teacher retention. This particular inquiry focused on beginning teacher self-efficacy through the lens of their African American students as they are both a considerable percentage of the total student body and a subgroup with lower proficiency on state assessments. Understanding if the Culturally Responsive Teaching professional development series could increase beginning teacher self-efficacy in areas where other subgroups are a majority of the school population would be a worthy endeavor.

Another angle for this inquiry could include the use of video recordings as part of the self-reflection process. Civitillo et al. (2019) shared that critical reflection and video recordings are important components for the success of teachers to implement Culturally Responsive Teaching in their daily practices. The beginning teacher participants could reflect through a video recording of their lesson prior to the post-conference with the school leader. The additional video component could have the potential to further increase the teacher self-efficacy beyond the improved results of this inquiry.

As previously mentioned, two of the beginning teacher participants mentioned that the professional development was on the longer side and could benefit from spacing it out more during the school year. Thus aligning with Chourai (2016) that shared teachers that meet routinely (four to six times) were able to extend beyond having an appreciation for the diversity in their classrooms to developing lessons that emphasized the role of Culturally Responsive Teaching practices to the betterment of their students. Instead of having one Culturally Responsive Teaching practice and two highly effective instructional strategies per professional development session, I could have included only one or two strategies per session. The reduction

of strategies per session would have lessened the length of the professional development sessions and increased the number of meetings to the research by Chourai (2016). Additionally, this would provide additional opportunities for the observational process for the school leader to provide feedback to ingrain the educational strategies.

Conclusions

The ability to impact the beginning teacher participants in this inquiry provided immense insight for me. The noteworthy growth for the beginning teacher self-efficacy of the participants provided justification for the time and resources spent on the professional development series. The 100% retention rate of the beginning teachers in the field of education and 7 of the 8 beginning teacher participants remaining at Eagle Springs Elementary School is both significant and worthy of celebrating. Particularly true with the high turnover rate of beginning teachers and teachers in general in the current state of education.

The inquiry validates the use of Culturally Responsive Teaching practices and highly effective instructional strategies as a pathway to improve beginning teacher self-efficacy through the lens of engaging their African American students for context of this inquiry. The total approach of professional development sessions reinforced with observations and post-conferences by instructional leaders provides an avenue to allow the beginning teachers the information needed that they missed from their pre-service programs. The missed information during pre-service programs is amplified by the data that only 1 of the beginning teacher participants in this inquiry felt that Culturally Responsive Teaching practices were explicitly discussed with them during their teacher preparation program. Additionally, 2 of the beginning teachers were currently completing an alternative pathway to their teaching license due to not completing a teacher preparation program while in college.

The beginning teacher participants produced vast growth on the OSTES from pre- to post-implementation on 22 of the 24 questions. The 2 questions that were negative growth were very minute with less than a 0.07 point difference that made them virtually identical to the pre-implementation score. My understanding of these results signals the need to continue with this professional development series with new beginning teachers at their school. The thought of including the beginning teacher participants in this inquiry as mentors for the new beginning teachers for a reiteration of this inquiry is a possibility that could lead to positive vicarious experiences for the new beginning teachers and continued mastery experiences for the previous participants.

The challenge for school leaders is to find the time to dedicate to the intense demands of this professional development series. Time is not an element that we can manipulate as educational leaders as much as we may try. Placing an additional burden on school leaders to implement this professional development series with their beginning teachers is a titanic ask. However, the cost of losing teachers and the brainpower that they possess is also a growing trepidation. Therefore, this additional burden has proved fruitful for me in this inquiry by alleviating the beginning teacher turnover rate at their school during the course of this inquiry.

Scholarly Practitioner Reflections on Leadership

The dissertation journey that I have experienced at East Carolina University has affected me immensely both personally and professionally. I have truly changed my educational outlook on what it means to be a scholarly practitioner and my role as an educational leader for my students and staff. I will forever be grateful for the lessons that I learned working with an extremely talented group of beginning teachers during the professional development series.

Personally, I have had the honor of working with an exceptionally talented group of educators through the cohort model at East Carolina University. I have used experiences by the other members of my cohort during this journey to improve my leadership style and enhance my inquiry. There were times during this journey that writing became a painful exercise of endurance and refinement to produce the right words on the page. The other members of the cohort were always there for encouragement and reminders that it was time to stop procrastinating and write. These previous strangers have morphed into lifelong colleagues and friends after this 3 year journey together. We have survived virtual meetings, far away classes, endless writing, and for some of us a study abroad program to Spain. I am a better leader today due to the lessons learned from these amazing educators.

Professionally, I took a different initial approach to the field of education. I still remember to this day sitting in a physical science class saying to a group of friends that I could never, ever be a teacher. I started my college career at East Carolina University studying for clinical laboratory science as my major. A strong urge kept pressuring me to change my decision to one that allowed me to serve students in a teaching capacity. I have now had the opportunity to serve students in North Carolina as a teacher, coach, athletic director, assistant principal, and principal during my 17 years in the profession.

I will continue to implement the lessons learned from this 3 year journey in my professional career as a life-long learner and educator. I believe that you always will hold the title of teacher, no matter how long you are removed from the classroom. This journey allowed me to serve the beginning teacher participants as their teacher. That passion that I started with in 2007 as a first year teacher has never left and I am appreciative of the opportunity to put on my teacher hat again during this inquiry.

The Culturally Responsive Teaching practices and highly effective instructional strategies researched and included in this inquiry were impactful both to the beginning teacher participants and students at Eagle Springs Elementary School. The ability to enact real change and seek to improve the educational outcomes of students should be the primary focus of school leaders no matter the context, location, or obstacles of their environment. This educational journey only strengthen my desire to positively impact my staff and students in the future.

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APPENDIX A: INSTITUTIONAL REVIEW BOARD APPROVAL



EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board
4N-64 Brody Medical Sciences Building · Mail Stop 682
600 Moye Boulevard · Greenville, NC 27834
Office 252-744-2914 · Fax 252-744-2284
rede.ecu.edu/umcirb/

Notification of Exempt Certification

From: Social/Behavioral IRB
To: [Kirby Maness](#)
CC: [Lawrence Hodgkins](#)
Date: 10/27/2022
Re: [UMCIRB 22-001967](#)
Beginning Teacher self-efficacy

I am pleased to inform you that your research submission has been certified as exempt on 10/26/2022. This study is eligible for Exempt Certification under category # 1 & 2ab.

It is your responsibility to ensure that this research is conducted in the manner reported in your application and/or protocol, as well as being consistent with the ethical principles of the Belmont Report and your profession.

This research study does not require any additional interaction with the UMCIRB unless there are proposed changes to this study. Any change, prior to implementing that change, must be submitted to the UMCIRB for review and approval. The UMCIRB will determine if the change impacts the eligibility of the research for exempt status. If more substantive review is required, you will be notified within five business days.

Document	Description
APPENDIX B - Consent Form IRB.pdf(0.01)	Consent Forms
APPENDIX C - OSTES IRB.pdf(0.01)	Surveys and Questionnaires
APPENDIX C - OSTES IRB.pdf(0.01)	Data Collection Sheet
APPENDIX D - Beginning Teacher Self-Efficacy Interview IRB.pdf(0.01)	Interview/Focus Group Scripts/Questions
APPENDIX E - Modified Project 14 Calling-on Tool IRB.pdf(0.01)	Additional Items
APPENDIX F - Professional Development Series IRB.pdf(0.01)	Additional Items
email for informational meeting.docx(0.01)	Recruitment Documents/Scripts
Kirby Maness Proposal 10-8-22.pdf(0.01)	Study Protocol or Grant Application

For research studies where a waiver or alteration of HIPAA Authorization has been approved, the IRB states that each of the waiver criteria in 45 CFR 164.512(i)(1)(i)(A) and (2)(i) through (v) have been met. Additionally, the elements of PHI to be collected as described in items 1 and 2 of the Application for Waiver of Authorization have been determined to be the minimal necessary for the specified research.

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

APPENDIX B: INFORMED CONSENT FORM



Informed Consent to Participate in Research

Information to consider before taking part in research that has no more than minimal risk.

Title of Research Study: Examining the Effect of Professional Development to Engage African American Students on Beginning Teacher Self-Efficacy

Principal Investigator: Kirby A. Maness (Person in Charge of this Study)
Institution, Department or Division: East Carolina University
Address: 2935 Avon Road
Telephone #: 910-690-1881

Researchers at East Carolina University (ECU) study issues related to society, health problems, environmental problems, behavior problems and the human condition. To do this, we need the help of volunteers who are willing to take part in research.

Why am I being invited to take part in this research?

The purpose of this research is to study the effect of Professional Development to engage African American Students on Beginning Teacher Self-Efficacy. You are being invited to take part in this research because you are a Beginning Teacher that works directly with African American students. The decision to take part in this research is yours to make. By doing this research, we hope to learn the effect of Professional Development in Culturally Responsive Teaching practices and highly effective instructional strategies to engage African American Students will have on Beginning Teacher Self-Efficacy. If you volunteer to take part in this research, you will be one of about 10 people to do so.

Are there reasons I should not take part in this research?

You should not participate in this study if you are unwilling to be truthful about your experience in education.

What other choices do I have if I do not take part in this research?

You can choose not to participate.

Where is the research going to take place and how long will it last?

The research will be conducted at Eagle Springs Elementary School, a pseudonym, in Eastern North Carolina. You will need to come to Media Center during the times of the study. The total amount of time you will be asked to volunteer for this study is no more than 10 hours over the next year.

What will I be asked to do?

You will be asked to do the following:

- Answer the Ohio State teacher efficacy scale before implementation of Professional Development and after implementation of Professional Development.
- Submit lesson plans at various points of the study.
- Participate in a Professional Development Series in Culturally Responsive Teaching practices and highly effective instructional strategies to engage African American students.
- Participate in observations and post-conferences with the modified Project i4 calling-on tool.
- Answer questions during a post-implementation interview.
- Audio will be collected from interviews and will only be used by the researcher. The audio will be kept in a password-protected database and will be destroyed after the researcher has successfully defended the research.

What might I experience if I take part in the research?

We don't know of any risks (the chance of harm) associated with this research. Any risks that may occur with this research are no more than what you would experience in everyday life. We don't know if you will benefit from taking part in this study. There may not be any personal benefit to you but the information gained by doing this research may help others in the future.

Will I be paid for taking part in this research?

We will not be able to pay you for the time you volunteer while being in this study

Will it cost me to take part in this research?

It will not cost you any money to be part of the research

Who will know that I took part in this research and learn personal information about me?

ECU and the people and organizations listed below may know that you took part in this research and may see information about you that is normally kept private. With your permission, these people may use your private information to do this research:

- Any agency of the federal, state, or local government that regulates human research. This includes the Department of Health and Human Services (DHHS), the North Carolina Department of Health, and the Office for Human Research Protections.
- The University & Medical Center Institutional Review Board (UMCIRB) and its staff have responsibility for overseeing your welfare during this research and may need to see research records that identify you.
- People designated by Williams County Schools District, a pseudonym, in Eastern North Carolina

How will you keep the information you collect about me secure? How long will you keep it?

The information collected in this study will be securely kept on my personal laptop and on a password-protected flash drive that will be kept in a safe in my home. I will keep this information until I successfully defend my research. All audio recorded and written interviews will be destroyed after I successfully defend my dissertation.

APPENDIX C: OHIO STATE TEACHER SELF-EFFICACY SURVEY



Demographics

Directions: Please answer the following demographic questions to provide information about the participants in this study.

What is your gender?

- Male
- Female
- Other

What is your age?

- 20 - 24
- 25 - 34
- 35 - 44
- 45 - 54
- 55 - 64
- 65 - 74

Are you of Hispanic, Latino, or Spanish origin?

- Yes
- No

How would you describe yourself? Please select all that apply.

- White
- Black or African American
- American Indian or Alaska Native
- Asian
- Native Hawaiian or Pacific Islander
- Other

What is the highest degree or level of school you have completed?

- Bachelor's degree (e.g. BA, BS)
- Master's degree (e.g. MA, MS, MEd)
- Doctorate or professional degree (e.g. MD, DDS, PhD)

What is your current Beginning Teacher year status?

- 1st Year Beginning Teacher
- 2nd Year Beginning Teacher
- 3rd Year Beginning Teacher

Directions:

Directions: This survey is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below through the lens of teaching your Black/African American students. Your answers are confidential.

There are a total of 24 Questions in this survey. Estimated time to complete is 10 minutes.

Block 1

Questions 1-4. How much can you do? Rate your Teacher Belief on a scale of 1-9 in regards to your Black/African American Students.

	1	2	3	4	5	6	7	8	9
	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
To what extent can you use a variety of assessment strategies?									<input type="text"/>
How much can you do to control disruptive behavior in the classroom?									<input type="text"/>
How much can you do to get students to believe they can do well with their schoolwork?									<input type="text"/>
To what extent can you provide an alternative explanation or example when students are confused?									<input type="text"/>

Questions 5-8. How much can you do? Rate your Teacher Belief on a scale of 1-9 in regards to your Black/African American Students.

	1	2	3	4	5	6	7	8	9
		Nothing	Very Little		Some Influence	Quite A Bit		A Great Deal	
How much can you do to get children to follow classroom rules?									<input type="checkbox"/>
How much can you do to help your students value learning?									<input type="checkbox"/>
To what extent can you craft good questions for your students?									<input type="checkbox"/>
How much can you do to calm a student who is disruptive or noisy?									<input type="checkbox"/>

Questions 9–12. How much can you do? Rate your Teacher Belief on a scale of 1–9 in regards to your Black/African American Students.

	1	2	3	4	5	6	7	8	9
	Nothing		Very Little		Some	Quite A Bit		A Great Deal	
How much can you do to motivate students who show low interest in schoolwork?									
How well can you implement alternative strategies in your classroom?									
How well can you establish a classroom management system with your students?									
How much can you assist families in helping their children do well in school?									

Questions 13-16. How much can you do? Rate your Teacher Belief on a scale of 1-9 in regards to your Black/African American Students.

	1	2	3	4	5	6	7	8	9
	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
How well can you respond to difficult questions from your students?		<input type="radio"/>							<input type="checkbox"/>
How well can you keep a few problem students from ruining an entire lesson?		<input type="radio"/>							<input type="checkbox"/>
How much can you do to improve the understanding of a student who is failing?		<input type="radio"/>							<input type="checkbox"/>
How much can you do to adjust your lessons to the proper level for individual students?		<input type="radio"/>							<input type="checkbox"/>

Questions 17–20. How much can you do? Rate your Teacher Belief on a scale of 1–9 in regards to your Black/African American Students.

	1	2	3	4	5	6	7	8	9
	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
How well can you respond to defiant students?		<input type="radio"/>							<input type="checkbox"/>
How much can you do to help your students think critically?		<input type="radio"/>							<input type="checkbox"/>
To what extent can you gauge student comprehension of what you have taught?			<input type="radio"/>						<input type="checkbox"/>
To what extent can you make your expectation clear about student behavior?				<input type="radio"/>					<input type="checkbox"/>

Questions 21-24. How much can you do? Rate your Teacher Belief on a scale of 1-9 in regards to your Black/African American Students.

	1	2	3	4	5	6	7	8	9
	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
How much can you do to foster student creativity?	<input type="radio"/>								<input type="checkbox"/>
How well can you provide appropriate challenges for very capable students?	<input type="radio"/>								<input type="checkbox"/>
How well can you establish routines to keep activities running smoothly?	<input type="radio"/>								<input type="checkbox"/>
How much can you do to get through to the most difficult students?	<input type="radio"/>								<input type="checkbox"/>

APPENDIX D: BEGINNING TEACHER SELF-EFFICACY INTERVIEW

Title of Study: Examining the effect on beginning teacher self-efficacy through Culturally Responsive Teaching professional development

Date & Time of Interview:

Location of Interview:

Interviewer:

Interview Participant (Name or Identifier):

[OPTIONAL: INSERT BRIEF DEMOGRAPHICS SURVEY TO EACH PARTICIPANT]

Introduction Text

My name is _____ and I will be the facilitator for today's interview. The purpose of this interview is to learn more about the effect of professional development to engage African American students on beginning teacher self-efficacy. You have been asked to participate because you are beginning teachers that work with African American students. It is my expectation that your opinions and experiences will help me learn more about how the professional development did or did not engage African American students and affect your beginning teacher's self-efficacy. After the conclusion of the interview, the information we discussed will be categorized into themes and topics before being shared anonymously with the school's staff. Your personal information will not be connected to the results of this interview. I am passing you a consent form. By signing this form, you are agreeing to participate in the beginning teacher self-efficacy interview. If you feel uncomfortable for any reason signing this form, you are free to leave at any time. Please take a moment to read it over.

Before we begin, I want to tell you that I will be audio and video taping this session for the purpose of transcribing the conversation only and will not share it with anyone outside of the study. I would like to go over a few ground rules for the interview. These are in place to ensure that all of you feel comfortable sharing your experiences and opinions.

Ground Rules:

1. *Confidentiality* –Please respect the confidentiality of your peers. As facilitator, I will only be sharing the information from this interview anonymously.
2. *One Speaker at a Time* – Only one person should speak at a time in order to make sure that we can all hear what everyone is saying.
3. *Use Respectful Language* – In order to facilitate an open discussion, please avoid any statements or words that may be offensive.

Thank you, now let's begin.

Questions to be Asked, Listed Fully and in Order

1. What are characteristics of effective professional development?
2. How do you design lesson plans to engage your African American students?
 - a. How is this design process different for other groups of students you teach?
 - b. How did your pre-service training prepare you to engage your African American students?
 - c. What highly effective instructional strategies do you use to engage your African American students? How do you know they are effective?
 - d. What Culturally Responsive Teaching practices do you use to engage your African American students? How do you know they are effective?
3. How does professional development affect your beginning teacher self-efficacy?

4. What suggestions do you have for how the scholarly practitioner could have done to help you through the implementation of the professional development to improve their instructional leadership?
4. Is there anything that I have not asked that you would like to share about your participation in this study?

Conclusion Text

Thank you for participating in today's beginning teacher self-efficacy interview. As a reminder, I will be sharing the information learned during this session anonymously with the school's staff in order to help improve the professional development to engage African American students on teacher efficacy. If you think of any additional thoughts or comments that you would like to share, please contact me at _____. Have a great remainder of your day!

APPENDIX E: MODIFIED PROJECT I4 CALLING-ON TOOL

Calling On Students 1.A

Overview

Focusing on student access to the classroom discourse so **ALL students** have a regular opportunity to talk in class is a foundational part of building an equitable classroom culture. Every student should have an equal opportunity to engage in classroom discussions. How teachers call on students impacts equitable engagement. Classroom observations provide the evidence of what this looks like in the classroom.

The purpose of this document is to provide background information on calling on strategies, connect calling on strategies to the Project I⁴ framework, and provide an observation tool for your use. To fully understand Calling On as an observational tool, follow these steps:

- **Step One:** This is a refresher of the calling on strategies teachers use in the classroom. Specifically, we provide resources for calling on students in the classroom. This section can be reviewed at any time before or after your observations.
- **Step Two:** The template in Step 2 provides a tool for the observer to record calling on strategies used in classrooms. There is a space to sketch the classroom layout to assist in collecting evidence.
- **Step Three:** After you feel comfortable with the observations (step 2), use the table to tabulate and analyze the calling on strategies used. This will provide you with the evidence necessary for a meaningful, data-driven, conversation with the teacher.
- **Step Four:** We provide a guide for the observer to have conversations with the teacher. While we will spend more time on this next semester, teachers will want “feedback” from your observations and we would like you to move from the traditions of “feedback” to evidence-based conversations.

Step One: What You Need to Know

In many classes, the focus for all student responses (teacher-facilitated or student-facilitated) tends to be the “right” answer instead of adopting the disposition toward learning that mistakes are just as useful for sorting out misconceptions. Right answers often do not lead to uncovering student thinking, sense-making, or developing math concepts. Even in classrooms in which students are presenting or facilitating discussions, they are often replicating the teacher talk moves of calling on raised hands, selecting only some students, and focusing on right answers.

The problem is: **Teachers’ primary way of soliciting access/engagement is through hand raising** (Hamilton, 2019). It is the single least effective way to offer equitable access and fully engage students and motivate students to fully engage in the class. Yet, there are times when calling on hands is appropriate as indicated in the chapter.

Cold calling is useful if used intentionally. Teachers, however, are at different stages of feeling comfortable with other types of calling on strategies, typically used in full group instruction. For example, the routine for cold calling is useful: stating the question, using appropriate wait/think time (3-8 seconds depending on cognitive level of question), and naming a student to respond. However, cold calling on students without think time or because the student is not engaged and the teacher is using the calling on as a disciplinary signal is not useful.

Cold calling by naming the student name before asking the questions signals to other students that they are “off the hook” for responding. Blurt out or “popcorn” is possible if the teacher is intentional about its use; often the teacher just accepts call-outs or blurt-outs. The teacher may use Think-Pair-Share (TPS) or “turn and talk” to have partner talk (useful!); however, in the sharing stage, teachers often recognize raised hands. Instead, the teacher can listen in on student conversations during TPS and support a student to “rehearse” a response and start the group discussion with that student’s response.

The charts on the next two pages may be helpful to the principal and the teacher in preparation or in post-conversations. **Note the difference between teacher revoicing and effective repetition.** A teacher’s simple repetition of what was said by the student is not typically effective.

The hyperlinks to resources may be helpful to the principal and the teacher in preparation or in post-conversations. **Note the difference between teacher revoicing and effective repetition.** A teacher’s simple repetition of what was said by the student is not typically effective. TWO RESOURCES: TEACHER ACTIONS (for calling on) and LEVELS OF CLASSROOM DISCOURSE

Questions for consideration

- How can we better design **calling on strategies** for whole class instruction (used often by the teacher, but increasingly by students who present problems to the whole class) so the questions are more about student thinking (even misconceptions or “wrong” answer) than right answers?
- How can we move from the teacher repeating student responses to students speaking loud enough with full attention from peers so that other students are listening and then responding to the student?
- How can we use “turn and talk” **systematically** to think, then pair, and then share equitably?
- How can we develop systems for student-to-student interaction that happens automatically.

ACADEMIC DISCOURSE (AD)
 Teacher-Generated-----Teacher Initiated and
 Facilitated-----Student Generated

Protocols and Questioning	<ul style="list-style-type: none"> ● Teacher Role: Teacher-designed questions; teacher-controlled protocols ● Underlying focus: Often compliance & behavior-driven; concerned with pacing & fidelity ● Primary interaction relationship: Teacher-to-student; often pseudo-discourse ● Calling on strategies: Typically raised hands; limited use of strategies for equitable access ● Level of questions: Often recall and the application questioning levels with few questions at higher cognitive levels 	<ul style="list-style-type: none"> ● Teacher Role: Teacher-initiated, including encouraging student-to-student dialogue ● Underlying focus: Student understanding and teacher use of student experiences ● Primary interaction relationship: Teacher-to-student, with teacher encouragement of student-to-student & small groups ● Calling-on strategies: Designed for equitable access of all students ● Level of questions: Attention to higher cognitive level questions, including synthesis and creativity 	<ul style="list-style-type: none"> ● Teacher Role: Coaching students as facilitators; warm demander & strong student relationships ● Underlying focus: Encouraging more student-facilitated groups ● Primary interaction relationship: Student-to-student ● Calling on strategies: Primarily student-generated questions & student-to-student interaction ● Level of questions: Higher level questions that elicit creative responses & authentic problem-solving
----------------------------------	---	---	---

Step Two: What You Need to Do in the Observation

Modified Project I⁴ Observation Tool Calling-On Tool 1.A

The tool is designed to collect basic information for the teacher to see how the teacher (or a student leading a discussion of a math problem) is generally calling-on students in classroom setting. **Two types of information are useful: seating chart and selective verbatim of the teacher actions and student responses.** Using one is useful; gaining proficiency at using both at the same time is even better.

Type One of Calling On: Make a seating chart.

Using a seating chart to determine equitable calling on is critical. Too often, some students are totally overlooked – they may not raise their hands, or, if they do, teachers ignore them. If possible, write student names if you know them. Either use STUDENT NAME or identity (F/M or race/ethnicity): AA= African American; L= Latinx; W=White; AsA= Asian American. This classroom map is of one table of 6 persons.

Make a slash mark (/) for every instance of the items in the tool. Try to indicate with short abbreviation of the type of calling on or teacher response that was used (after the slash mark). It will take a bit of practice to get used to the names of calling on (chart below), but this offers precise data with which to have the conversation with the teacher

R*	Raised hand
CC**	Cold Call
CCD	Cold Call for Discipline
B-A	Blurt out-Accepts
B-I	Blurt out-Ignores
C&R	Call and Response: Teacher asks for group response or indicates students should “popcorn”
ES	Uses equity strategy (equity stick or card to call on student)
TR***	Teacher repeats student response to class verbatim

TRV***	Teacher revoices student response
TPS	Think and Pair and then Share
Other	Any other strategy you note

*Raised hands are not always ineffective. See Chapter 1. However, if primary mode of interacting, this reduces equitable student access.

** Cold calling is not incorrect or ineffective if used in ways that support student thinking and full access (wait/think time) and student name at end of question after think time.

*** Note difference between simple repetition, effective repetition, and revoicing on charts
Please use this blank page to draw the seating arrangement of the class you are observing and identify students in each place. Mark the slash and abbreviation for each calling on instance.

R*	Raised hand
CC*	Cold Call
CCD	Cold Call for Discipline
B-A	Blurt out-Accepts
B-I	Blurt out-Ignores
C&R	Call and Response: Teacher asks for group response or indicates students should “popcorn”
ES	Uses equity strategy (equity stick or card to call on student)
TR***	Teacher repeats student response to class verbatim
TRV***	Teacher revoices student response
TPS	Think and Pair and then Share
Other	Any other strategy you note

Type Two: Selective Verbatim and Use of Coding

In the second type of calling on process, the observer uses selective verbatim to capture the teacher’s actions, the time, and the student responses. While think time is a part of the question form and question level tools, the observer can record TT (think time) or NTT (no think time). The lack of think time between asking the question and calling on a student often leads to certain students being quicker thinkers who raise their hands. First, the observer collects time and selective verbatim. After the observation, the observer codes the evidence.

In addition, the observer will be documenting highly effective instructional strategies and Culturally Responsive Teaching practices as they occur in the lesson. This will include but is not limited to the following highly effective instructional strategies: academic discourse, elaborate interrogation, deliberate practice, rehearsal and memorization, effective feedback, summarizing.

This will also include but is not limited to the following Culturally Responsive Teaching practices: instructional materials, instructional language, and reading response.

Instructional Activity

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> <input type="checkbox"/> Academic Discourse <input type="checkbox"/> Elaborate Interrogation <input type="checkbox"/> Deliberate Practice | <ul style="list-style-type: none"> <input type="checkbox"/> Rehearsal and Memorization <input type="checkbox"/> Effective Feedback <input type="checkbox"/> Summarizing | <ul style="list-style-type: none"> <input type="checkbox"/> Instructional Materials <input type="checkbox"/> Instructional Language <input type="checkbox"/> Reading Response |
|---|--|--|

Time Stamp	Evidence	Code	Instructional Activity

Step Three: Tabulate and Analyze

After the observation, as the observer, tabulate the data from seating chart observation on this chart.

Note: It is possible if you get adept at this to use this as a data tool to collect the data; judge your comfort level with the map and/or this tool. If you use the map, tabulate results on this table to share with teacher.

Teacher _____ Observer _____ Date _____
 Duration of Observation _____ to _____

Student Name OR number	Demographics	Raised hand CO: R	Called Cal CO: CC	Called Discipline CO: CC D	Calling out CO: B-A CO: B-I	Calling out CO: C&R	Equitable method CO: ES	Simple Repetition TR	Teacher Revoicing TRV
1.									
2.									
3.									
4.									
5.									
6.									
7.									
8.									
9.									

10.									
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									

After the observation using selective verbatim, tabulate the number of instances of each type of calling on.

Teacher _____ Observer _____ Date _____
 Duration of Observation _____ to _____

R*	Raised hand	Total Number
CC**	Cold Call	
CCD	Cold Call for Discipline	
B-A	Blurt out-Accepts	
B-I	Blurt out-Ignores	
C&R	Call and Response: Teacher asks for group response or indicates students should “popcorn”	
ES	Uses equity strategy (equity stick or card to call on student)	
TR***	Teacher repeats student response to class verbatim	
TRV***	Teacher revoices student response	
TPS	Think and Pair and then Share	
Other	Any other strategy you note	

What are statements of factual evidence from the observation?

Use the evidence categories from the data to record to make 5-6 factual statements about the data.

Examples of Evidence

Of the 27, students in the class:

- ___ students who were called on after **raising hand** (CO: R)
- ___ students called out answers and teacher **accepted call-outs** (CO: B-A)
- ___ students called out answers after direction from teacher to use C&R (Call & Response)
- ___ students were asked to repeat/paraphrase another student's response
- ___ students answered more than once
- ___ students who responded are ___ male/boys and ___ female/girls

Instructional Activities Included:

OR

Teacher asked ___ questions and called on ___ students whose hands were raised.

Teacher cold-called on ___ students.

Teacher revoiced ___ times.

Step 4: Having a Conversation with the Teacher

In this section, although you will have ideas about what to do, **engage the teacher in problem solving**. Keep in mind: “Telling people what we think of their performance doesn’t help them thrive and excel and telling people how we think they should improve actually hinders learning” (Buckingham & Goodall, 2019, p. 2).

1. **Introduction:** *I was in your class for ___ minutes while the lesson was focused on _____. As you know, I was particularly concentrating on the ways you called on students and perhaps used opportunities to have student-to-student dialogue*
2. **These are the data from that observation: (present factual analysis to teacher).**
3. **Let’s talk about what you are observing about these data?** *Continue to ask probing questions but engage the teacher in making a decision about what specific action to take and how s/he will know there is improvement.*
4. **As a result of this data, what areas of strength do you observe? What is a practice that you want to change?**
5. **What do you want me to observe and when?**

RESOURCE: TEACHER ACTIONS FOR CALLING ON

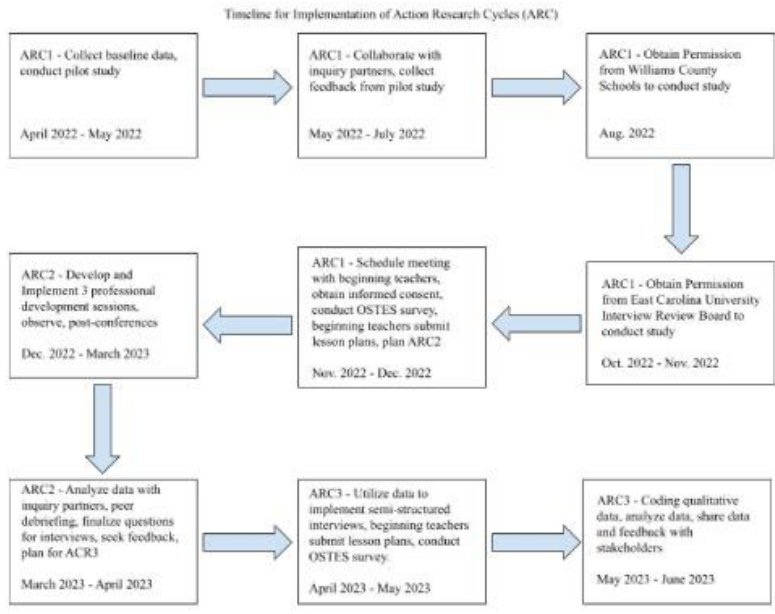
TEACHER ACTION	EXPLANATION
REVOICING	<p>Teacher repeats some or all of what a student has said and then <u>asks the student to respond and verify</u> whether or not the teacher’s statement is correct.</p> <ul style="list-style-type: none"> · Involve student in clarifying their own thinking · Help other students follow along with conversation · Make student’s ideas available to others
REPEATING/ RESTATING	<p>Teacher extends to another student to repeat or rephrase, in their own words, what first student has said and follow up with the first student.</p> <ul style="list-style-type: none"> · Another rendition of first student’s contribution without interpreting, evaluating, or critiquing · Provide evidence other students hear what was said · Student thinking is important and worth emphasizing
ADDING ON	<p>Teacher increases participation by asking for further commentary, either adding to other comments or agreeing / disagreeing with previous comments.</p> <ul style="list-style-type: none"> · Extend in open-ended manner near closure · Extend in strategic manner to produce more detailed explanations
WAITING	<p>Teacher gives students time to compose their responses.</p> <ul style="list-style-type: none"> · Signals value that deliberative thinking takes time · Create respectful, patient environment for digesting important findings and raising any lingering questions · Diversify participation
REASONING	<p>Teacher asks another student to respond to previous student’s statement by eliciting respectful discussion of ideas (agree / disagree).</p> <ul style="list-style-type: none"> · Students provide explanation of their reasoning to someone else’s contribution · Compare one’s reasoning with someone else

APPENDIX F: PROFESSIONAL DEVELOPMENT SERIES

Professional Development

Engaging African American Students to Increase Beginning Teacher Self-Efficacy Training #1

1



*Scholarly Practitioner will journal throughout the implementation process

2

Roundtable Discussion



- Please visit the following link: [John Hattie's Effect Sizes](#)
- Prepare to share the following:
 - An "ah ha"
 - An I wonder statement
 - Something you want clarified
- Move into groups of 4
- Use the sentence starters provided to have a discussion about Effect Sizes and how it could impact your educational practice moving forward



4

Roundtable Discussion



- Share about the following:
 - An "ah ha"
 - An I wonder statement
 - Something you want clarified
- Sentence starters
 - I discovered that...
 - I wonder...
 - I have a question about...
 - I'm not sure about...
 - I would like to add onto...
 - What do you mean by...
 - Can you explain... again
 - So what you are saying is...
 - I thought about...a different way
 - I agree with ____ because...



Have a discussion about Effect Sizes and how it could impact your educational practice

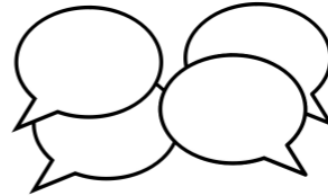
5

Academic Discourse

A form of instruction in which students are invited to speak about the topic at hand. It involves much more than a teacher asking a class a question, then another, etc., but involves students discussing with each other, often prompted from an open and not closed set of questions.

Effect Size: 0.82

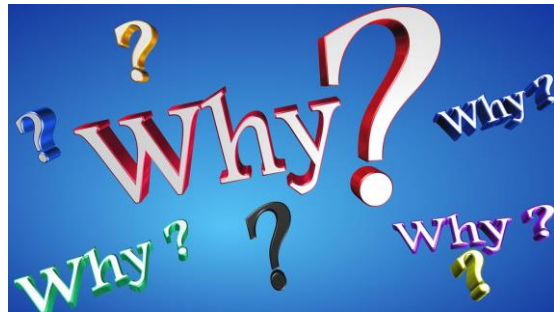
[Ideas](#)



6

Best Trip Ever

- Briefly think and write down the best trip that you have ever taken in your life.
 - Work with an elbow partner to explore “why” this was the best trip
 - 1’s will read their answers to 2’s
 - 2’s will paraphrase and prompt 1’s to provide additional details for why it was the best trip
 - Switch Roles and continue the Activity
 - Focus on why questions throughout the activity



6

Elaborate Interrogation

This questioning technique calls for readers to generate an explanation for an explicitly stated fact by asking questions such as: "Why is this true?"; "Why does this make sense?"; or even simply "Why?" Unlike more typical textbook questions - Which ask "what" instead of "why" - elaborative interrogation has been shown to promote learning from texts.

Effect Size: 0.66



7

Read alouds Part I

- Please get out the three read alouds that you brought with you that you plan to use in the near future
- Describe the read aloud to a partner and the learning goals that are associated with the read aloud
- Use your read alouds to answer the questions on the next slide



8

Instructional Materials

Culturally Responsive Teaching Practice

- Who is represented in my texts and how?
- Are diverse characters depicted in ways in which their diversity is not central to the story?
- Can I highlight the mirrors/ windows and have important conversations with students?



9

Instructional Materials

- Important Considerations
 - Choice boards with activities that connect home, school, and community.
 - Voices that are amplified or missing
 - Impact of character identity on the events of the story
 - How students connect personally to the texts
 - When you ask students to share who they are and where they come from, you owe them a safe space in which to do so.



10

Activity to Connect Strategies to the Classroom

- Take out your lesson plans
- Write down ideas on a separate piece of paper
 - How could you incorporate the following into your lesson plans:
 - Academic Discourse
 - Elaborate Interrogation
 - Culturally Responsive Instructional Materials
 - Discuss with a new partner your response
- Turn in your lesson plans at the end of the session



11

Next Steps: Connection to Lesson Plans

- Round #1 of Observations and Post-Conferences
- Revise Lesson Plans to include Highly Effective Instructional Strategies and the Culturally Responsive Teaching Practice
- Next Meeting:
- Thank you!



12

Professional Development

Engaging African American Students to Increase Beginning Teacher Self-Efficacy Training #2

13

Review Lesson Plans

- Take out your lesson plans
- Think: Highlight components on your lesson plan in different colors that demonstrate **Academic Discourse**, **Elaborate Interrogation**, and/or **Instructional Materials**
- Pair: Connect with a partner that has on a different color shirt from you
 - Discuss your lesson plans and how to add these components into your daily pedagogy
 - Discuss which component is the easiest to add, which is the hardest to add
- Share: Share out one way that your partner added the component and how you could do a similar activity in your classroom



14

Paper Airplanes

- Grab a sheet of paper from the table
- Create the best paper airplane from memory without discussing with anyone else
- Let's test the paper airplanes
- Now watch the following [video](#)
 - Grab a new sheet of paper
 - Create a new paper airplane following along with the directions in the video



15

Deliberate Practice

This learning technique involves extensive engagement in relevant practice activities in order to improve particular aspects of performance. Deliberate practice often refers to challenging, effortful repetition, often adjusted through feedback.

While regular practice can include much repetition, deliberate practice requires focused attention and is conducted with the specific goal of improving performance.

Effect Size: 0.79



16

My Story

- Every person has a story, every story has a meaning, every meaning matters
- Describe your educational story
 - How did your educational background influence your purpose
 - How did your family impact your career choice
 - Why did you become a teacher
 - How do you want your students to remember you in five years
- Choice Board to tell your story
 - Draw a group of four pictures
 - Write a short song
 - Create a short children's story book
 - Free Space



17

My Story

- Move to a new space with a partner
- Tell your story that you created from the choice board activity
- Have your partner practice telling your story from your creation with feedback
- Switch roles
- Share out large group



18

Rehearsal and Memorization

Rehearsal is a term used by memory researchers to refer to mental techniques for helping us remember information. It can involve many strategies such as repeating information to be memorized by organizing it at random and repeating the information when prompted by a visual cue, such as an index card or photograph.

Effect Size: 0.73



19

Read alouds Part II

- Please get out the three read alouds that you brought with you that you plan to use in the near future
- Focus on the instructional language in the read aloud
- Answer the questions on the following slide
- Share in a trio



20

Instructional Language

Culturally Responsive Teaching Strategy

- What questions might a student ask you about identities that you would not know how to answer in an accurate or affirming way?
- What topics are you "waiting to discuss" or learn more about only when you have students who identify this way?"
- How does the author describe the character in the book?
- What words or picture clues can you use for the text to describe the relationship?

*Consideration for level of student



24

Instructional Language

- Important Considerations
 - Books that provide both windows and mirrors for students about various families should be used throughout the day in all literacy activities
 - Including: read alouds, independent reading, guided reading, shared reading, and as mentor texts for writing narrative texts and beyond



22

Activity to Connect Strategies to the Classroom

- Expert Table Talk
- Group of 4-5 will take a seat in the circle, leaving one seat empty
- This group will participate in academic discourse around the topics that we have been learning and how to implement them into their daily practice
 - Those not in the circle will have the opportunity to sit in the empty chair to provide a thought, a question, or an affirming statement to the group
 - The group will then respond to each other in relationship to the contribution added
 - The contributor will thank the group and rejoin the others outside of the circle
- Let's get started



23

Review: Observation Process

- Think: How was this process similar or different from previous observations you have received during your internship/NCEES?
- Pair: Discuss the process question and any questions that you may have after completing the first round of observations.
- Share: Whole group



24

Next Steps: Connection to Lesson Plans

- Round #2 of Observations and Post-Conferences
- Revise Lesson Plans to include Highly Effective Instructional Strategies and Culturally Responsive Teaching Practices
- Next Meeting:



25

Professional Development

Engaging African American Students to Increase Beginning Teacher Self-Efficacy Training #3

26

Review: Lesson Plans

- Take out your lesson plans
- Think: Highlight components on your lesson plans in one color that demonstrate **Academic Discourse, Elaborate Interrogation, Instructional Materials** and **Deliberate Practice, Rehearsal and Memorization and Instructional Language** in another color
- Pair: Connect with a partner that catches your eyes first from across the room from you
 - Discuss your lesson plans and how to add these components into your daily pedagogy
 - Discuss how these components have engaged your African American students
- Share: Share out one way that your partner added the component and how you could do a similar activity in your classroom



27

Hide and Seek

- Will need 4 volunteers to become the seekers
 - Volunteers will leave the room
 - Volunteers will know the item that they are searching for prior to leaving the room
 - Remaining participants will stay in the room to receive additional instructions



28

Hide and Seek

- Will need to assign feedback styles to the 4 volunteers
 - Silent Feedback
 - Negative Feedback
 - Generic Positive Feedback
 - Specific Feedback



29

Hide and Seek

- Volunteers will rejoin the group
- Each will answer the following questions
 - How did you feel when you were searching the room?
 - How was your performance affected by the feedback? How was it helpful or harmful?
 - If this was the style of feedback that you received on a daily basis, how would it affect your ability to grow and your relationship with others on your team?



30

Effective Feedback

Feedback in learning can be defined as information allowing a learner to reduce the gap between where they are in their learning and the expectation for where they are going in their learning.

Specifically, feedback is information provided by an agent (e.g. teacher, peer, book, parent, self/experience) regarding aspects of one's performance or understanding that reduces the discrepancy between what is understood and what is aimed to be understood.

Effect Size: 0.64



31

50 Word Sentence

- Please get out one of the three read alouds that you brought with you that you plan to use in the near future
- Silently read your read aloud
- Write a grammatically sound and comprehensive 35-50 word sentence summarizing the text
 - The sentence should explain the key details of the text and fully explain the story to the best of your ability
 - Teach a partner your story using only the sentence that you have written
 - Get with another group and share your summaries



32

Summarizing

The ability to summarize a text is often taken as a marker of reading comprehension, and for this reason many scholars have advocated explicit summarization training for students who struggle with comprehension.

This can include deleting unnecessary material, deleting material that is redundant, substituting a subordinate term for a list of items or actions, selecting a topic sentence, and constructing a topic if one is only implicitly suggested by the text.

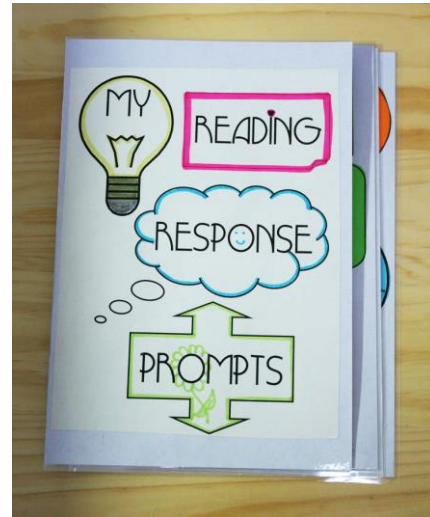
Effect Size: 0.74



33

Read alouds Part III

- Please get out another one of your three read alouds that you brought with you that you plan to use in the near future
- Use the following choice board for your read aloud:
 - Answer the five W's and share your favorite part of the story. Be sure to draw a picture.
 - Write a note to a friend recommending the book. Share key details but don't spoil the ending.
 - Do a four-square diagram with words and pictures of the characters, settings, problem, and solution.
 - Compare/Contrast. How is the story like and different from another story we've read?



34

Reading Response

Culturally Responsive Teaching Practice

- What does the text mean in context of students' lived experiences?
- How can this meaning contribute to their understanding, critical analysis, and clarification of the text?
- How can this meaning push students' thinking further into new inquiry?
- Do these practices provide choices for students?
- Are the ways in which students engage in responding to texts examples of equitable practices?
- Do the ways in which students respond to texts value the voices of students who have been historically marginalized? If not, how can we provide space for these voices as students respond to texts?
- How can we use reading responses to enact culturally responsive instruction?



35

Reading Response

- Includes the following:
 - Choice
 - Critical consumption and analysis of text
 - Provides space to integrate the lived experiences of students
 - Provides space to amplify student voices
 - Actively learn to recognize and affirm students' knowledge by asking students about their lives, listening to their answers, and taking part in the community of the neighborhood school

36

Activity to Connect Strategies to the Classroom

- Get into groups of three
- Grab an anchor chart
- Brainstorm activities that you could use to implement the Nine strategies
 - Academic Discourse
 - Elaborate Interrogation
 - Instructional Materials
 - Deliberate Practice
 - Rehearsal and Memorization
 - Instructional Language
 - Effective Feedback
 - Summarizing
 - Reading Response
- Share out whole group



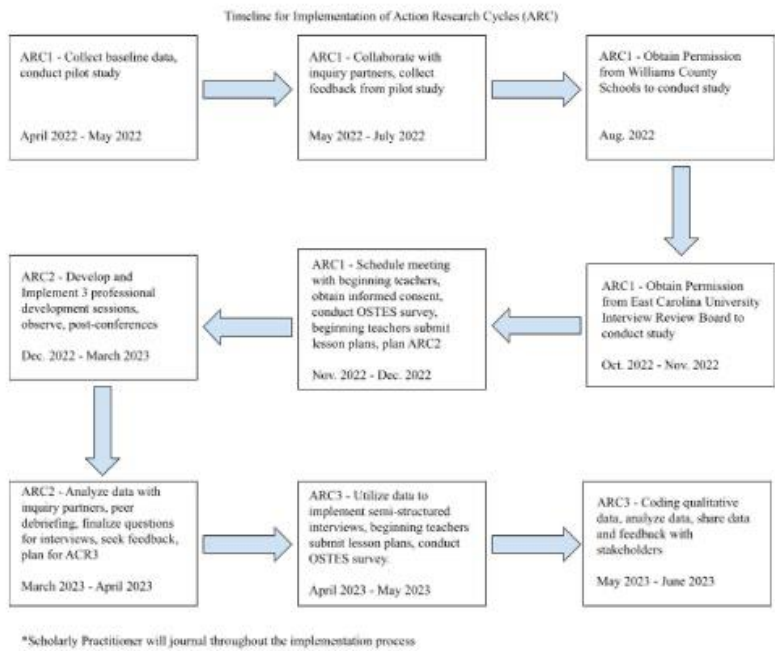
37

Next Steps

- Round #3 Observations and Post-Conferences
- Beginning Teacher Self-Efficacy Post-Professional Development Survey by
- Submit revised Lesson Plans to include Highly Effective Instructional Strategies and Culturally Responsive Teaching Practices by
- Interview Process
- Thank you



38



39

References

- Hattie, J., Bustamante, V., Almarode, J., Fisher, D., & Frey, N. (2020). *Great Teaching by Design: From Intention to Implementation in the Visible Learning Classroom*. Corwin.
- Ticknor, A. S., 1973, Howard, C., 1978, & Overstreet, M. (2021). *It's not "one more thing": culturally responsive and affirming strategies in K-12 literacy classrooms*. Rowman & Littlefield.

40

APPENDIX G: PRE-IMPLEMENTATION LESSON PLAN ARTIFACT

Learning-Focused Lesson Plan

Name: 2nd Grade

Topic: Math 11/7 through 11/22

Learning Goals for this Lesson	Standards: <u>2.MD.7</u> Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
Students Will Know: -how to tell time to the nearest 5 minutes	Students Will Be Able To: -identify the parts of the clock -show and read times on an analog clock -explain the steps of reading time to the nearest 5 minutes
Lesson Essential Question : How can I tell time to the nearest five minutes?	
Activating Strategy : Give students the materials to make their own clock. They can use paper plates to make their clocks. Have students discuss what the different types could be called. Watch the brainpop jr video for parts of a clock. video: https://www.youtube.com/watch?v=XbJtwg1K4ic	
Key vocabulary to preview and vocabulary strategy clock, digital, analog, minute, hour, time, seconds	
Lesson Instruction	
<p>Learning Activity 1:After viewing the brain pop video for parts of a clock, model with students how to label their clock (label the minute and hour hand, write the numbers and what they stand for). Tell the kids that since the WORD "minute" is longer than the WORD "hour" it is the longer hand. Explain that when we tell time the short hands shows us the hour and the long hand shows us the minutes. Tell students that we have to count by 5s to find the minutes. Make sure to explain the difference between an analog and digital clock. https://jr.brainpop.com/math/time/time-to-the-quarter-and-half-hour/ With a teacher clock (this is in your math kit) model showing different times and counting by 5s to find the minutes. Students can write the digital times on white boards. Relate measurement to time with measuring the time on the clock. Assessment Prompt for LA 1: Have them show the time 2:15 on their clocks (go around and check this).</p>	<p>Graphic Organizer</p> <p>Flow Map</p> <p>Centers Teacher Math Measurement & Data Trifold 2.MD.7 Book #1</p> <p>Partner Bus Time Center</p> <p>Challenge Envisions pages 477-478</p> <p>Computers Study Island- time</p>
<p>Learning Activity 2: Review the parts of the clock with students. View the brainpop video for Time to the Hour. Use the teacher clock to show some different times to the hour (12:00, 5:00). Have students practice showing different times on their clocks (1:00, 4:00). Complete the enVisions lesson 8-6. Play the visual learning video and complete page 473 whole group and 474 with partners. Have a student come up to the board to fill in #s 1-4. Tell them to explain how they know the time. Ask students: How are the hour and minute hands different? Which moves more in an hour-the hour hand or minute hand? Assessment Prompt for LA 2: Students complete page 475 and 476 independently. Pull struggling students to complete this with you at a small group.</p>	<p>Seesaw: Time Day 1 - Time to the Hour</p> <p>Time Day 2 - AM and PM</p> <p>Time: AM and PM</p> <p>Time Day 3 - Hour and Half Hour</p>
<p>Learning Activity 3: Review LA 2 by going over page 476 whole group. These are the higher order thinking questions for time. Have partners share how we tell time on analog clocks as a review. Tell students we will be learning how to tell time in a different way today-by telling time before and after the hour. View the brainpop for Time to Quarter and Half hour. Have students label these sayings on their own clocks. Model some times on your clock and have students share how we can say that time (ex show 7:15 and explain that it is quarter after 7). Complete enVisions lesson 8-7: visual learning, page 479 and 480 together. Assessment Prompt for LA 3: Students complete page 481 and 482 independently. Pull struggling students in a small group.</p>	

	<u>Time Check-in</u> <u>Time Day 5 - Time to 5 mins</u> <u>Time to 5 mins extra practice</u> <u>Time Day 6 - Draw Time</u> <u>Time Review</u> <u>Time CFA</u>
Learning Activity 4: Review previous activity. Have partners share with each other how to tell time. Partners can use their clocks to create some times for their partners to guess. Ervisions Lesson 8-8 AM and PM. Teacher input pages 485-486 Assessment Prompt for LA 4: Complete pages 487-488	Assignment: <u>Time Test</u> Measurement 8 Data Trifold 2.MD.7 Book #2
Summarizing Strategy Think-pair-share/Absent Student-Explain how you tell time on an analog clock	

APPENDIX H: POST-IMPLEMENTATION LESSON PLAN ARTIFACT

Learning-Focused Lesson Plan

Name: 2nd Grade

Topic: Reading Weeks of Feb. 6 and 13

Learning Goals for this Lesson	Standards: RI 2.6
Students Will Know: -organizational patterns of informational text -the main purpose of a text	Students Will Be Able To: -determine the topic of a text -explain why the author is writing the text -summarize the main purpose of the text
Lesson Essential Question : How do I identify the author's purpose of writing a text?	
Activating Strategy : Show a paragraph from the author's purpose powerpoint and have students discuss why they think the author wrote it.	
Key vocabulary to preview and vocabulary strategy answer explain describe purpose express inform	
Lesson instruction	
Learning Activity 1 Introduce ADE (we can show page 14 in the bundle), create a tree map using pg. 15 -17 of bundle. Use the ADE paragraphs to read aloud and discuss how the author is conveying their purpose. Assessment Prompt for LA 1: Students complete Sign Language passage with test question stems with their table groups. Wednesday/Thursday Seesaw: <u>How Do Authors Convey Their Purpose Day 2 Sort</u>	Assignment: Gabriel bundle quick check 2/10 RI 2.6 assessment (canvas CFA-Penguins) 2/17
Learning Activity 2: Pass out the Zoos passage to partners. Have students partner read the story and work on the question stems to identify the author's purpose. Assessment Prompt for LA 2: Ask students to discuss what evidence helped them determine the author's purpose. Finish Wed/Thurs seesaw	
Learning Activity 3: Read aloud How to Bake Cupcakes. Discuss the different steps to making cupcakes. What is the first step? What is the final step? Answer the questions together. Assessment Prompt for LA 3: Question stem: Write a sentence from the passage that conveyed the author's purpose.	

Learning Activity 4:

Review anchor chart for ADE. Split students into partners (high/low reader) for a gallery walk. Students walk around to explain what the author's purpose is for each paragraph.

Assessment Prompt for LA 4: Students complete 1 task card independently at their seat from the board.

Monday/Tuesday seesaw: How Authors Convey Their Purpose Task Cards

Learning Activity 5:

Review for the test using class tree map ADE and examples.

Assessment Prompt for LA 5: Take the mini bundle '8 paragraph' quick check.

Learning Activity 6:

Read 'Will an Egg Float' passage with question stems. (Gabe bundle).

Assessment Prompt for LA 6: Students work with a partner to discuss questions/answers for 'Float' passage.

Learning Activity 7:

Pass out multiple nonfiction books to table groups. Use page 30 of the bundle for students to write what they think the author's purpose is and why. ****Possibly Black History books****

Assessment Prompt for LA 7: Table groups can share out what they think the author's purpose was for a book they saw.

Summarizing Strategy 3-2-1

Academic Discourse
Elaborate Interrogation
Instructional Materials

Deliberate Practice
Rehearsal & Memorization
Instructional Language

