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A State of Emergency: The Experiences of Teachers in Professional Learning Communities from 1999 to 2018 in a Rural South Carolina School District

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by

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ABSTRACT

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This qualitative case study was conducted to develop an understanding of professional learning communities and other types of professional development and their impact on building educator capacity on student outcomes in Allendale County School District. This is a small rural underperforming district in which student performance has not improved over time despite the District being taken over by the South Carolina State Department of Education (SCDOE) on two separate occasions between 1999 and 2018. Research methods consisted of semi-structured interviews with a sample of 15 educators and administrators in Allendale, as well as a review of relevant documentation. The findings of the study indicate that much of the professional development provided in Allendale during the 1999-2018 period did not exhibit the characteristics identified in the literature for effective professional development, and was not based on the professional learning communities (PLC) approach which researchers have identified as effective in bringing about improvements in student performance. Much of the professional development provided for teachers over the past twenty years in Allendale has been short-term and fragmented; as a result, teachers perceived that it had little relevance to them and their students. The analysis of interviews and documentary evidence indicated that the potential of professional development for improving student performance in Allendale was hindered by numerous changes in school and district leadership and a confrontational and non-collaborative relationship between state and district officials. However, a result of the second state takeover

was a more systematic and collaborative approach to professional development strategies and implementation. Research findings will be utilized to support future implementation of a more effective PLC model in Allendale, and for avoidance of leadership relationships that have hindered its progress over the past twenty years.

DEDICATION

I dedicate this dissertation to my late grandparents Leonard “Skip” and Cecil Bing who instilled in all of the Bings that the race is not for the swiftest and that can’t been dead. A special feeling of gratitude to my loving and supportive husband, Dr. Eric D. Robinson. My daughter, Hayden, who never left my side and served as my inspiration many nights. In addition, it is dedicated to my parents, Nathaniel and Peggy O’Banner, for always being my biggest cheerleaders and believing in me when I didn’t believe in myself.

I also dedicate this work and give special thanks to my sister, Rafayele Bostick, her husband Reggie (the brother I never had) and my nephew Khalen. All of you are my rocks and reasons for enduring to the end.

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Chapter 1. Introduction

In an era of standards-based accountability, improving classroom instruction to increase student achievement is of prime importance (Capraro et al., 2016). DeYoung and Howley (1992) emphasized that the publication of *A Nation at Risk: The Imperative for Educational Reform* in 1983 contributed to a wave of local, state and federal reforms such as school district closures and takeovers to address the concern that schools were failing to produce students who had the skills and values to contribute to a national social and economic order. In 1989, New Jersey was the first state in the United States to takeover a local school district. Since then, many other state governments including the South Carolina State Department of Education (SCDOE) have exercised their authority to take over low-performing or poorly-managed school districts. In 2013, more than 30 states in the United States had legislation which allowed state officials to take over a school district for academic or fiscal reasons (Bowman, 2013). The South Carolina Education Accountability Act of 1998 contained provisions that would allow for the takeover of individual schools and districts (SC Education Oversight Committee [SCEOC], 2008). This legislation also contained provisions outlining a school district rating system as well as a process for school districts rated below average to improve their performance. Morel (2018) found that over a hundred school districts in the United States have been taken over by state officials.

In 2001, another shift in the educational landscape in the United States occurred with the enactment of the No Child Left Behind Act (NCLB). State and district leaders were required to identify gaps in achievement between subgroups and ignited another national dialogue centered on educational reform (Husband & Hunt, 2015; Haug & Sands, 2013). Finnigan, Daley, and Che (2013) emphasized that the main strength of NCLB is embedded in the accountability criteria requiring adequate yearly progress (AYP) towards benchmarks for all students regardless of their

ethnicity, disability, home language, or socioeconomic background. NCLB made provisions for strong, progressive sanctions for schools and districts which did not meet their targets. During the 2010-2011 school year, over 16,000 schools in the United States failed to meet the targets established by NCLB and were identified as not making AYP (Finnigan, Daly & Che, 2013).

Background and Context

Allendale County School District is located in the lower southern corner of South Carolina. The United States Census Bureau [US Census] (2018) indicated that Allendale County School District is in a rural county with a population of 9,000, a decline from 10,419 in 2000. The racial makeup of the county in 2018 was 73.3% black or African American, 24.7% white, 0.7% Asian, 0.4% American Indian, 1.3% other races, and 0.9% from two or more races (US Census, 2018). Once a thriving railroad community which is part of the infamous Highway 301 and home to the University of South Carolina Salkehatchie regional campus, the median income for an Allendale County School District family in 2018 was $24,817 and 38.2% of the population were living below the poverty line (US Census, 2018). Allendale County School District is a small, rural school district with an enrollment of 1,210 students divided among four schools: one primary school, one elementary school, one middle school, and one high school, with a total of approximately 87 teachers (SCDOE, 2018). A review of Allendale County School District state-issued school report cards showed a trend of below average and at-risk ratings over ten years. Results of the 2017 SC Ready Assessment, which was administered to 3rd through 8th graders, indicated that only 14.6% of Allendale County School District students either met or exceeded the expected standards in English as compared to 40% statewide and that only 13.9% exceeded or met the expected standards in math as compared to 42.1% statewide. State report

card data also showed evidence of a high annual teacher turnover of more than 20% for the preceding five years (SCDOE, 2018).

The Takeovers. In 1999, the South Carolina State Superintendent of Education, Inez Tenenbaum, exercised her authority to take control of Allendale County School District. This action was the first of its kind in state history and was implemented amid accusations of mismanagement at the district level and evidence that student achievement was ranked almost lowest in the state. The Allendale County School District 1999 state report showed that despite the district spending $600 more each year in per pupil spending compared to the SC average of $5,721, the district had the lowest third grade reading scores in the state (SCDOE, 2018). Only 53% of the third graders showed minimal reading skills at their grade level as compared with 84.4% of students statewide (SCDOE, 2018). The 1999 report card also revealed that over one-quarter of Allendale County School District teachers were not properly certified and that minimal professional development and trainings were offered by the district (SCDOE, 2018).

In 2007, after eight years of state control, South Carolina Department of Education officials returned the district to local control (SCDOE, 2018). Evidence from district report cards indicated that modest progress had been achieved; however, that advancement still fell short of meeting the required levels of proficiency (SCDOE, 2018). Table 1 shows the district state report card ratings from 2004-2008 (SCDOE, 2018).

Table 1.

Allendale County School District 2004-2008 State Report Card Ratings

Year	Absolute Rating	Growth Rating
2008	At-Risk	Below Average
2007	At-Risk	At-Risk
2006	At-Risk	At-Risk
2005	At-Risk	Average
2004	Below Average	Excellent

Ten years later, in June 2017, South Carolina State Superintendent Molly Spearman declared a state of emergency and initiated a second state takeover of Allendale County School District. Unlike the 2007 takeover, which was adamantly opposed by both parents and school board members, the 2017 takeover was supported by parents. Like the 2007 takeover, however the 2017 takeover was opposed by the local school board members (SCDOE, 2018).

State report cards indicate that Allendale County School District reported the worst achievement scores on standardized tests during the 2017 school term. The report card indicated that more than 80 percent of students in grades three through eight did not meet expectations in math and reading and not a single 11th grader received an overall ACT score deemed college ready. Provisions of the Memorandum of Agreement between Allendale County School District and the SCDOE resulted in the District receiving an interim superintendent, one transformational leader, and three transformational coaches in addition to the existing school-level literacy coaches, in order to help improve district performance in the 2017-2018 school term (SCDOE, 2018).

Statement of the Problem

Allendale County School District continues to have low student achievement despite two state takeovers and subsequent professional development initiatives aimed at reducing the student achievement gap. Research indicates that high quality professional development is one of the most effective methods for improving teacher instructional capacity, instructional practices, and student achievement (Cohen & Hill, 2000; Darling-Hammond & McLaughlin, 1995; Yoon et al., 2007). Every year, state departments of education and local school districts provide teachers with professional development opportunities yet, in many cases, student achievement scores do not subsequently increase. Franey (2015) observed that, despite research evidence of effective forms of professional development, it is common practice for school districts to provide teachers with short-term, ineffective professional development sessions. As a result, teacher instructional capacity does not improve, teaching practices do not change, and student achievement remains unsatisfactory (Darling-Hammond, Gardner & Espinoza, 2017). A review of Allendale County School District financial reports indicated that over $14,000 per pupil was spent in 2017, well above the average per pupil spending in many other SC districts; yet, student achievement scores consistently fell in the unsatisfactory range on state-wide standardized assessments (SCDOE, 2018). There is little information available as to why teacher instructional capacity, instructional practices, and student performance does not improve in rural school districts that have been taken over by the state.

Statement of the Purpose

The purpose of this qualitative case study was to examine educator experiences during professional learning communities from 1999 to 2018 to understand the impact of building and supporting teacher instructional capacity and effective instructional strategies in Allendale

County School District. The case study of Allendale County School District will thus provide an opportunity to investigate the use of various professional development initiatives, strategies, and characteristics in a rural school district that has been taken over by the state, and the perceived ways in which these hinder or promote teacher growth and improvements in student achievement and outcomes. Based on the findings, recommendations will be made for professional development and reform initiatives.

Significance of the Study

One of the primary purposes of a state department takeover of a school district is to improve student achievement and introduce new strategies for improvement into districts and schools (Pennington, 2014). Bowman (2013) challenged that many school districts that are taken over do not subsequently show significant academic improvement. Leithwood (2010) found that educational reforms initiated on a large scale have had little success in closing the academic achievement gaps between students of different economic, social, and cultural backgrounds. However, Bambrick-Santoyo (2018) maintain that when students in low-socioeconomic status schools can obtain three consecutive years of strong teaching the achievement gap closes.

For more than ten years, state and federal policy documents have included professional development for educators as a strategy for school reform (Rucinski, 2017). As professional development is aligned through research with increases in student achievement, a closer examination of the multi-billion, dollar industry is needed (Grossman & Hirsch, 2009).

Previous research on professional development has mainly been conducted in urban districts across the nation where professional development initiatives appear to have resulted in improved student achievement (Shannon & Bylsma, 2004). Previous research on professional development in rural settings is sparse, but has “identified teacher collaborative learning and

teacher-led professional development as potentially promising professional development structures for rural settings" (Peltola, Haynes, Clymer, McMillan, & Williams, 2017, p. 2).

By conducting this study, the researcher sought to obtain a better understanding of teacher experiences of professional development activities such as professional learning communities in Allendale County School District from 1999 to 2018. The study will provide important insights into the specific types of teacher professional development that are believed to have a positive influence on student achievement; thereby, addressing current gaps in knowledge and understanding.

Findings from the proposed qualitative study may be utilized to generate insights into the use of professional learning communities and other types of professional development and their impact on student achievement. It will extend the research literature relating to the professional development frameworks needed to close the student achievement gaps in rural school districts that have been taken over by the state. This research may also be used to generate practical findings to help inform investment and resource allocation decisions regarding professional development for teachers, with expected positive impacts on student achievement outcomes.

Research Questions

A qualitative methodology of case study was utilized to address the following research questions:

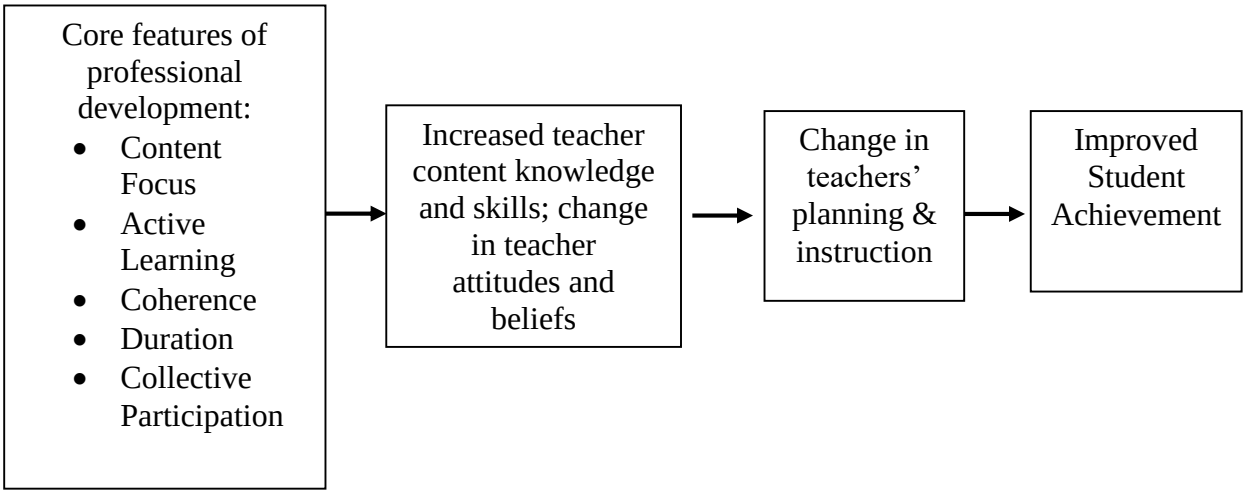
1. How were district and school professional development initiatives addressed in professional learning communities from 1999 to 2018?
2. How did participation in professional learning communities from 1999 to 2018 influence teacher instructional capacity and classroom practices?

Theoretical Framework

A theoretical framework "adds philosophical richness and depth to a case study and provides direction for the design of the case study research project" (Jones, Torres, & Armino, 2006, p. 54). The theoretical framework in which this study is grounded is based on work done by Desimone (2009). This five-feature framework for effective professional development proposed that for professional development to be effective in improving teaching practice and student learning, the following five characteristics or features need to be in place: content focus, active learning, coherence, sustained duration, and collective participation. Figure 1 illustrates the conceptual framework Desimone (2009) developed for teacher professional development.

Figure 1.

Conceptual Framework for Evaluating the Effects of Professional Development on Teacher Growth and Student Achievement (from Desimone, 2009)



Limitations and Delimitations

Rossman and Rallis (2011) explained that limitations of a study expose the conditions that may weaken the study. Interviews are selected as one of the primary methods for data collection in this research. Although interviews have certain strengths, Rubin and Rubin (2011)

deduced that there are three limitations associated with using interviews as a data collection method: 1) not all participants are equally articulate and perceptive, 2) interviews require researcher skills, and 3) interviews are not neutral tools of data gathering; they are the result of the interaction between the interviewer and interviewee and the context in which they take place. The limitations of this study include that the researcher will have to follow a well-structured set of interview questions to reduce bias and subjectivity. Fifteen face-to-face interviews will also require many hours to gather qualitative data. Another limitation of this research study is the restricted research sample size. Critiques of qualitative research may question the limited possibility of generalizing this study to other groups and districts. The objective of qualitative research is to develop in-depth insights about a specific phenomenon, in this case the professional development experiences of educators in a single, small school district in South Carolina. As such, generalizability is not the intended goal of this study but instead the researcher intends to address the issue of transferability by way of thick, rich descriptions, as well as detailing information regarding the context and background of the study so that the applicability and relevance of the findings to similar school district contexts can be determined (Lincoln & Guba, 1985). A further potential limitation relates to the use of purposive sampling to select research participants, and the small number of participants in different job roles (e.g. teachers, school principals, district administrators), which may have introduced some bias into the findings. Although the researcher took care not to select participants known to have particular views or experiences, it is not possible to determine how the extent to which these would be shared by others in similar job roles in the district.

Bloomberg and Volpe (2012) explained that delimitations of a study clarify the boundaries of a study and narrow the scope of the study. A delimitation of this study is that it

will not include the experiences or perspectives of Allendale County School District school board members during the 1999 and 2018 state takeovers. Another delimitation of this study is that it will not include the experiences or perspectives of Allendale County School District teachers who did not actively participate in professional development activities during either of the state takeovers. Further, though the sample was drawn from individuals currently and formerly employed by the district, high levels of teacher and leader turnover in Allendale County School District meant that the researcher was unable to capture the views of many individuals who had already left the district, whose views and experiences of professional development might have been different from those of the research participants.

Definitions of Terms

For the purpose of this research, the following terms are defined:

Classroom practices: Rituals and routines that are established in a classroom setting and implemented by educators (Stuart &Thurlow, 2000).

Coaching: A professional development opportunity that emphasizes the sharing of expertise about content and evidence based practices, focused directly on teachers' individual needs through job-embedded practices, intense and sustained durations, and active learning (Blazar & Kraft, 2015).

Collaboration: A professional development structure in which teachers learn by engaging in meaningful conversations to share ideas, knowledge, concerns, resources, stories, and outcomes about instruction and assessments in order to learn from the experiences, successes and failures about new content or instructional approaches of all participants (Peltola et al., 2017).

Instructional Lead Teacher: Educator that leads in co-taught class, leads teacher team, and/or works with new or struggling teachers to improve instruction (Public Impact, 2014).

Professional Learning Communities (PLCs): "Teams of teachers who have committed to meeting on a regular basis to examine their teaching practices, the strategies they use, and the effects of those practices on the students with whom they work" (Rucinski, 2017, p. 3.)

State Takeover: Reconstitution of a school district by the state department of education or legislature which practices such as the restructuring of school leadership, i.e., replacing a superintendent, school principal, and other school/district administrators; mandatory redesign of a school/district's curriculum and instructional practices; and/or takeover of school governance (Ruda, 2001).

Teacher Instructional Capacity: The potential for educators to continue to develop their knowledge, skills and dispositions along the learning continuum (Cochran-Smith, Feiman-Nemser, McIntyre, & Demers, 2008).

Summary

In Chapter 1, the study was introduced and background and contextual information was provided. The problem, purpose and significance of the study were explained and a description of the conceptual framework was presented. Two research questions, assumptions, limitations, delimitations, and the scope of the study were provided. Finally, key terms used in the dissertation were defined. In Chapter 2, a review of literature providing further background and context for the research is provided.

Chapter 2. Literature Review

The purpose of this qualitative case study was to examine educator experiences during professional learning communities from 1999 to 2018 to understand the impact of building and supporting teacher instructional capacity and effective instructional strategies in Allendale County School District. An initial review of relevant literature was conducted to help inform the design of the study and the development of the conceptual framework, and to enable the researcher to compare and contrast the findings with those of previous researchers (Bloomberg & Volpe, 2012). Specifically, six main areas of literature were reviewed: (a) definitions of professional development; (b) professional development in the context of state takeovers; (c) types of professional development for teachers; (d) the characteristics of ineffective professional development, (e) the characteristics of effective professional development and of schools that are effective in implementing professional development, and (f) impacts of professional development on student achievement.

The review of literature provides the framework for an understanding of the context, policies, and regulations relating to professional development in which teachers must participate as a requirement of their district or state regulations for maintaining certification. Literature on types of professional development for teachers was reviewed to provide a lens for understanding the primary research findings on the professional development experiences of teachers and the knowledge, skills, and attitudes teachers require as adult learners in order to improve student achievement. The literature review covered the historical development of professional development in education from research conducted by Dewey in 1904 to the present. Apparent gaps in the literature have been highlighted in the review where these were apparent, and all relevant or contested issues are identified and discussed.

Definitions of Professional Development

In the 21st century field of education, professional development has been defined and discussed in many different ways, but the key elements in definitions of professional development generally include a change in the knowledge base of teachers, a shift in instructional strategies, and documented student growth. Definitions which focus primarily on teacher learning and change in teaching practices include those of Chambers, Lam and Mahitivanichcha (2008), who refer to professional development as “all activities that help education professionals develop the skills and knowledge required to achieve their school’s education goals and meet the needs of students” (p. 4), and Darling-Hammond, et al. (2017), who discuss effective professional development as “structured professional learning that results in changes to teacher knowledge and practices, and improvements in student learning outcomes” (p. 2). Similarly, Guskey (2002) refers to "systematic efforts to bring about change in the classroom practices of teachers, in their attitudes and beliefs, and in the learning outcomes of students" (p. 381).

Focusing on the condition of improvements in student outcomes, Odden, Archibald, Fermanich and Gallagher (2002) emphasize that professional development “produces change in teachers’ classroom-based instructional practice, which can be linked to improvements in student learning” (p. 53). Producing this change in teachers is part of the intrinsic growth required to promote individual, school and district increases in student achievement. Considering teacher professional development in more general terms, Mizell (2010) explains that it is "the strategy schools and districts use to ensure that educators continue to strengthen their practice throughout their career.” (p. 1). Professional educators have an ingrained desire to sustain instructional teaching capacity which carries over from year to year with all learners. Haug and Sands (2013)

point out that the professional learning of teachers is a complex phenomenon involving interactions among teachers, students, content, environments, resources, student learning and teacher practices. Brock (2015) suggested that the terms professional development and professional learning are interchangeable because professional development must necessarily involve professional learning and vice versa. In the literature, professional development is often associated with other terms including teacher practice, continuing professional development, teacher learning, professional learning, professional learning community (PLC), professional learning network, mentoring, coaching, action research, workshops, seminars, and in-service.

One can surmise that the variation in definitions of professional development and the wide and confusing range of terms associated with it may have led to a state of flux among educators as district and school level administrators grapple with the challenge of providing teachers with the necessary tools to become adept at the task of educating students. There is no agreed-upon definition or shared understanding of the term professional development in the context of education. Buysee, Winton and Rouse (2009) contend that the absence of a standard definition is likely to be contributing to the failure to develop a common vision for the implementation of effective professional development in U.S. education and the resulting lack of academic improvements.

To further complicate matters, professional development has many different purposes within education. The various purposes of formal professional development sessions include, for example, the introduction of new state teacher evaluation models or new textbook and curriculum adoptions, discussions about classroom management strategies, growth mindset research or district-wide technology initiatives, and continuing education credits for teachers (Trust, Krutka, & Carpenter, 2016). Even these do not encompass the full range of professional

development opportunities. Trust, Krutka and Carpenter (2016) contend that policy makers should consider creating more inclusive definitions of professional learning that encompass participant-driven, voluntary professional activities.

Historical analysis of professional development would indicate that it has the been a central element in recent education reform in the United States. The NCLB Act of 2001 (NCLB, 2002) contained provisions to address a need to immerse educators in learning opportunities, and in doing so outlined how these opportunities should meet the following criteria for professional development: (1) it is sustained, intensive, and content-focused--to have a positive and lasting impact on classroom instruction and teacher performance; (2) it is aligned with and directly related to state academic content standards, student achievement standards, and assessments; (3) it improves and increases teachers' knowledge of the subjects they teach; (4) it advances teachers' understanding of effective instructional strategies founded on scientifically based research; and (5) it is regularly evaluated for effects on teacher effectiveness and student achievement. Despite this specification of the requirements of professional development, it has been determined that the Act did not contain adequate guidance related to the requirements of such programs or how they should be implemented, resulting in very mixed success (Borko, 2004).

Professional Development Initiatives During State Takeovers

Researchers of educational reform and change have increasingly identified a need to study the role of district leaders in closing the student achievement gaps and in school improvement efforts (Seller, 2005). Leithwood (2010) observed that school districts and district administrators have taken on major roles in the continuing debate centered around the topic of school reform. Districts and schools are central to the implementation of effective, research-based professional development practices, because state departments of education do not have a

high level of control over the local professional development of teachers even in a takeover situation. Wong and Shen (2002) insists that there is a need for intensive and systematic studies linking district reform to the school level and class level.

To a great extent, the success of large-scale education reforms is reliant on the effectiveness of teachers, as pointed out by Garet, Porter, Desimone, Birman, and Yoon (2001). Fullan (2014) states that teachers are the single most important education force relative to student learning. According to Marzano, Frontier, and Livingston (2011) achievement in classes with highly skilled teachers is better than student achievement in classes with less skilled teachers. Mizell (2010) observes that the most important factors in improving student performance levels are quality of teaching and the standard of school leadership. As a result, teacher professional development is a major focus of systematic reform initiatives intended to increase student achievement (Grossman & Hirsch, 2009). Helping teachers hone their practices is paramount to improving student outcomes on performance assessments and in classroom learning activities. But according to Gewertz (2009), few improvements have occurred in achievement levels in the most under-performing schools and districts, even though this has been a top priority goal at the highest levels of government. The literature provides valuable insights into why this might be the case.

Chambers et al. (2008) emphasize the importance of proper management and implementation of investments in professional development. Systemic reform requires knowledgeable leaders who are able to encourage teachers to take ownership of the professional development offered and transfer it to the classroom setting. The recommended approach to professional development by Chambers et al. (2008) considers the time needed to identify individual and group teacher deficits and take the necessary actions to correct or improve their

instructional teaching capacity. At the state and district level, it is important to identify the strategies that directly improve teachers' knowledge, skills, and practices and measure the associated costs and benefits so that funds are invested in the most effective approaches (Chambers et al., 2008). Schueler, Goodman and Deming (2017) similarly acknowledge that improvements in performance will not occur overnight and need to be planned appropriately. They point out that the risk of rushing into professional development initiatives is that these might not be adequately focused on what needs to change in order to bring about the desired improvements. Cohen (1990) and Elmore and Burney (1996) have pointed out that the haphazardness and volume of professional development opportunities being offered can lead to frustration and confusion on the part of teachers. At the same time, the short duration of staff development sessions for many teachers may not be sufficient to provide the expertise needed to implement the changes necessary to improve student performance.

In a state takeover situation, it is imperative to identify the right composition of professional development opportunities to sustain teacher instructional capacity and promote effective instructional strategies. Recent developments and reforms in professional development have resulted in a wide range of options, including professional learning communities, professional learning networks, mentoring, coaching, and participation in active learning projects. The various categories and types of professional development as documented in the literature are discussed in the following two sections: the first covers the main findings of literature relating to the various types of professional development for teachers, and the second discusses literature relating specifically to professional learning communities, which are the main focus of the present study.

Types of Professional Development

Franey (2015) observes that professional development practices and programs for teachers fall into two broad categories: traditional and reform-related. According to his categorization, "the traditional structure of professional development for teachers is a 'one-size-fits-all' approach, where all teachers, regardless of their differences are provided the same professional development" (Franey, 2015, p. 1). Similarly, Watts (1980) equated one-size fits all approaches to a generic drug that is given to all patients regardless of their diagnosis or even if they are ill at all.

One-day or Occasional Workshops. Traditional professional development characteristically consists of brief occasional workshops in which a facilitator transmits information to teachers about instructional practices. Evidence from national surveys continually shows that most teachers still attend traditional, workshop-style forms of professional development (Hunzicker, 2011). Before the implementation of the NCLB (2002) legislation, which defined all professional development funded through the law to include activities that are not one-day or short-term workshops or conferences, professional development practices in districts were gradually being reformed (Colbert, Brown & Choi, 2008; Thomas & Magilvy, 2008). Colbert et al. (2008) observe that due to the NCLB requirements for standardization in education, a top-down, non-collaborative approach to teacher development has returned in recent years.

Mentors and Coaches. Mentoring can be as informal as two teachers having a conversation in the lounge to formally assigned mentors that receive stipends. Two mentoring options are full-release or site-based. Full-release mentors are full-time teachers that only serve as full-time district assigned mentors (Fletcher & Strong, 2009). Fletcher and Strong (2009)

define site-based mentors as teachers that are assigned within their schools to serve as mentors to other teachers in addition to their regular teaching roles. Researchers found that students associated with full-release mentors had better achievement gains than students associated with site-based mentors (Fletcher & Strong, 2009). Mentoring has been increasingly used within education in recent years and has been proving effective in helping to raise academic achievement levels. Mizell (2010) found that "new teachers who received intensive mentoring had a significant effect on student achievement after as little as two years" (p. 6). Rockoff (2008) synthesized that research shows that student achievement in both reading and math was higher among teachers receiving more hours of mentoring, lending credence to the assumption that more time with a mentor improves teaching skills. Ingersoll and Strong (2011) found that students of beginning teachers who participated in induction mentoring programs had higher scores, or gains, on academic achievement tests.

Shank (2005) noted that it common practice for a more experienced teacher to be appointed to be a mentor or coach to a beginning or less experienced teacher. In a variation on this, peer coaching involves teachers acting as coaches to one another as equals, by taking turns to observe and provide feedback to one another, as well as advice and support (Ackland, 1991). Nelson and Bohanon (2019) explained the role of dedicated educational coaches or individuals who are appointed to support the roles and development of teachers. When used effectively, coaches develop close partnerships with teachers. They identify areas of improvement as well as highlighting teacher’s strengths and can thus play an important role in helping identify and support the best forms of professional development. Ackland (1991) acknowledge that regardless of the form used, it is important that coaching or mentoring is respectful and trust based, providing constructive but not judgmental feedback. Adequate time must also be allocated to the

process (Showers & Joyce, 1996). Research by Showers and Joyce (1996) and Bowman and McCormick (2000) provided evidence that teachers who took part in peer coaching were more likely than others to reflect on their own performance and implement positive changes to their classroom practices.

In-Class Observations. In-class observations were an important component of school reform initiatives of the 1980s and 1990s, and have continued mainly as annual or biannual observations by school administrators who collect data for the purpose of evaluating school performance. The more formal approaches such as data walks (Bloom, 2007) are more often used to generate school-level data on classroom practices rather than a professional development initiative. When in-class observations are used only for this purpose they are of little value as a professional development tool (Shaha, Glassett & Copas, 2015b). Classroom observations have also been part of a trend in which principals were encouraged to be instructional leaders by observing the teachers in their school and providing feedback to help them develop and improve their practices (Ing, 2010). The practice of classroom observations has become widespread. Ing (2010) found that more than 80% of principals were conducting informal classroom observations either daily or several times a week, with most of the observations taking between one and five minutes. Ing (2010) stressed that observations are only effective in contributing to professional development if sufficient time is allocated for reflection, follow-up, and discussion between the principal and the observed teachers. Shaha et al. (2015b) confirmed that frequent in-class observations combined with constructive feedback on performance and the availability of appropriate professional development tools and resources have positive impacts on teaching practice and on student performance.

Online Professional Development Tools. Developments in technology have brought about new opportunities for the use of online professional development tools and resources by teachers. Accessed via the Internet, online professional development opportunities have the advantage of being cost effective compared with traditional in-person professional development. Districts and schools are able to avoid the costs involved with organizing and implementing face-to-face training and the frequent loss of instructional time when these take place during the working day (Hansen, Hansen & Anderson (2012); Nelson & Bohanon, 2019).

One of the main advantages of online learning is that it enables teachers to participate in sessions at their own pace. Hansen et al. (2012) examined the benefits and challenges experienced when implementing an e-learning professional development system for schoolteachers and found that whether or not learning is online or in-person the important thing is that it is felt to be relevant to teachers' daily practice and goal-oriented.

Nelson and Bohanon (2019) note that online learning often involves generating specific outputs such as lesson plans, learning goals, and can be customized to teacher's school and classroom situation and development needs. It may also include the use of online facilitators who can assess understanding and engage with teachers when they need support or feedback (Nelson & Bohanon, 2019). One of the most effective forms of online learning is based on a learning community model in which individual teachers can interact not just with the facilitator but with their fellow teachers. During these interactions, the teachers share information online about best practices and provide support for one another on discussion boards (Shaha et al., 2015b). These forms of collaborative online learning are based on an asynchronous communication model which Nelson and Bohanon (2019) point out allows teachers to engage in deeper reflection and learning than in a real-time communication situation.

Shaha, Glassett, and Copas (2015a; 2015) deduced that there is evidence that the use of on-demand, online professional development by teachers has significant positive impacts on student performance. Clayton-Code (2015) evaluated the use of an interactive online professional development course intended to encourage teachers in middle and secondary schools to incorporate personal finance education across the curriculum, and the findings revealed an improvement in teacher attitudes towards teaching personal finance and in student knowledge of personal finance. In each weekly learning session, teachers were required to do online reading and activities and participate in online discussions. Hansen, Hansen and Anderson (2012) found that blended learning models involving both face-to-face and online learning can be effective forms of teacher professional development. Shaha et al. (2015a; 2015b) found that online professional development resources were effective in improving teacher practice when combined with classroom observations to provide feedback on performance.

Professional Learning Networks (PLNs)

Trust (2012) defines PLNs as a "system of interpersonal connections and resources that support informal learning" (p.133). These networks allow teachers and mentors to connect across schools and districts in ways that provide many forms of support, especially for novice teachers. According to Trust, Carpenter and Krutka (2017) they provide not only personal contacts who can provide them with ideas, support, feedback and collaboration opportunities, but also offer spaces in which this interaction occurs, as well as collaborative and information-based tools. These authors observe that PLNs tend to differ widely in their composition and characteristics, since they are developed in ways that support the personalized learning of the individual participants.

Two main types of PLNs were defined by Trust (2012): information aggregation PLNs and social media connection PLNs. He explained that the information aggregation category of PLNs enables teachers to access information relevant to their learning and development via relevant online news sites and Really Simple Syndication (RSS) feeds. In the social media connection category of PLNs, teachers use social media sites such as Facebook and Twitter as well as online forums and discussion boards or video-conferencing tools such as Skype to communicate either in asynchronous or real time with other teachers, sharing information, seeking feedback on problems or collaborating on projects. Trust (2012) observed that PLNs provide an online space for a network of teachers to collectively build and share knowledge and find solutions to problems they face. PLNS might be local, regional or global in nature, or may even exist within a single school, facilitating communications and collaboration between teachers who would not necessarily usually work closely together. Taking this into account, Brown (2019) defines PLNs as "any group who engage in collaborative learning with others outside of their everyday community of practice" (p.1). However, Brown (2019) observes, PLNs are often geographically limited or focused, because teachers within a particular geographic area are often more likely to have shared interests and needs, as well as a common understanding and even a shared history.

Fullan (2014) documented many benefits of PLNs that are working effectively and detailed how PLNs make the case that connected learning, within and across schools and systems, is the only way for whole systems to improve and keep improving. Trust, Krutka, and Carpenter (2016) conducted a qualitative study to investigate teachers' experiences of PLNs and found that due to the widespread availability of these and their ability to provide support for teachers' diverse interests and needs, they offer valuable opportunities for supporting the

professional growth of teachers, especially when they need assistance in a particular area. Drawing on a review of previous literature, Brown (2019) observed that PLNs can have a positive impact on a range of factors including the professional learning of participating teachers; the development of a more learning-focused and enquiry-based culture within participating schools; an improvement in the innovation potential of participating schools due to an enhanced ability to collect, create and share knowledge and information on new practices; improvements in teaching practice and student outcomes; and improvements in the provision of education in disadvantaged areas.

However, the ability to secure such benefits depends on the quality of the network itself. Brown (2019) noted that previous studies have generated mixed findings on the impacts of PLNs on student achievement and other outcomes, or have failed to show any association between PLN activity and student outcomes at the school level. Based on the research evidence, Brown (2019) concluded that the most important factors in contributing to the effectiveness of PLNs include effective, trust-based collaboration, a clear focus on specific goals or topics, strong leadership of the PLN as well as the support of school leaders, and long-term commitment to the initiative, as it often takes at least several years for measurable outcomes to be generated. In contrast, professional learning communities are school-based learning organizations which have become an increasing focus of education policy in recent years and are discussed in the following section.

Professional Learning Communities (PLCs)

In contrast with PLNs which are informal and often geographically dispersed networks of teachers who are most likely to interact and communicate online, professional learning communities (PLCs) are school-based learning organizations. These are intended to promote

student achievement by ensuring that the schools constitute complete communities of learning, with a culture which supports this (Sergiovanni, 1996). Mundschenk and Fuchs (2016) describe PLCs as settings in which teachers learn from and with each other, and come to see themselves as a community of teachers who focus on the implementation of new ideas and practices tailored to their individual strengths and capacities and in which they reflect on their individual and collective teaching and its impact on student learning, and jointly analyze data from a variety of sources that lead to an examination of instruction where learner-centered challenges are reframed as instructional challenges, where teaching practice is examined, where teachers observe one another, and where feedback and debriefing are consistently evident.

PLCs are based on the theories of practice concept introduced by Argyris and Schon (1974) and also influenced by the notion of experiential learning illustrated by Dewey (1904) which emphasizes the importance of experience and reflection in the learning process (Miettinen, 2000). Sergiovanni (1996) explains that by facilitating a culture which encourages inquiry and ensuring there is capacity for this, students and teachers alike are encouraged to become lifelong learners. In a similar way, Rucinski (2017) explained that the use of PLCs as a school reform strategy is generally based on decisions to implement an approach that will enable teachers to continuously learn from their practices. Further explaining this, Stewart (2014) describes PLCs as "a shift from passive and intermittent professional development to that which is active, consistent, based in the teaching environment, and supported by peers in a professional learning community" (p. 28).

Hord (2009) emphasized that quality of teaching has the biggest influence on student learning and that PLCs are an important vehicle for improving this. Similarly, Lieberman and McLaughlin (1992) highlight the importance of developing a school-based community of

learners, rather than encouraging individual teachers to develop specific skills which they assert is a less effective approach. Sykes (1996) concluded that professional communities represent an invaluable resource for teachers to learn about problems of practice and how to overcome these. Noting that PLCs have specific characteristics which distinguish them from other forms of teacher professional development for teachers, Hord (1997) drew on a review of previous literature to define these characteristics as: 1) supportive and shared leadership (Avenell, 2007; Hipp & Huffman, 2003); 2) shared values and vision (Stoll et al., 2006); 3) collective learning and the application of that learning (DuFour, DuFour, Eaker & Many, 2006); 4) shared practice (Mitchell, Wood & Young, 2001), and 5) supportive conditions for the maintenance of the learning community (Fullan, 2006).

In recent years, there has been an increasing policy focus on PLCs. Ronfeldt, Farmer, McQueen and Grissom (2015) noted that, in contrast to the traditional approach in which teachers work in isolation, some policymakers have pushed to transform schools into places where teachers work collectively and which provide structured opportunities for collaborative learning. Many schools following this model have mandated weekly collaboration meetings and data sessions, which encourage teachers to support each other and share ideas, and some of which are attended or led by coaches, instructional leaders or administrators. Teachers are asked to constantly expand their skills through new learning and increasing knowledge. Teachers are pushed to further their skill-set acquisition in response to the changing environment and new professional development engagements. There is a universal push for teachers to respond and change to many external forces and pressures. Teachers are also encouraged to reflect collectively on teaching practices, and to take ownership of and implement the decisions made at their weekly meetings. DuFour and Marzono (2009) challenged that is better for instructional

leaders to allocate time to building the capacity of teachers working as groups than to spend hours observing teachers individually.

Although PLCs have been widely documented in the educational literature as representing best practices in personal development for teachers; Evers and Walberg (2002), Preedy, Glatter and Wise (2003), and Teddlie and Reynolds (2000) have observed that in practice there have been relatively few systematic opportunities for teachers to interact for professional development purposes within PLCs or externally. Despite the documented benefits of PLCs, Blankenstein (2004) believed that “it is more common to find school professionals who say they are part of a learning community than it is to actually find a professional learning community in operation" (p. 51). Blankenstein (2004) observed that while many schools strive to become professional learning communities, they often struggle to come to a common understanding of what this entails, and lack the collective urgency and organizational conditions that are required. As Zeichner and Noffke (2001) note, many teachers have not been properly trained to conduct the types of research essential to identify and implement best practice, and the research currently being carried out is often of a poor standard and used primarily to help endorse current practices rather than improving them. The time pressures experienced by most teachers also make it difficult to conduct research on the effectiveness of PLCs on improving teacher instructional capacity (Zeichner & Noffke, 2001).

Dufor (2004) notes that where collaborative initiatives had been implemented in schools, these were often focused on operational or student behavioral issues, and not on conducting research or sharing best teaching practices for the purpose of improving the academic achievement of students. Where they are limited in this away, the potential benefits of PLCs are therefore not being realized. Dufor (2004) therefore put forward that PLCs were following the

pattern of other school reform initiatives, in which initial enthusiasm for them was being replaced by confusion about their intended purpose, resulting in implementation difficulties and a widespread perception among educators that PLCs had been a failure. This seemed to be following the trend referred to by Alexander, Murphy and Woods (1996) as the revolving door, in which new educational initiatives are continually introduced then quickly discontinued. These authors attributed this phenomenon mainly to two factors: first that much professional development has focused largely on what teachers already know how to do, and second, that there are too many barriers, such as time constraints, which prevent teachers obtaining the sufficiently deep learning of new practices that is essential for effective implementation. These authors viewed PLCs as an opportunity to overcome this negative cycle (Alexander et al., 1996). Even by 2017, however, Rucinski (2017) observed that only four states: Delaware, Georgia, Arkansas, and South Carolina, specifically mention these in their state statutes and had fully adopted the PLC model.

Despite this, evidence of positive impacts of PLCs which meet the conditions necessary for success have been generated by empirical studies. Lee, Smith and Croninger (1995) found that schools with professional learning communities in which teachers worked collaboratively and made changes to their teaching practices had documented higher levels of student achievement in math, reading and other subject areas, and that the achievement gaps between different groups of students had been narrowed in these schools. The characteristics of effective PLCs are discussed at further length in a later section.

Characteristics of Ineffective Professional Development

This section is a presentation of the findings of literature which have revealed the types of professional development which tend to be ineffective or less effective. Literature indicates

that teachers frequently find the professional development provided to them to be unsatisfactory, and report that it does not meet their professional development needs and has little impact on their performance in the classroom (Ajani, 2019; OECD, 2014; Wei, Andree, & Darling-Hammond, 2009).

Shaha et al. (2015) believes the majority of teacher professional development is still being delivered in the traditional form of one-off, single day workshops, which are ineffective in helping teachers make significant changes to their beliefs, knowledge and teaching practices. One-off, single day workshops are often delivered by external experts and take place outside the school environment (Trust, Krutka & Carpenter, 2016). The single-day workshop approach is often implemented with little strategic planning and little or no follow up, and does not promote the sustained professional development of teachers (Brown & Militello, 2016; Darling-Hammond, 2013). Clarke and Hollingsworth (2002) and Korthagen (2017) emphasized that relatively little research has been conducted into how teachers as professionals learn. Kennedy (2005) postulated that this resulted in many traditional professional development initiatives being designed based on the belief that professional development involved the mastery of a set of technical skills instead of effective instructional strategies.

Kisa and Correnti (2015) state that traditional workshop-style professional development often provides only disconnected and decontextualized learning experiences for teachers, and that the lack of classroom follow-up in this form of training allows little opportunity for teachers to actively engage in the practices they are learning. Other researchers have similarly commented that professional development for teachers is often narrowly focused on specific content and is felt by teachers to be disconnected from their real-life complex and diverse development needs (Chen & McCray, 2012; Opfer & Pedder, 2011). Likewise, Ball and Cohen (1999) point out that

this form of professional development is “intellectually superficial, disconnected from deep issues of curriculum and learning, fragmented, and noncumulative” (pp. 3-4). McIntyre et al. (2010) pointed out that teachers tend to see one-off workshops as futile if they have no involvement in their development and it does not relate to the reality of their classroom teaching.

In this form of training, teachers tend to be passive learners who just listen to the instructor and take notes, or interact to a very limited extent with the instructor and other participants. According to Apple (2009), this approach undermines the intellectual abilities of teachers by regarding them as passive recipients of information. This is not well aligned with the self-directed learning model which Knowles (1980) developed to show how adults learn. In this approach, individuals take responsibility for their own learning experiences, and are focused on the acquisition of particular skills or methods relevant to their work and which can be applied in a variety of contexts, rather than covering specific content. It has long been established that effective learning does not take place by teachers if they perceive professional development to be irrelevant to their classroom contexts, and when their learning style and the teaching style used in the professional development are not properly aligned (Brookfield, 1990).

Traditional face-to-face methods of teacher professional development also tend to be in the form of a one-size fits all approach, which is often ineffective because teachers are such a diverse group with different levels of experience and expertise and different training and development needs (Nelson & Bohanan, 2019). Teachers often therefore feel that this form of training is disconnected from their needs and their real-life teaching contexts (Nelson & Bohanan, 2019; Schols, 2019). Franey (2015) also highlighted the importance of recognizing and addressing the needs of individual student learners and tailoring teaching practices to these and lamented that “when the education of teachers ... is provided in traditional professional

development practices the notion of individualization and differentiation seems to be forgotten (p. 2)." Research indicates that professional development is less effective when teachers are not involved in its design and planning (Ajani, 2019).

Furthermore, unless ongoing support is provided to teachers in implementing what they have learned, they are less likely to do so, or may implement the new methods incorrectly. They may also feel overwhelmed or frustrated due to the lack of support provided to them following the training (Brown & Militello, 2016). In summarizing the characteristics of ineffective professional development based on previous literature, Demonte (2013) defined these as (1) disconnected from the everyday practice of teaching; (2) too generic and unrelated to the curriculum or to the specific instructional problems teachers face, and (3) infrequent and implemented as a one-shot event or lead by an outside consultant who conducts a workshop but may never return to the school or district (p. 4). In contrast, effective forms of professional development exhibit characteristics that are not only the inverse of those associated with ineffective forms of development but constitute a holistic approach based on a range of best practices, as discussed in the following two sections.

Characteristics of Effective Professional Development

This section contains summaries of key findings in the literature regarding what is known about effective practices in professional development for teachers, in terms of professional development that has positive impacts on teacher learning, on the adoption of new classroom practices and on student achievement. Although a number of different aspects of professional development are discussed in turn, the literature also indicates that it is the overall approach to professional development, which incorporates all of these aspects and takes place within a

supportive organizational context, that is most important in contributing to the effectiveness of professional development.

It has been inferred that effective professional development incorporates content knowledge and skills development that is perceived to the teachers to be relevant and useful to their everyday classroom practices (Scheerens, 2010). In this context, Kennedy (2016) points out the importance of ensuring that professional development promotes real learning rather than merely adding to the overload of information experienced by many teachers and in which many different messages compete for their attention. Kennedy (2005) determined that it is more effective for educators to learn to use strategies which can be applied in all learning contexts. Cosner and Jones (2016) conducted research on professional development in struggling schools and found that it this is often most effective when it is based on multiple methods and includes learning from external experts, as long as this learning is tailored to the specific needs of the school and its teachers and students. Ajani (2019) contends that tailoring personal development to the specific needs of teachers and their students can best be achieved by involving teachers in the design and planning of activities.

Franey (2015), Desimone, Porter, Garet, Yoon and Birdman (2002) and Mizell (2010) emphasized the importance of tailoring professional development to the specific needs of teachers. Franey (2015) asserted that "in order to increase the effectiveness of these developmental opportunities, they must be designed and implemented to meet teachers' individualized and differentiated needs, developmental levels, learning processes, and previous experiences." (p. 12). Desimone, Porter, Garet, Yoon and Birman (2002) concluded that professional development focused on specific instructional practices has a positive impact on the use of these in the classroom, and that specific features such as active rather than passive

learning opportunities enhance this impact. Mizell (2010) determined that "student learning and achievement increase when educators engage in effective professional development focused on the skills educators need in order to address students' major learning challenges" (p. 5). Overall, research shows that effective professional development must have rigorous standards based on evidence of effective practice, in order for teachers to take ownership of their professional development, acknowledge its value, and experience growth.

The method and format by which professional development is delivered to teachers is equally as important as the specific content. Spillane, Reiser, and Reimer (2002) highlighted the importance of sense-making in allowing teachers to implement their professional learning effectively. They posited that teacher knowledge, beliefs, and attitudes interact with learning situations and educational strategies or policies, influencing how effectively they understand these and are able to implement them effectively in their own classrooms. In a similar way, Xu (2016) asserted that professional development should not merely be focused on the common practice of delivering content knowledge or pedagogical knowledge, but also on encouraging teachers to reflect on their own practice. In support of this approach, Hannay and Earl (2012) point out that "without individuals reconstructing their mental models and personal practical knowledge, external reforms will remain superficially implemented" (p.314). Hannay and Earl (2012) advocated for the importance of learning specific skills in professional development activities and believe that if teachers are to develop the skills of the twenty-first century with their students, they first need to develop such skills themselves and that professional development should focus on this. Such skills are defined by Hannay and Earl (2012) as collaboration, problem framing (using evidence), critical thinking, thinking outside of the box, innovation, and creativity.

Also relevant to an understanding of effective professional development for teachers is Knowles's (1980, 1984) andragogy or self-directed learning theory, which emphasizes that adults like to take responsibility for their own learning experiences rather than being passive recipients of knowledge. Adult learners, according to Knowles (1980, 1984) prefer learning to be focused on problem-solving and on the acquisition of particular skills or knowledge that can be applied immediately in their work context. Becker, Greene, and Rosen (1990) also reported that teachers prefer practical forms of training that enable them to develop specific outputs such as lesson plans or teaching strategies, that they can apply immediately with their students. In their research, Runhaar, Sander and Yang (2010) highlight the importance of professional development being in a format that enables teachers to work collaboratively in learning, brain-storming and problem-solving, even after the formal professional development activities are over. However, Dufour (2011) stressed the importance that professional development is designed to promote constructive forms of collaboration, as there is a risk otherwise that the activities can become complaint sessions.

Opfer, Pedder and Lavicza (2011) emphasized that teachers need to understand the purpose and objectives of professional development in order to be motivated to participate. An OECD report (2009) observed that effective professional development "is on-going, includes training, practice and feedback, and provides adequate time and follow-up support. Successful programs involve teachers in learning activities that are like ones they use with their students and encourage the development of teachers' learning communities" (p.49)

Schols (2019) emphasized the importance to teachers of collective learning, which he defined not as learning with or from other teachers but also with and from their students. In examining the engagement of a sample of teachers in learning about new technologies, he found

that the teachers were more motivated when involved in various forms of collective learning, and were more likely to change their teaching practices as a result of the learning. OECD (2009) and Runhaar, Sander and Yang (2010) concluded that active and collaborative rather than passive forms of professional development are likely to be more effective in engaging teachers and having an impact on their classroom practices, and in turn are therefore more likely to influence student achievement levels. Cosner and Jones (2016) stressed the importance of having opportunities for interaction and collaboration between teachers within the school and the potentially important role of teacher leaders in planning and implementing the professional development system.

Kisa and Correnti (2015) described new effective forms of professional development as being more aligned with the real-work experiences of teachers and based on actual curriculum materials and student work. Based on this new model of professional development, the delivery of successful outcomes is expected to improve if principals, teachers, coaches and mentors are connecting their materials, curriculum and student engagement practices. Boushey and Moser (2018) believe that connecting the best practices taught in professional development and the classroom intentionally and immediately will lead to students and teachers responding positively to the changes in an environment that is simple and functional.

A number of researchers have reviewed previous literature to identify the key features of effective professional development from a wide range of studies. In developing a framework for their evaluation of a professional development model Jenkins and Agamba (2013) incorporated the findings of two previous reviews by Desimone (2009) and the National Center for Educational Statistics (2005) to identify the features that should be taken into consideration when designing professional development. These were defined as (1) content focus, or ensuring that

the professional development covers content that is relevant and expected to improve student learning; 2) active learning, in which teachers interact or play an active role, rather than being passive recipients; 3) duration, or ensuring that the overall length or timescale is sufficient to generate positive impacts; 4) collective participation, or undergoing professional development with relevant peers; 4) coherence, or having clear links with existing knowledge, and 5) alignment, or being connected with standards, other professional development initiatives and teachers' personal professional development goals and plans. Adding the dimensions of teacher involvement in the design of professional development, Bayar (2014) concluded that any professional development activity should consist of the following components: 1) a match to existing teacher needs, 2) a match to existing school needs, 3) teacher involvement in the design/planning of professional development activities, 4) active participation opportunities, 5) long-term engagement, and 6) high-quality instruction. Based on their review and synthesis of previous research, McIntyre et al. (2010) concluded that professional development only has a positive impact when it is voluntary rather than mandatory and involves all teachers within a school.

A number of other studies have investigated specific aspects or components of professional development that are associated with positive outcomes on student achievement. Garet et al. (2001) and Porter, Garet, Desimone, Yoon and Birman (2000) believe that there are three structural features and three core features present in most effective professional development practice. These were defined as: (1) being of the reform type rather than the traditional type of professional development; (2) sustained over time; (3) involving groups of teachers from the same school; (4) providing opportunities for active learning; (5) coherent with other reforms and teachers' activities; and (6) focused on specific content and teaching strategies.

Using the frameworks developed by Garet et al. (2001) and Porter et al. (2000) for case study research, Quick, Hotlzman and Chaney (2009) identified the following key constructs for effective professional development: (1) collaboration, (2) time, (3) modeling opportunities, (4) safe environment, (5) focus on content, and (6) coherence with school goals and teacher needs. Darling-Hammond, et. al (2017) built on the findings of Desmond (2009) by identifying seven key characteristics of effective professional development: (1) content focused; (2) incorporating active learning; (3) supporting collaboration; (4) using models of effective practice; (5) providing coaching and expert support; (6) offering feedback and reflection, and (7) of sustained duration.

Carrillo, Maasen van den Brink, and Groot (2016) investigated the influence of the duration of professional development initiatives on teacher and student outcomes. They observed that 62% of all estimates from studies examining the effects of professional development programs of more than 60 hours of duration provide evidence of a positive and significant impact of the training, around 12 percentage points higher than those relating to programs of less than 60 hours. This result is consistent with the findings of Yoon et al. (2008) and Navarro and Verdisco (2000) who all reiterated that for professional development training to be effective it must be intensive and sustained. Guskey and Yoon (2009) pointed out, however, that it is not just about the quantity of time provided for professional development, but also the quality of professional development delivered during this time.

Effective Schools

The research on effective professional development demonstrates the importance of the overall context in which professional development for teachers is implemented. Brookover, Lezottee and Lawrence (1977) identified that student achievement was not just influenced by family background but by the characteristics of schools. Their effective schools research was a

response to the Coleman study, which asserted that a child's home and family background is the main influence on learning and that "schools bring little influence to bear on a child's achievement that is independent of his background and general social context" (Lezotte, 1993, p.3). In recognition of the important role of school characteristics in influencing student achievement, these became the main focus for improvement and strategic change in the 1970s and 1980s.

Building on this earlier research, Lezotte (1991, 1993) expanded the effective schools model to incorporate the role in school improvement that is played by the school board and central office staff. He identified the importance of leadership, support, collaboration and the assistance of the Board of Education and the central office for sustainable school improvement. Lezotte (2010) refined the findings of earlier effective schools research to identify seven key correlates of effective schools: (1) High expectations for success; (2) Strong instructional leadership; (3) A clear and focused mission; (4) Opportunity to learn/time on task; (5) Frequent monitoring of student progress; (6) Safe and orderly environment; (7) Positive home-school relations. He stressed the importance of establishing a school culture which facilitates and supports these correlates of effective schools.

Other researchers have also generated evidence of the role of school leaders and the influence of school-related factors in effective professional development. As Brown and Militello (2016) pointed out, principals play a crucial role as they are familiar with the development needs of their teachers and are also in a position to influence professional development delivery methods and content. Leithwood and Jantzi (2008) note that the promotion of and participation in teacher professional development is the dimension of school leadership that is most strongly associated with positive student outcomes.

Weiss (1995) developed a Three I framework for educator decision-making: interest, ideology, and information, which focused on the importance of the personal characteristics of school leaders in implementing change. However, in using this model to examine decision-making in schools she also found that the characteristics of the institution, including the structure, culture and decision-making procedures, also have a big impact on decision-making. In this way, Weiss (1995) highlighted the importance of is ensuring that these aspects of the school are designed or modified to be supportive of effective professional for teachers. This includes promoting a culture of collaboration and ensuring that there are effective processes for feedback on performance. Schols (2019) stressed that in the context of the heavy workloads and busy schedules faced by most teachers, it is essential at the institutional level to have a clear vision or plan for professional development and adequate time allocated for this within the school daily schedule and monthly calendars. There is also a need to ensure that sufficient time is allocated to these activities. Wei, Andree, and Darling-Hammond (2009) argued that "when time for professional development is built into teachers' working time, their learning activities can be ongoing and sustained and can focus on particular issues over time" (p. 30). Donahoe (1993) and Raywid (1993) also noted the importance of allocating sufficient time for professional development, which may involve making changes to the school daily schedule.

Demonte (2013) focused on the structural factors or pre-conditions that need to be in place within schools for effective professional development to take place, and explained these as: (1) establishing a strong evaluation system that identifies strengths and weaknesses in teaching practice; (2) encouraging administrators in schools, districts, and state education agencies to take steps to become experts in changing standards--specifically in relation to the Common Core Standards and new student assessments--and making sure teachers are aware of these; (3)

supporting administrators in schools, districts, and state education agencies in the creation and collection of resources about new standards and assessments to help teachers maintain and improve classroom instruction; and (4) adapting staffing, the organization of the school day, and the other basic structures of schools to better teaching practices.

Killon and Davin (2009) of The Leaning Forward organization (formerly the National Staff Development Council), a leading voice in professional development, have established 12 recommended pathways or evidence-based best practices for effective professional development, which take into account not only the characteristics of the development itself but also wider organizational and other contextual factors. These are defined as: (1) standards-based professional development; (2) time dedicated to professional development; (3) a budget that supports professional development; (4) state policy professional development for licensure/relicensure; (5) teacher involvement in decision-making about professional development; (6) flexible designs for professional development; (7) professional learning communities; (8) support for National Board certification; (9) mentor/induction; (10) individual professional development plans; (11) career paths/teacher leadership, and (12) compensation/recognition for professional development.

Jacobs and McGovern (2015) proposed that moving forward, the developers of professional development initiatives should: (1) Redefine what it means to help teachers improve and define development clearly, as observable, measurable progress toward an ambitious standard for teaching and student learning; (2) Give teachers a clear, deep understanding of their own performance and progress by encouraging improvement with meaningful rewards and consequences; (3) Reevaluate existing professional learning supports and programs; (4) Conduct an inventory of current development efforts; (5) Start evaluating the effectiveness of all

development activities against the new definition of development; (6) Explore and test alternative approaches to development; (7) Reallocate funding for particular activities based on their impact; (8) Reinvent how we support effective teaching at scale; (9) Balance investment in development with investments in recruitment, compensation, and smart retention; (10) Reconstruct the job of a teacher; (11) Redesign schools to extend the reach of great teachers; and (12) Reimagine how we train and certify teachers for the job. Haug and Sands (2013) support these recommendations and highlight the potential of professional development that is characterized by collaboration situated in authentic school settings, involves mutual inquiry, addresses both content and processes, provides individual and collective supports, and includes school-level support and encouragement to participate.

Characteristics of Effective Professional Learning Communities

Researchers have also generated research-based evidence on the characteristics of effective PLCs that help ensure that these are effective as vehicles of professional development. Since PLCs are the focus of the current study, the main findings of this body of research are summarized separately in this section.

In order to help identify ways in which PLCs can be more effective in improving teaching practices and raising student achievement, various researchers have highlighted the roles and responsibilities of different stakeholders. Hord (2009) and Senge (1990) stress the role and responsibilities of school leaders to put in place the right environment and conditions necessary for continuous learning. According to Hord (2009), these include clarifying the membership of the PLC, setting a clear purpose for meetings, ensuring that sufficient time and suitable locations are allocated for them, ensuring that a dedicated individual is responsible for retrieving and organizing relevant and user-friendly data, and ensuring that the PLCs are based

on a system of shared leadership in which the school leaders play a supportive but not a leading or authoritative role.

Louis and Kruse (1995) stress that school principals and other leaders are best placed to initially put the conditions in place for a PLC and then to implement distributive leadership with the staff in a democratically participatory way. Research conducted by Leithwood, Leonard & Sharratt (1997) demonstrated that PLC initiatives were most successful when school principals worked collaboratively with teachers on an equal basis. Senge (1990) highlights the important role of the district superintendent in recruiting individuals to school leadership roles who have the right mindset to work collaboratively with teachers and put in place the conditions for effective professional development. He proposed that it is the job of the superintendent to find and support principals who have a mindset and attitude dedicated to true collaboration. Livneh and Livneh (1999) suggested that educators need opportunities to reflect, engage in professional dialogue, work with pupils, and engage in peer observation, coaching, and feedback.

However, the success of PLCs also depends on the willingness of teachers themselves to engage effectively in these communities and be prepared to learn from practitioner research on successful teaching practices (Maloney & Konza, 2011). These authors maintain that PLCs are most likely to generate positive outcomes in terms of improved teaching practices and student achievement when teachers have ownership of such initiatives, and are involved in the planning of them as well as implementing the outcomes (Maloney & Konza, 2011). Teachers also need to understand how their own learning is linked with and influences student learning (Lambert, 2003). Similarly, Fullan (1994) deduced is that it is ultimately individuals who are responsible for bringing about systematic change in any setting, in this case school leaders and the individual teachers involved in the PLC. Although principals have a responsibility to implement the

structures and systems necessary to support professional learning communities, it is down to the collective efforts of the staff to ensure that learning about new practices actually occurs (Hord, 1997). Based on empirical research with PLCs in elementary schools, Maloney and Konza (2011) concluded that "professional learning had a better chance of succeeding if teachers contributed as equals to setting the agenda, bringing about change, and ultimately improving their own practice" (p.85).

Researchers have highlighted the role of interpersonal relationships in contributing to the success of professional learning communities. For example, adapting one of the five principles of the learning organization by Senge (1990) – team learning – to an educational context, Sergiovanni (1992) observes that the idea of school as a learning community suggests a kind of connectedness among members that resembles what is found in a family, a neighborhood, or other closely-knit groups. Barth (2001) and Blankenstein (2004) discussed the role of relationships in successful learning communities and their impact on student outcomes. Barth (2001) observes that the main factor for getting students to achieve is the relationships among the adults who are in the schoolhouse with them. Dufour (2004) explains that team work is the adhesive that binds professional learning communities. Collaboration and consistent analysis of the work the team does leads to improved classroom practices. This collaboration leads to a systematic and ongoing cycle of questioning the processes and deep team learning which in turn leads to higher student achievement.

Carpenter (2017) conducted qualitative research with participants in a number of well-established PLCs to explore collaboration. Carpenter (2017) defined PLCs as "a group of educators gathered in physical and intellectual workspace to critically reflect on their practice while collaborating on teaching and learning" (p. 1069). Carpenter identifies five main

characteristics of PLCs from previous literature, defined as: shared-leadership and decision-making; collaborative inquiry: shared practice; accountability for outcomes: evolving relationships. He found that effective collaboration was taking place in those in which the teachers were directing their own learning, documenting their practices and collaborating actively with their peers to identify ways of improving practices. Teachers in these PLCs reported high levels of motivation and demonstrated transformative learning (Carpenter, 2017). In those which were not functioning well, there was no shared leadership structure, little collaborative inquiry and little evidence of self-directed or transformative learning. In these teachers were often resentful of the top-down approach and perceived control of their collaborative activities.

Cravens et al. (2017) found that it is important to structure collaboration in order to support effective learning communities. Productive learning communities generally involve both individual and group learning, availability of peer observation, active participation and the collaborative development of new or improved practices. They are also closely integrated with classroom context and are based on teacher shared experiences and practice. Hord (1997) developed a best practice PLC model which incorporates support of the principal, development of a shared vision for collaborative learning, and sufficient resources. Building on this model, Cheng and Ko (2012) identified the need to plan professional development activities strategically and link professional development with the school development plan. Although principal support is important, Hallinger, Heck and Murphy (2014) found the impact of this on PLCs is mediated by the collaborative learning culture and the continuing professional development policy in place at the school, so it is important that all these are aligned with the PLCs.

Cravens et al. (2017) stressed that it is important to ensure that PLCs or communities of practice are fully integrated into the learning goals of schools (Darling-Hammond & Sykes, 1999) and are focused on student learning and curriculum (Cravens et al., 2017). Admiraal et al. (2019) examined PLCs and identified interventions which were categorized into five clusters: 1) Shared school vision on learning; 2) Professional learning opportunities for all staff; 3) Collaborative work and learning; 4) Change of school organization, and 5) Learning leadership. They concluded that the interventions were more sustainable when they were more embedded in the school culture and organization. Huguet, Farrell and Marsh (2017) examined the use of data in two PLCs in different schools, where principals had different approaches to influencing the ways that teachers interacted with data They concluded that when teachers are able to collaboratively develop their own data management and analysis tools these are perceived to be more beneficial to their everyday teaching practice. Vescio, Ross and Adams (2008) concluded that in order for PLCs to be effective, it is essential that they are able to demonstrate with data actual outcomes in terms of changed practices to teaching and improved student learning. Bolam et al. (2005) reported that there are eight key characteristics of effective professional learning communities, defined as: (1) shared values and vision; (2) collective responsibility for pupils' learning; (3) collaboration focused on learning; (4) individual and collective professional learning; (5) reflective professional enquiry; (6) openness, networks and partnerships; (7) inclusive membership, and (8) mutual trust, respect and support.

Vescio et al. (2008) and Ratts et al. (2015) presented evidence of the positive impacts of PLCs and helped reveal the specific characteristics that are associated with these in their studies. Vescio et al. (2008) found that PLCs have been a positive influence on the professional culture of the schools, and attributed this to the increase in collaboration between teachers, including

lesson sharing, classroom observations and using common protocols for instructional decision-making. It was revealed that the most effective PLCs in this study were specifically focused on student learning, empowerment of teachers and the use of research literature in teacher continuous learning opportunities. Ratts et al. (2015) examined the relationships between teacher training in the principles of PLCs, the practice of these principles, and student achievement. The results indicated that members of PLCs were more likely to improve the quality of their teaching if they participated in classroom observations, provided feedback to their peers, and collaborated with their colleagues to review the quality of students' work and identify ways of improving instruction. There was also evidence of a positive association between teacher collaboration and student performance on standardized assessments (Ratts et al. 2015).

Professional Development and Student Achievement

The impact of teacher performance on student achievement has been studied extensively, with evidence that effective teachers have a clear impact on student learning (e.g. Barlow, Frick, Barker, & Phelps, 2014; Kutaka et al., 2017; Marzano, 2003). In an era of standards-based accountability, improving standards of teacher instruction to increase student achievement is of paramount importance (Carprao et al., 2016). Bayar (2014) concluded that, while educational systems consist of multiple components which all play an important role in achieving the aims of the system, "teachers remain in a prominent position when it comes to accountability for student achievement" (p. 319).

A report published by the National Mathematics Advisory Panel (2008) concluded that scientifically valid evidence on the specific professional development characteristics that help improve student learning remains scarce. However, in recognition of the key role of teachers, many studies have been focused on the impact of teacher professional development on student

achievement, and a significant body of research has been built up over time which provides evidence of the types of characteristics associated with successful outcomes from professional development, and which has been used to develop recommendations for standards and best practice in this area. Rotermund, DeRoche, and Ottem (2017) concluded that research indicates that specific characteristics of professional development are related to effectiveness in changing teacher practice and improving student learning.

There is now considerable evidence that high-quality sustained teacher professional development typically has statistically significant positive effects on teaching practices and student outcomes. Demonte (2013) acknowledged that "Despite the challenges, there is rigorous research on professional learning that shows that it can indeed change the way teachers teach and how much students learn." (p. 4). Yoon et al. (2007) reported that teachers receiving an average of 49 hours of professional development typically boost student achievement levels by approximately 21 percentile points. Saunders, Goldenberg, and Gallimore (2009) compared Title 1 schools receiving professional development to schools in the same district without professional development or focused professional development. The findings supported evidence that the schools with professional development had greater increases in student achievement over three years of state-mandated testing than the schools that did not have professional development or focused professional development initiatives.

Rotermund, DeRoche, & Ottem (2017) indicate that when educators have access to purposeful professional development academic achievement is positively impacted and there is improvement in state assessment scores. Santau, Maerten-Rivera and Huggins-Manley (2011) concluded on the basis of their research that “the students' significant gains were a result of effective professional development, which led to effective science instruction and thus promoted

student learning" (p.788). Shaha et al. (2015a) examined the impact of teacher participation in an online professional development program on student achievement. The results showed increasing gains in achievement over the two-year period of the study in both math and reading. Specifically, schools that effectively implemented professional development (professional development schools) experienced Year 1 18.9% gains in math and a further 7.7% in Year 2, compared with corresponding gains of 4.2% and 0.5% in schools that did not implement the same professional development (non-professional development schools). In reading, professional development schools experienced Year 1 18.9% gains in math and a further 10.2% in Year 2, compared with corresponding gains of 4.2% and 0.5% in non-professional development schools. Shaha et al. (2015) concluded that there was a significant positive relationship between the number of participation years in professional development and improvements in student achievement levels.

However, not all forms of professional development are equally effective. Carprao et al. (2016) assert there are differential effects on student achievement depending on the quality and the specific features of professional development provided. Also highlighting the differences in outcomes from different forms of professional development, Odden, Archibald, Fermanich and Gallagher (2002) observed that typical professional development has had little impact on teacher practice or student performance. They proposed that effective professional development is considered by most a critical strategy for accomplishing today's ambitious student achievement goals. Garet et al. (2001) highlighted the importance of investing in activities that have the characteristics most associated with improvements in teaching. Akiba and Liang (2016) examined the effects of six different types of professional learning activities on mathematics achievement outcomes and found that teacher-centered collaborative activities were more

effective than non-collaborative learning activities in improving student math scores. Similarly, Ronfeldt, Farmer, McQueen and Grissom (2015) found evidence of greater student achievement gains in math and reading in schools which have better quality collaboration, and reported that teachers improve at faster rates when they work in schools with greater levels of collaboration.

Carrillo, Maasen van den Brink, and Groot (2016), Kennedy (1998) and Hill, Rowan and Ball (2005) indicate that there is more evidence of positive effects on student achievement from content-based professional development programs than from those focused on pedagogical approaches. Kennedy (1998) reported that 67% of content-based professional development programs had positive and significant effects on student achievement, compared with only 50% of the professional development programs intended to improve pedagogical quality. Rotermund, DeRoche & Ottem (2017) investigated and discovered that the most prevalent type of professional development among public school teachers is content area focused. They calculated that 85% of teachers reported that they participated in such professional development.

However, it is not just the characteristics of professional development that influence its effectiveness in raising achievement levels, but also the standard of implementation. McIntyre, Kyle, Cheng-Ting, Munoz and Beldon (2010) examined the reading achievements of elementary English language learners in classrooms where teachers implemented a popular, sheltered-instruction model called SIOP compared with students of teachers who had not received instruction in this model. They found significant differences between classrooms where the model was well-implemented and classrooms that did not implement the SIOP instruction model with fidelity.

Carrillo, Maasen van den Brink and Groot (2016) concluded that the impacts of professional development programs on student achievement are mixed and vary in relation to

factors such as grade, subject, duration, and characteristics of the professional development. They found, for example, that professional development interventions are more likely to lead to positive and significant effects when math rather than reading comprehension is used as the outcome measure, when implemented in rural rather than urban areas, in developed rather than developing countries, and in elementary rather than in secondary schools. Despite differences in outcomes, there is a substantial body of literature which documents key success factors relating to professional development for teachers.

Some studies demonstrated the positive impact of PLCs on student achievement, based either on primary research or secondary analysis of existing studies. Lomos, Hofman and Bosker (2011) conducted a meta-analysis of data from five empirical studies and found evidence of a small but "positive and significant relationship between PLCs and student achievement" (p. 137). Jackl and Lougée (2012) found that 81percent of the teachers interviewed reported that they perceived their students were learning more due to their involvement in the PLCs, and analysis of performance data revealed that schools who used PLCs most extensively had fewer students held back, and exhibited better grades, performance on state achievement tests and graduation rates, compared with other schools.

Organizational Issues and Challenges

Franey (2015) observed that one of the major challenges relating to the professional development of teachers is that the type of practices and programs shown by research to be effective are often not actually implemented in school districts. Darling-Hammond et al. (2017) and Quick et al. (2009) have illustrated the importance of professional development that is sustained over time and integrated with school goals and strategies however there is little evidence that this is the case in common practice. Franey (2015) notes that much professional

development for teachers is short-term and in the form of "stand-alone days that will have no impact on the classroom" (p. 11). In an earlier study, Ball and Cohen (1999) also highlighted the prevalence of single-shot, one-day workshops that often deliver professional development that is intellectually superficial, disconnected from deep issues of curriculum and learning, fragmented, and noncumulative. Desimone and Garet (2015) observed that the professional development received by teachers is often "fragmented, with little continuity across professional development opportunities, and little cumulative design" (p. 258). Their research revealed that due to budgetary constraints, districts and schools often must choose between serving larger numbers of teachers with less focused and sustained professional development or providing higher quality activities for fewer teachers (Desimone & Garet, 2015). Yoon et al. (2007) note that professional development consisting of less than 14 hours of professional development is not associated with statistically significant effects on student outcomes.

Hubbard, Mehan and Stein (2006) illuminated the effects of lower-quality, short-term development in their research. They illustrated that teachers "showed up at their respective professional development sessions, listened respectfully, did the activities required of them during these sessions, and then returned to their sites to continue doing much as they had always done" (p. 130). Kennedy (2016) also referred to the problem of enactment that can occur when professional development programs are held outside the classroom and teachers fail to enact what they have learned inside their classrooms. Jacobs and McGovern (2015) found major shortcomings in the professional development of teachers and reported that most teachers do not appear to improve substantially from year to year even though many have mastered critical skills. Jacobs and McGovern (2015) contend that instructional leaders and administrators bombard teachers with help but most of it is not helpful to teachers as professionals or to schools

seeking better instruction. Harris and Sass (2011), Schomoker (2006), and Yoon et al. (2007) also insisted that most previous research in this area indicates that the current types of professional development offered to teachers do not have an effect on student learning. Mizell (2010) observes that those organizing professional development are often unclear that the intended specific improvements in educator and student performance, and do not therefore design programs in ways that ensure these can be achieved. As a result, educators frequently complain that they are required to participate in one-size-fits-all professional development that is not helpful in enabling them to address the actual day to day challenges they face and fails to take into account their specific development needs and interests.

Implementation challenges and a lack of fidelity to the intended goals of professional development have also been widely reported in the literature. For example, Liang, Collings, Kruse, and Lenhart (2015) conducted a study of 895 educators in a large-scale statewide professional development initiative in Ohio called Formative Instructional Practices (FIP) and compared the intended goals of the program to what was actually implemented in schools. The researchers found evidence of considerable shortcomings in program implementation, with many schools failing to put in place the intended forms of levels of training and support: high proportions of teacher participants indicated that they had not participated in face-to-face professional development (25%) or did not find the online training modules engaging (57%), or that the FIP professional learning teams were not active in their buildings. Around the same time, Kisa and Corrrenti (2015) conducted a survey of 1,722 teachers in 31 schools implementing a popular comprehensive school reform program (America's Choice). They found that although schools were using the same reform model, their implementation of this varied considerably. As

a result, teachers were found to have successfully changed their practices only in those schools that effectively implemented reform-aligned professional development content and processes.

Franey (2015) highlights the critical importance not only of regular and sustained professional development, but also follow-up to provide support for teachers trying to implement new learning in their classroom practices, and to monitor the impacts of the professional development. Knight, Carrese, and Wright (2007) observed that effective follow-up to professional development is rarely conducted. Schmoker (2006) observed that there are often no formal requirements for teachers to translate their professional development learning into their teaching practice, or use them as the basis for ongoing improvement. As a result, training tends to promote a mentality of dependence in which teachers depend on new or external guidance rather than taking ownership of their own learning and translating it into changes in teaching practices. Schmoker (2006) therefore advocated for the use of improved team-based professional development and a team-based approach for implementing the learning gained and evaluating and refining teaching practices.

One of the likely factors contributing to the shortcomings and inconsistencies in implementation of professional development is a lack of state requirements in the area of professional development. Grossman and Hirsch (2009) observed that in the United States the majority of state policies do not specifically outline professional development requirements. School districts, local providers and teachers have traditionally been allowed to make decisions regarding the types and quality of professional development used. State mandated requirements have been limited to ensuring that teachers meet specific guidelines regarding the number of hours or days of professional development required for recertification of their teaching license or to fulfill their annual teaching contracts. Franey (2015) elaborated on policies which have

traditionally left professional development decisions to school districts, providers and teachers. Although states require teachers to complete a certain amount of professional development for license renewal, they do not typically regulate the quality or the relevance of the professional development completed (Grossman & Hirsch, 2009).

Desimone et al. (2002) observed that in order to develop effective professional development programs, districts and schools need to address three main challenges: (1) focusing on and setting priorities for professional development activities over time given limited resources; (2) acquiring knowledge about the features of effective professional development, and (3) building the necessary infrastructure for the types of professional development activities needed to improve student learning. The cost-related factors pertaining to professional development for educators are considered further in the following section.

Financial constraints have been reported to be one of the main factors making it difficult for a state department of education to control local professional development (Rucinski, 2017). Yet Demonte (2013) notes that the U.S. invests over $20 billion annually in total federal, state, and local funds for educator professional development in the belief that this will improve the quality of teaching. Jacobs and McGovern (2015) calculated that the teachers covered by their study spend around 19 days per year, or 10% of a typical school year, on professional development, and that districts spend an average of nearly $18,000 per teacher per year on professional development efforts, which exceeds the amount spent on transportation, food and security combined. They calculated that the largest 50 districts in the U.S. spend a total of at least $8 billion on teacher development annually (Jacobs & McGovern, 2015). These figures suggest that the issue is not a lack of adequate funding, but the challenge of how to make best strategic use of this by investing in the types of professional development likely to have a positive impact

on student achievement (Jacob & Lefgren, 2002; Miles, Odden, Fermenich, Archibald & Gallagher, 2004; Mizell, 2010).

Research Gaps and Requirements

The paucity of rigorous research studies on the impacts of professional development among teachers have been highlighted by Yoon et al. (2007). Yoon et al. (2007) determined that of the more than 1,300 studies which had examined the effects of teacher professional development on student achievement within three key content areas, only nine met What Works Clearinghouse evidence standards. Kennedy (2016) concurs that there is a lack of high quality research in this area, arguing that, "education research is at a stage in which we have strong theories of student learning, but we do not have well-developed ideas about teacher learning, nor about how to help teachers incorporate new ideas into their ongoing systems of practice." (p. 973). Similarly, Carprao et al. (2016) and Penuel, Fishman, Yamaguchi, and Gallagher (2007) have highlighted the need for additional research to examine the relationships among professional development, teacher knowledge and practices and student outcomes. DeMonte (2013) suggested that the complexity of presenting effective professional development is one reason for the scarcity of solid research on professional development and highlighted the difficulties of determining, for example, whether such research should measure what students learn, changes in teaching practices, or both.

Since increases in student achievement are the goal of professional development for teachers, it has been argued that research should focus on determining its impact on student achievement (Desimone, 2011; Franey, 2015). In order to do so, Franey (2015) stressed, student learning must be measured using hard data in the form of assessment scores, for example. However, many states do not monitor professional development or its outcomes except in terms

of hours of professional development completed by teachers (Grossman & Hirsch, 2009), and when they do attempt to evaluate professional development this is often in the form of satisfaction surveys, which only provide information on the feelings and perceptions of teachers about the activities (Franey, 2015). While these can also be helpful in the ongoing design of initiatives, very little firm data has been generated which determines the effectiveness of professional development in terms of student achievement (Franey, 2015).

Accurate measurement of the impacts of professional development can be very challenging, however, given the wide range of influences on student learning. As Hubbard et al. (2006) point out, establishing a direct cause and effect from professional development to increased student achievement is difficult given all the numerous school, social, and individual factors that are involved. Other researchers (e.g. Knapp, 2003; Wayne, Yoon, Zhu, Cronen & Garet, 2008) have also pointed out the difficulties of isolating the effects of professional development on learning, since factors such as curricula, leadership, and access to expertise are constantly changing. Wayne et al. (2008) deduced that this is a particular problem from a statistical standpoint due to uncertainty about the extent to which observed changes in instruction can be attributed to the professional development program itself rather than the effect of other factors. Kutaka et al. (2017) also highlighted the difficulties of making firm associations between the professional development of teachers and gains in student achievement. They speculated that it is not always clear whether any apparent lack of improvements in student achievement is actually due to a failure of the research instruments to properly capture these (Kutaka et al., 2017).

Variations in the implementation of professional development in different school site presents another challenge for professional development research and creates barriers to the

ability of researchers to gain an understanding of the impacts of different forms of professional development (Berends, Bodilly & Kirby, 2002; Cooley & Leinhardt, 1980; Shadish, Cook & Campbell, 2002; Stein, Engle, Smith, & Hughes, 2008). These challenges may partly explain why, as observed by Kane and Staiger (2008) research in a variety of school districts and states over three decades has produced inconsistent and mixed findings regarding teacher impacts on student achievement and, where effects have been identified, these have often declined over time, indicating that more studies with stringent statistical controls are needed.

Kisa and Correnti (2015) observed that another of the difficulties in determining the impacts of professional development on student outcomes is that most research in this area has been cross-sectional rather than longitudinal. When data is only available relating to a single point in time and there is no available measure of teaching practices or student outcomes before the professional development, it is difficult to identify changes resulting from the training. Neither do cross-sectional studies allow researchers to monitor change over time and capture retrospective perceptions of the value of teacher professional development.

Other gaps in research and knowledge relating to effective professional development for teachers have been reported in the literature. Rotermund et al. (2017) have emphasized the need for more studies to examine the link between state and district policies and access to high quality professional development for teachers. Holmes (1998) and Korthagen (2017) both contend that there remains a large gap between theory and practice with regard to professional development for teachers and that more research is needed to help close this gap. Jacobs and McGovern (2015) have observed that despite considerable investments of time and money, educational leaders have very limited evidence-based knowledge about how to improve teacher performance through professional development. Likewise, Guskey (2009) refers to a gap between our beliefs

about the characteristics of effective professional development and the evidence we have to validate those beliefs. This gap is further discussed in the work of Grossman and Hirsch (2009) who report that although considerable resources are spent on professional development to build teacher knowledge and skills each year, very little is known about its impact on student achievement.

Desimone and Garet (2015) and Brock (2015) discussed ways of closing the gaps in research and knowledge. Desimone and Garet (2015) highlighted the importance of building a rigorous and punctilious evaluative component into professional development in order to improve understanding of the effectiveness of different types of professional development activities. Brock (2015) concluded that "what does clearly emerge is the need for authentic, evidence-based casual (not merely correlational) links between the provision or experience of identified professional development or learning processes, and demonstrable student learning outcome effects that can be directly attributed to professional development or learning causes" (p.6).

Specific Challenges for Rural Areas

Rural areas often face particular challenges with regard to professional development for teachers, because of the very nature of being rural. According to a review of previous research by Peltola et al., (2017) there are particularly big gaps in the research literature relating to professional development among teachers in rural districts, and the available studies do not allow causal inferences to be made between the professional development of teachers and gains in student achievement. The results of primary survey research conducted by Peltola et al. (2017) with public elementary and secondary school principals in Oklahoma demonstrated that their rural schools provide substantial support for professional development but that teachers are less

able to rely on one other for professional development such as collaborative learning, coaching, mentoring and common planning. The researchers concluded that this is at least partly because rural schools tend to be small, and therefore have fewer teachers who share professional interests and needs or can offer support to their peers (Peltola et al., 2017). The typically small size of rural schools coupled with geographic distance from other teacher networks and specialized professional development opportunities has resulted in what previous studies have referred to as professional isolation, which affects rural teachers and can make it difficult for rural districts to attract and retain teachers (Peltola et al., 2017). This is aligned with the conclusions of Eargle (2013) that teachers from rural districts and communities need ongoing, flexible professional development designed to encourage collaboration. Wei, Darling-Hammond, and Adamson (2010) also observe that teachers in rural schools typically have less access to many types of professional development compared to their peers in urban or suburban schools.

Summary

Professional development is necessary for all teachers and should be used to enhance the environment for a classroom teacher. It involves educating teachers and other stakeholders and helping them to enhance their knowledge of effective classroom strategies and instructional practices, to improve their own teaching, and ultimately to have beneficial impacts on student achievement. The content and focus of professional development content can range from classroom management topics to instructional practices used in enhancing student achievement in the classroom. This chapter has set out the findings of a review of the literature relating to the professional development of teachers. It has discussed what is known from previous research about the effectiveness of professional development in raising student achievement levels and has drawn on the available literature to highlight the challenges of conducting research in this

area and the current research and knowledge gaps. The following chapter presents the methodology for the proposed study.

Chapter 3. Methodology

The purpose of this qualitative case study was to examine educator experiences during professional learning communities from 1999 to 2018 to understand the impact of building and supporting teacher instructional capacity and effective instructional strategies in Allendale County School District. Professional development is a common approach used by educators to improve teacher instructional capacity. A shift in teacher instructional capacity and classroom instruction is widely believed to result in improved student achievement (Bambrick-Santoyo, 2018). A more in-depth understanding of this phenomenon may allow educators to make decisions from a more informed perspective in terms of content, design, and implementation of district and school professional development initiatives using professional learning communities. In seeking to understand this phenomenon using an in-depth review of artifacts and interviews with a sample of educators from Allendale County School District, this research will address the following research questions:

1. How did participation in professional learning communities from 1999 to 2018 influence a shift in teacher instructional capacity and classroom practices?
2. How were district and school professional development initiatives addressed during professional learning communities from 1999 to 2018?

The methodology outlined in chapter 3 for this study includes the: (a) rationale for the research design, (b) sampling method, (c) methods of data collection, (d) analysis and synthesis of data, (e) ethical considerations, (f) issues of trustworthiness, and (g) limitations of the study. A brief summary concludes the chapter.

Research Design

Qualitative case study methodology provides tools for researchers to study complex phenomena within their context and applied correctly becomes a valuable method for researchers to develop theory, evaluate programs, and develop interventions (Baxter & Jack, 2008). Creswell (2007) and Stake (2001) define a qualitative case study as intensive description and analysis of a phenomenon, social unit, or system bounded by time or place. Merriam (1998) believes that qualitative case study is an ideal design for understanding and interpreting education phenomena. Merriam (1998) describes it as "A case study is employed to gain an in-depth understanding of the situation and meaning for those involved. The interest is in process rather than outcomes, in context rather than a specific variable, in discovery rather than confirmation. Insights gleaned from case studies can directly influence policy, practice, and future research" (p. 19).

The research fits well with the criteria for a qualitative case study. In line with the case study approach, it seeks to gain a thorough understanding of the PLC process for teachers through semi-structured interviews with a sample of fifteen educators in an effort to build a complex, holistic picture. This contrasts with quantitative research in which the objective is to merely quantify particular types of experiences or views and identify relationships or associations between variables. A qualitative case study approach was used to help to elucidate why Allendale County School has been taken over by the state department of education twice despite teachers being involved in professional learning communities for years.

Sampling

This case study focused on Allendale County School District. The study participants were chosen with the help of current and former Allendale County School District building principals and district leaders. The identified participants included nine teachers from different grade levels,

two instructional coaches, two school level administrators, and two district level administrators. For the purposes of this study, it was important that participants have knowledge of the professional development initiatives conducted in Allendale County School district from 1999 to 2018. All participants participated in professional learning communities during the period from 1999 to 2018.

According to Cohen and Crabtree (2006), sampling is a process of systematically selecting that which will be examined during the course of a study. Qualitative research typically uses relatively small sample sizes because of the time-consuming nature of data collection in this type of research (Anderson, 2010). Unlike quantitative researchers whose results are intended to be transferable to a wider population, qualitative researchers do not use statistical methods to calculate the sample size needed for representativeness. Instead, qualitative researchers often use purposeful sampling to select a number of participants with relevant experience of the phenomenon under study. Patton (2002) emphasized that "studying information-rich cases yields insights and in-depth understanding rather than empirical generalizations" (p. 230).
In qualitative research, the individuals included in the case study sample should all have the common experience of the phenomena being observed in the research (Creswell, 2007).

Fifteen educators from Allendale County School District were identified and interviewed. School level administrators were involved in the teacher selection process. The school level administrators were given clear criteria to guide the recommendation process. Upon receiving approval from ETSU IRB and Allendale County School District to conduct this case study, an introduction letter was sent to the selected individuals outlining the purpose of the study and explaining the interview process and how the data would be used. To avoid the appearance of

coercion, the letter explained that participation is voluntary and that participants had the option of not participating in the research project and/or dropping out of the study at any time.

In this study, the criteria for the selection of participants was:

- All participants were current or former educators who worked in Allendale County School District sometime from 1999 to 2018.
- All participants participated in school or district professional development initiatives in Allendale County School District during the first, second or both state takeovers.
- Participants were active participants in professional learning communities.
- Participants were known to be willing to engage in professional conversations.

The research sample included fifteen educators currently or formerly employed by Allendale County School District from 1999 to 2018 who all met the sampling criteria. Purposeful sampling was used to select educators from the primary, elementary, middle and high school. Within the purposeful sampling approach, maximum variation sampling of years of experience, length of time in Allendale County, and educator role and responsibilities was used in order to ensure the selection of participants with a wide variety of backgrounds and perspectives (Moser & Korstjens, 2017). Although participants were all current or former Allendale County School District educators, there were differences among them along the following parameters: years of experience as an educator, length of time in Allendale County School District, content area taught, gender, race, and age.

Data Collection

Qualitative research does not emerge from a single tradition, instead it centers around the utilization of multiple data sources, such as surveys, questionnaires, interviews, observations, and documentary evidence (Patton, 2002; Thomas & Magilvy, 2011). The main data collection

method of this case study consisted of face-to-face, in-depth, open-ended interviews with fifteen educators from Allendale County School District. Creswell (2007) stated that collecting data through individual, in-depth interviews offers the researcher the opportunity to capture the perspective of individuals pertaining to a specific phenomenon. Interviews with the selected educators were conducted at an agreed upon site and were audiotaped and transcribed. Profile and demographic data such as race, gender and subjects taught were gathered from open-ended questions during the interviews.

A thorough analysis of relevant documents was also conducted in order to triangulate the primary data with secondary research evidence and to provide further insights into the phenomenon being studied, in this case the professional development initiatives educators experienced from 1999 to 2018. The documents reviewed included school board minutes, newspaper articles, professional development plans, budgetary data, school board meeting agendas and minutes, and Title II professional development plans.

Ethical Considerations

Seiber and Tolich (2013) pointed out that ethics has a long and complex history as a field of study in philosophy. According to Seiber and Tolich (2013) the Belmont principles of respect of autonomy (informed consent); beneficence (the presumed end does not justify the means); and justice (procedures should be fair, reasonable, non-exploitative, and fairly administered), provide the basis for the rules that researchers should follow in human research. The Belmont principles was considered and realized during the case study research process.

Researchers also have the ethical obligation to do no harm to their human participants (Sieber & Tolich, 2013), with appropriate safety and ethical protocols being put in place to ensure that participants are not inadvertently harmed. The following safeguards were

implemented during the proposed case study research. The researcher ensured that all electronic files were kept on a password protected computer and that the password was changed every six months. All paper files were kept in a locked file cabinet in a locked office. Only the researcher had access to the cabinet and kept the key in a secure location. After the interviews were transcribed, the audio tapes were destroyed.

The researcher submitted an application to Institutional Review Board at East Tennessee State University (ETSU) setting out proposals for a case study investigation of Allendale County School District. Following IRB approval of this research study, the permission and informed consent of all participants was obtained, with each being informed of their right to refuse to participate in the study or to answer specific questions. Assurances of confidentiality and anonymity were provided to the participants. Protocols were followed for proper and secure storage of audio tapes and transcripts and, when the interviews were transcribed, the identities of the teachers were kept anonymous by the use of pseudonyms such as Participant A. The researcher made efforts to establish a good level of rapport with the research participants to ensure mutual trust.

Data Analysis

The data from each of the interview transcripts sources was coded line by line. Charmaz (2006) explained that this is a process by which a researcher begins to sort and synthesize data by attaching descriptive labels to extract parts of the data. Patton (2002) explained that the purpose of this process is to identify and classify patterns within the data. Once the interviews were transcribed, coding was carried out in two phases: initial and focused coding. In the initial coding, all the interview data was coded, and in the subsequent stage, focused coding was used to identify patterns and trends from the initial coding (Charmaz, 2006). Charmaz (2006) pointed

out that this will further develop higher level themes relevant to the research questions. Following the line by line coding, thematic analysis methods was used to analyze and report on the interview data and the data from the review of documentary evidence (Braun & Clarke, 2006).

The findings of the interviews and document reviews were organized into detailed narrative descriptions corresponding to the key themes and sub-themes identified in the coding and analysis process. The documentary evidence such as test scores from school and district report cards and district financial data found in the district budget was incorporated into the narrative to help explain and expand upon the primary research findings.

Trustworthiness

Guba and Lincoln (1998) proposed that the trustworthiness of qualitative research should be assessed differently from that of quantitative research. In an effort to establish trustworthiness in quantitative research the researcher must address issues of validity and reliability, but these concepts are not relevant to qualitative research. Lincoln and Guba (1985) associate the terms credibility, dependability, confirmability and transferability with qualitative research to control for potential biases that might be present through the design, implementation, and analysis of the study.

Credibility. Credibility refers to the extent to which the findings of a qualitative study appear to be credible or true (Lincoln & Guba, 1985). Bloomberg and Vople (2012) explain credibility in terms of whether the researcher has accurately represented what the participants believe and express during the research. Anfara, Brown, and Mangione (2002) recommend that qualitative researchers employ the following strategies to achieve validity or credibility: prolonged engagement in the field, use of peer debriefing, triangulation, member checks, and

time sampling. Triangulation, specifically data triangulation, is the method of using a variety of data sources in qualitative research (Patton, 2002). Data sources used in this case study were interviews with current and former Allendale County School District educators as well as data collected by the State Department of Education that details information on the progress of Allendale County School District from 1999 to 2018. The findings from the in-depth interviews were compared to surveys educators completed for the annual SC School Report Cards. For accountability purposes, the surveys asked questions pertaining to professional development and school morale. The case study included analysis of data compiled by the South Carolina Department of Education on student achievement in Allendale County School District from 1999 to 2018.

The researcher is not employed or associated with Allendale County School District and did not use participants that are known to her to avoid any researcher bias. To avoid other credibility issues, a very exact and detailed record was kept of all interviews. The individual interviews with educators was recorded, then transcribed for coding purposes. After the interviews were transcribed, the researcher asked the participants to review their individual interviews in order to verify that their thoughts and opinions were accurately recorded during the interview. This method, which is known as member-checking (Bloomberg & Vople, 2012), ensured that participants' perspectives were correctly portrayed without any researcher bias.

Confirmability. Confirmability is important as a means of showing that the findings of a study were reached objectively using systematic and neutral methods of data collection and analysis, and were not subject to any researcher bias. To ensure confirmability in this qualitative research, an accurate and detailed account of all data collection was documented throughout the research process. In the data analysis of the case study data, triangulation was used to enhance

understanding through the use of multiple sources and to contribute to increased confirmability of the findings, as recommended by Amankwaa (2016).

Transferability. Transferability in qualitative research means that the findings have applicability to other areas or contexts (Amankwaa, 2016), even though they are not directly generalizable to a wider population as in the case of quantitative research. Transferability may be achieved by providing a detailed description of the case study setting so that the applicability and relevance of the findings to other settings can be determined (Lincoln & Guba, 1985). In the case of the present study, transferability was enhanced by providing detailed information on the case study district so that the relevance of the findings to similar low-performing districts with a likelihood of being taken over by the state can be determined. The researcher also ensured that the same protocols and procedures were followed during all fifteen interviews to limit bias and so that the research may be duplicated in similar settings.

Dependability. Dependability refers to the extent to which the same conclusions of a qualitative study would be reached by a different researcher if they were to replicate the study, or the extent to which it is deemed that the researcher's interpretation of the findings and the conclusions or recommendations reached are justified by the research data. Again by systematically documenting the research methods the researcher ensured that dependability of the study can be evaluated. Further, dependability was enhanced through a process of obtaining feedback and advice from the researcher's academic advisor as the research progressed, which helped validate the researcher's analysis and interpretation of the data.

Summary

The nature of the methods and design of the proposed qualitative case study were presented in Chapter 3. This qualitative case study used purposeful sampling with maximum

variation to select fifteen educators for individual interviews using an instrument created specifically for this research. The sample of educators interviewed had knowledge of professional development initiatives in Allendale County School District from 1999 to 2018. The sample of educators participated in professional learning communities in Allendale County School District at some time from 1999 to 2018. The sample included educators with a variety of demographic characteristics and certifications to provide a broad perspective of the phenomenon being studied in this case study. Data analysis included transcribing the interviews, coding the data, identifying key themes relevant to the research questions and process, and using a process of triangulation of data sources to interpret the findings. Credibility and validity were maximized in the data collection and analysis processes.

A detailed analysis of the data obtained from the in-depth artifact review and in-depth interviews with educators are presented in Chapter 4. The findings from the interviews are correlated with other data from Allendale County School District such as student achievement outcomes, other teacher surveys on morale and professional development, and teacher retention rates in the district. Findings in Chapter 4 are presented in narrative text, as well as in graphs and charts.

Chapter 4. Findings

This chapter presents the findings from interviews conducted with educators and administrators regarding their experiences of PLCs and other forms of professional development in Allendale County School District between 1999 and 2018. Where appropriate, findings are incorporated from the analysis of relevant documentation reviewed by the researcher as part of the case study methodology used. These included relevant media reports, district board minutes, and other documentation relating to the state takeovers of Allendale School District collected by the researcher during the study.

Presented in this chapter are the interview findings by themes relevant to the research questions: 1) How were district and school professional development initiatives addressed during professional learning communities from 1999 to 2018; and 2) How did participation in professional learning communities from 1999 to 2018 influence a shift in teacher instructional capacity and classroom practices. In line with the thematic analysis methods used to code and analyze the interview data as described in Chapter Three, themes relevant to these questions were identified inductively from the research data. Illustrative verbatim quotes from the interviews are used throughout the chapter to ensure that the presentation of findings most accurately conveys the views and experiences of the participants.

Characteristics of the Sample

The sample of fifteen participants from Allendale County School District was selected using purposive sampling methods to ensure that a broad range of experience and roles would be included in the study. Specifically, the sample consisted of nine teachers from different grade levels, two reading coaches, two school level administrators, and two district level administrators. All participants were required to have some knowledge of the professional

development initiatives conducted in Allendale County School district from 1999 to 2018 and to have participated in professional learning communities at some point during this time. They all gave voluntary informed consent to take part in the study. The role or position and years of experience of each the participants are shown in Table 2.

Table 2.

Participants Years of Experience

Participant	Position	Years of Teaching Experience
A	Elementary Teacher	38
B	Elementary Teacher	6
C	High School Teacher	8
D	Instructional Coach	24
E	Assistant Principal	26
F	District Administrator	20
G	Principal	36
H	Elementary Teacher	8
I	Elementary Teacher	40
J	Instructional Coach	24
K	High School Teacher	21
L	Elementary Teacher	10
M	Elementary Teacher	17
N	District Administrator	36
O	Elementary Teacher	5

Interview Findings

Table 3 shows the main themes identified in the analysis relating to each of the research questions of the study, which are discussed in turn in this chapter. A participant confirmability matrix, showing which participants made comments relating to each of the themes identified in Table 3, is included as Appendix A.

Table 3.

Research Questions and Related Themes

Research Question:	Main Theme:
1. How were district and school professional development initiatives addressed during professional learning communities from 1999 to 2018?	Variety of and discontinuity in professional development initiatives Reliance on external consultants and coaches Influence of political factors on professional development implementation Teachers' lack of perceived relevance and value of professional development Change in approach and adoption of PLC model
2. How did participation in professional learning communities from 1999 to 2018 influence a shift in teacher instructional capacity and classroom practices?	Increased teacher and stakeholder engagement Adoption of new teaching methods and practices Perceived impacts on student achievement

Variety of and Discontinuity in Professional Development Initiatives. The research data revealed the ways in which professional development evolved and changed in the District over time during periods of state and district control, and the range of professional development initiatives that have been implemented. The first state takeover in 1999 appeared to have marked a turning point in at least attempting to address the professional development needs of teachers in a systematic, evidence-based manner, according to one of the school principals interviewed in the current study:

> That was probably when it about started to evolve and we begin to do more professional development at the school level and at the district level … The

> district looked at all of the schools and looked at the data to see what the need was, where our deficiencies were, to see what the district as a whole needed professional development in. (Participant G, Principal)

Despite this, the interviews with most participants indicated that many of the programs or initiatives over time since then were not adopted within a systematic PLC-type model as discussed in Chapter 2, which is based on experiential learning and the use of data to understand student and school needs and how to address these. Instead, the accounts of many of the participants suggested that much of the professional development provided for teachers between 1999 and the most recent state takeover appears to have been driven by the availability of funding or the participation of the district in state- or national-level initiatives. This was explained by one of the District Administrators as follows:

> We went through that period where we were trying to prepare everybody for Common Core ... and ELA math … Now all the training I'm doing now is centered around testing. (Participant N, District Administrator)

This participant also reported that, "We'd just gotten those two huge technology grants. Our professional learning communities centered around helping teachers become technology proficient, especially in using the iPad".

Other participants referred to district involvement in national or state level initiatives such as the South Carolina College-and Career-Ready Assessments, Read to Succeed initiative, System 44, and the Read 180 initiative for students with special needs or low achievement. Many also discussed the use of technology-focused programs, which appeared to have been adopted as a result of specific types of funding or grants being received by the district. These included the Apple program, in which students were provided with iPads and teachers were required to

undergo training so that they could assist students in using these devices and various educational apps, such as Smarty Apps. Some of the participants referred to being trained in the use of software such as Smarty Apps or iReady with the objective of creating learning paths and strategies for elementary school students. Other programs mentioned by the participants that involved integrating technology into education included Achieve 3000 for literacy and DreamBox for math. Such programs often involved the use of consultants or specialists to train teachers in the use of specific educational technology or apps.

Although a considerable amount of professional development was reportedly provided for teachers, much of this consisted of stand-alone or ad hoc initiatives as discussed above, rather than the use of a systematic, evidence-based PLC model tailored to the specific needs of the students and teachers within Allendale. According to the participants, this hindered the academic performance of students and schools, especially when programs that were proving to be successful were discontinued and replaced by others.

> We got the Success for All program in which the kids were taken out into small groups … wherever they fell as far as their needs. That was pretty successful. In 2012, we went from … a failing school to a C. Then they said, "oh well, that program cost too much, and so they took that away from us" …When it was taken away, we went right back to the way we used to be (Participant A, Elementary Teacher)

> There was nothing that was stable. It's always changing. They would get one thing and then they would get another … it was like they never stuck with anything to really see if it worked or not. (Participant J, Instructional Coach)

> We had programs that were really successful that now they're not using anymore, like Lexa and Smarty App. Those programs were really helping the students with reading, letter recognition, sounding out words, making up stories and problem solving (Participant I, Elementary Teacher)

These findings indicate that the professional development used in the district over much of the time period from 1999 failed to meet the requirement of sustained duration which is one of the criteria defined by Desimone (2009) as being crucial for professional development to be effective. Indeed, one of the District Administrators (Participant F) also commented that although the district had attempted to implement a PLC approach which would meet this and other requirements of effective professional development, this was unsuccessful because of the involvement of too many external stakeholders with their own interests in promoting or using specific programs or tools.

> In the beginning, they tried to … have PLCs working and they tried to have team building and leadership … It failed miserably because of the various agencies that were trying to come through and promoting their own let's do Lexia, let's do this, let's do PBIS, let's do RTI, let's do MTSS. (Participant F, District Administrator)

The other District Administrator participant similarly explained that attempts had been made during this time to implement a PLC model using external consultants, yet her account shows that the discontinuities continued with changes in external contractors and the short-term use of specialist coaches.

> We brought in outside consultants as needed for those two years. Then that superintendent left and the following year … They contracted with Pearson for professional learning communities … Then the following year the state brought in

> another consulting group ... They had coaches at all the schools … They were only there a year. (Participant N, District Administrator)

According to another participant who discussed the time prior to her being appointed as a transformation coach in the fall of 2016/17, these discontinuities in professional development had persisted at least up until the second state takeover in 2017.

> Teachers use the language of flavor of the month. They talked about the frequency with which new initiatives and things were presented, and often felt like things weren't given enough chance before they were abandoned and started something else … There was a little bit of frustration around professional learning communities there because teachers felt "I don't really have to buy into this because it's not going to last". (Participant D, Instructional Coach)

Although these individual, one-time initiatives may well have benefited students in some respects at least in the short term, the lack of a coherent, long-term professional development strategy, a lack of continuity and consistency in teacher professional development, and the influence of other variables including district-level political factors, as discussed later in the chapter, seem likely to have reduced their potential for contributing to sustainable positive gains.

Reliance on External Consultants and Coaches. One of the reported key features of the earlier period of state control was the heavy reliance on external specialists or people newly recruited to the district, including instructional coaches, educational consultants and technology specialists, to plan and implement the professional development of teachers within Allendale.

> The district had hired professional development specialist. She did the training and the training involved like administrators and teachers being trained. At least twice a month the professional development specialist, she would visit our

schools and she would do little mini trainings with the teachers during their planning periods after school. (Participant E, Assistant Principal)

What was Edison? It was like a group of people that brought in different people, different master teachers. They brought them in and they worked with the teachers and they helped the teachers create lesson plans and they came in and they taught lessons. (Participant J, Instructional Coach)

One of the district administrators (Participant N) noted that when she joined the District after about 4 years of state control, for example, it was to find that "teacher specialists, curriculum specialists and principal specialists" had been placed at all schools by the state and were responsible for most of the professional development at that time. The two district administrators interviewed for the current study highlighted the positive impact that external specialists had had on professional development. For example:

I would say that we had instructional coaches that were pretty strong. They led the majority of everything. (Participant F, District Administrator)

I think the time period when we started with the Apple, when we got the technology grant, that was good. Teachers were excited about learning how to use the iPad … The consultant that they hired to come in, she was very good. She was engaging and the teachers got to know her and trust her and they looked forward to her coming (Participant N, District Administrator)

One also explained how important instructional coaches had been in ensuring teachers all understood the core curriculum and how to teach it, which was especially important since Allendale had been experiencing high levels of teacher turnover, especially in the early years of state control.

According to the accounts of several of the participants, the use of external consultants as well as changes in leadership in the district throughout periods of state and district control, resulted in a lack of continuity and consistency in professional development initiatives, as discussed in the following section. The following quote from one of the District Administrators interviewed in this study demonstrates the high level of change in the use of external consultants over time which is likely to have contributed to this instability.

> In the second year I was at Allendale County, the state contracted a huge contract with Edison to come in and they were driving all of the professional learning … Then I left for three years, and then I came back … I did a lot of special development during that time those two years. We brought in outside consultants as needed for those two years … Then the following year the state brought in another consulting group … They were only there a year … (Participant N, District Administrator)

Influence of Political Factors on Professional Development Implementation. To a large extent, the inconsistencies in professional development appear to have been related to changes in leadership in the district over time. Many participants, including teachers, administrators and instructional coaches, observed in their interviews that numerous changes of superintendents had resulted in considerable discontinuity in professional development during this time.

> Allendale would always have a big turnover with stability in leadership (Participant E, Assistant Principal)

> I was only there for three years and we had two different temporary superintendents (Participant B, Elementary Teacher)

According to the account of one elementary teacher in the current study, there had been ongoing issues in the past relating to state/district "politics", with administrators and leaders appointing consultants or coaches from outside the area rather than individuals within the community who might have been better suited to the leadership roles and had a greater commitment to the district.

> You had the people that really wanted to be there and they didn't really want to put them in the leadership roles that they should be in …It just felt like people drove in from an hour or so away who were driving in to come be a part of working with us and then at the end of the day, they were leaving and going out of the community and weren't really being involved … There was always power struggles with the admins at the school and district level. The coaches who did meaningful and exciting PLCs were rarely allowed to do them or given very little time at our meetings. They just didn't always make the right decisions about who should be in charge and often those people left for other districts. (Participant B, Elementary Teacher)

One of the instructional coaches interviewed in the current study, who had arrived at the District in 2017 to help implement professional development during the second period of state control, indicated that she was confronted with a widespread culture of mistrust and resistance to state interference, as well as a lack of trust and communication even within the district.

> There was a huge culture of mistrust there. Mistrust (of) me as someone who was coming from the state department. Because they would say the state was here and the state took over before … that was 20 years ago, but they talked about it like it

> was something that had just happened ... There was a lack of communication … across schools they didn't communicate (Participant D, Instructional Coach)

Teachers' Lack of Perceived Relevance and Value of Professional Development. Various factors including the culture of mistrust and instability of leadership discussed above as well as the socio-economically disadvantaged and geographically remote nature of Allendale County are likely to have contributed to the high level of teacher turnover experienced over time, especially following the first state takeover of Allendale. Media reports indicated that around half the teachers at one Allendale school typically leave each year (Richard, 1999) and it was mentioned by numerous participants in the present study that despite the best efforts of specialist coaches, many teachers left the district after they had been trained by them, or at the time of the first state takeover. The impacts of this on the district's professional development activities were explained by participants in the current study as follows:

> During that first takeover, we did have teacher specialists. They gave us strategies that helped us to be a better teacher. Most of those people left Allendale when the teaching specialists left … and we were back in the same boat that we were in with inexperienced teachers. (Participant A, Elementary Teacher)
>
> Sometimes we feel that we're spinning our wheels because we have to go back and repeat the same thing again because of the number of (teachers) that leave. (Participant G, Principal)

As a result, many inexperienced substitute teachers or teachers recruited from overseas, including countries such as Spain and India (Bowers, 2017, June 19) were recruited at Allendale schools, making it even more challenging for either the state or the district to meet the professional development needs, and reportedly also having an impact on students.

> When the state came in, teachers left and our children, most of them were left with either long-term subs for all year … or a foreign educator… (Participant H, Elementary Teacher)

One of the District Administrators described the challenges they had faced in attempting to implement PLCs in 2016 in this context, just before the second state takeover of Allendale:

> We were so busy just trying to get teachers to teach … we tried to focus on literacy, but because they didn't know how to read the data, teachers didn't know how to make assessments … we were just trying to build teaching and learning (Participant F, District Administrator)

Despite the efforts of the state and the district to implement professional development initiatives over time, from the perspective of many of the teachers interviewed in this study, most of these were not felt to be sufficiently tailored to the needs of the district and its teachers and students. This had apparently resulted in a lack of engagement and high levels of resistance to professional development by many teachers, which in turn had made them difficult to implement successfully. Teachers at elementary and high school level indicated that they did not feel the professional development offered had been very relevant to them, especially when the same training was delivered to large groups of teachers covering different schools or grade levels.

> Some of them grabbed my attention, but a lot of the times I was just kind of bored and sitting there and wondering why do I have to sit in this? … I feel like there was a disconnect between the teaching staff and the administrative staff … The challenge was there was so many grade levels that the one specific thing that we were going over didn't really apply to everybody in the room. (Participant B, Elementary Teacher)

> A lot of times they didn't have us separated by schools or grade levels, so some of the things that was introduced to us didn't benefit us as much in the elementary setting as it would in the high school setting. I believe it was just vice versa, some of them that were being introduced to us did not benefit the high school teachers as much as it would the elementary. (Participant L, Elementary School Teacher)
>
> There were times where we sat and we thought … it was pointless, it was useless. (C, High School Teacher)

The lack of engagement and interest on the part of teachers also appeared to be related to the specific forms of professional development that were delivered, with several teachers expressing the view that they were just being imposed on them, and that they were passive rather than involved and active participants.

> Most of the time all of our professional developments are mandatory so we all have to go, we all have to participate. We don't interact. We're being talked to, so we're just sitting there listening to what they're saying to us. (Participant H, Elementary Teacher)

One expressed an element of resentment that in the PLCs teachers were being held wholly responsible for the performance of students even though there were factors involved in this that were outside their control.

> A lot of times we were asked to state, "what are you doing in your classroom and what will you be doing to increase your scores?" Sometimes children weren't held accountable because you can do everything you're supposed to do and the kids still not do what they're supposed to do. (Participant O, Elementary Teacher)

However, some participants expressed the view that there had been benefits from professional development initiatives adopted during the interim period of district control that had not been present in the state-implemented initiatives. Participant N stated that the professional development implemented by the state was not tailored to the specific needs of students and schools in Allendale despite being based on a more systematic approach, and this view was echoed by one of the elementary teachers who commented that individual school-level training had been more effective than that provided by external trainers.

> The groups that came in and took over professional learning, those were very intent and it was very systematic. A lot of it was pretty much the same philosophy and the same kind of training for each one. They just put their own little spin on it. When the district was in charge of professional learning, I think it became more focused on specific district needs … When the district was in charge of professional learning, it was more focused on the needs of that school, of individual schools. (Participant N, District Administrator)
>
> For me the ones that were done in the individual schools were more personal. They were more thought out … The teachers were able to ask me questions, we got more things covered. They focused on specific things at one time. (Educator L, Elementary Teacher)

From the perspective of the district administrators and instructional coaches, the widespread lack of willingness on the part of teachers, and even school principals, to accept and effectively engage in professional development has been a major obstacle to the development of effective PLCs in Allendale over time.

> There was one time when I was at the high school where the principal didn't have the expectation for teachers to participate. (Participant N, District Administrator)

These participants reported being confronted with negative attitudes or a complete lack of interest on the part of teachers in being involved in the PLCs they were trying to establish, which hindered them from working effectively. One of the district administrators described the challenges they faced when attempting to introduce PLCs after she joined the district in 2016:

> It wasn't really a true PLC. If they tried to focus on the data, they started venting about too much testing, or if an instructional coach tried to direct them on a certain topic, then they wanted to talk about, "well we can't do it because I have too many kids in the class". It was more like an "us versus them". We were trying to make them see the bigger picture … I don't know that an actual true PLC ever took place. I know there was the thought of it … But we had pushback from the teachers. (Participant F, District Administrator)

Similarly, one of the instructional coaches described the negative mindset of teachers regarding PLCs when she had arrived at the District to implement these on behalf of the state in the 2016/2017 academic year.

> There was kind of a sense of hopelessness and helplessness when I came there. They were just kind of like "this is the way it's always been, we'll do just enough to get by, people have always left us alone, this isn't going to last, that kind of thing" … It was really about the mindset of the practitioners there, more so than it was the children … The kids were willing and ready to learn. (Participant D, Instructional Coach)

One of the apparent reasons for the teachers' resistance that emerged from the interviews was that they felt overwhelmed and under too much pressure from too many different initiatives and a lack of allocated time for professional development, which meant that it was often crammed into short time periods at the end of the working day when they were already tired.

> During the week we were expected to use every day to do something. One day would be data analysis. Another day would be team collaboration. Another day would be a literacy professional development … They really wanted teachers to collaborate and learn from one another and share their ideas with each other. That became very stressful because you never really had a time to really plan during the week at school … As an educator, sometimes it becomes overwhelming when probably four days out of the week you were constantly in a professional development … It can definitely stress me out and my colleagues to have to go to so many PLCs every week and basically not seeing any changes. (Participant O, Elementary Teacher)

According to one of the elementary teachers, however, these time pressures had been addressed at least in part by the recent introduction of non-mandatory weekend professional development sessions.

> They opened up the Saturday Academy last year, and with that they had people coming, in which they paid a stipend if we wanted to go. We weren't required to go, but they tried to encourage as many people to come. Those seemed to work a little bit better because it was on a Saturday. It was from like 8:00 until 3:00 or 4:00, so you had the whole day to really get into the topics and to explore them. (Participant M, Elementary Teacher).

On the whole, the evidence from the interviews is one in which despite attempts by the state and the district to implement many professional development initiatives over time, these frequently failed to achieve the desired objectives because of shortcomings which meant that teachers and even principals were not sufficiently receptive to or engaged in them. This situation was no doubt reinforced by the culture of mistrust and suspicion that long prevailed within the district, as discussed above based on the secondary and primary research findings. Despite reported attempts to implement a PLC model in Allendale, it seems that at least until very recently, the professional development initiatives were quite far removed from this. However, the interview findings of the current study also revealed evidence of more recent positive developments in terms of the adoption of a PLC approach to professional development for Allendale teachers, and improved stakeholder engagement. These developments are discussed in the following sections.

Change in Approach and Adoption of PLC Model. One of the District Administrators explained that in the past year, since the Allendale had been under state control again, "we went to a system where we had different types of professional development every day at the schools … we took it up to a different level last year". She stressed that despite this high level of professional development, there is "a good balance between the time that teachers spend in professional learning communities during the school day and them having time to do the things they need to do for their classroom." (Participant N, District Administrator). This situation in which professional development had become frequent and extensive in schools was echoed by one of the school principals: "(professional development) has evolved over time from almost nothing, to now it happens often and it happens frequently" (Participant G, Principal).

Although the findings therefore indicate that there has been a continuing high level of professional development for teachers in Allendale ever since the first state takeover in 1999, one of the main recent changes appears to be greater continuity and consistency, an approach more aligned with the PLC model. The movement towards a PLC model is also reflected in the observation by one of the district administrators that teacher and principal feedback is being used to refine the approach to professional development over time, while persevering with specific initiatives over a longer time period rather than giving up on them too quickly.

> From ’15 when the superintendent was also the curriculum director, I took what she started and I continued through ’18. For three years they had something constant. There was hardly any change. Of course, we adjusted to the feedback that was provided from coaches and the principals, as well the teachers, because we had teacher leader groups. We didn’t stop and say PBIS isn’t working, let’s just stop. No, we actually brought in people to train us versus stopping and trying something else. (Participant F, District Administrator)

One of the elementary teachers also described a more systematic approach to professional development in her school which seemed to indicate that a PLC approach was being utilized there. This approach involved educating teachers about new educational methods and strategies, encouraging them to adopt them in classrooms and then using their feedback to modify them or replace them with more effective practices.

> It is geared for teachers to implement new ideas, new programs, whatever in their classroom, to see whether it fits the needs of the students. If it does not fit the need of the students, then (they) can go back and let our curriculum coordinators know that that particular program did not work with the students. And they come

up to refine it and define other professional development to help enhance student learning. (Participant I, Elementary Teacher)

A school principal similarly described a longer-term focus on literacy which had been sustained over several years at their school, but which was school driven and therefore tailored more to the needs of students and teachers, rather than resulting from a mandatory state or district level requirement:

> At the school level it's been a push for literacy for the last two years, three years that I've been there. We have … at the school level been working on guided reading, balanced literacy, and making sure that we have that structure in place and that everybody knows what to do. (Participant G, Principal)

An important aspect of the PLC approach is that professional development should be evidence-based and objective, using performance data to understand the needs of students and schools, and to develop professional development initiatives designed to meet these needs. Again, many of the participants described the ways in which data is now being used at school and district level in this way.

> My role (is) to do a lot of progress monitoring to make sure that whatever new programs that we have, that they're being utilized and that we're looking at data. Whatever the data says, we use the data to drive our instruction (Participant E, Assistant Principal)

> We saw lots of growth in lots of areas because we were looking at data differently than I think we ever had in the past … we were able to plan to be more prescriptive. Again, it wasn't what we thought or what we feel … if you brought

something to the table you had to come with some data to substantiate that. (Participant D, Instructional Coach)

We've really started, especially at the high school, working really well with data, and teachers understanding their data. (Participant N, District Administrator)

The following quote from an elementary teacher interviewed in the current study highlights the way in which the use of data which she learned from the PLC is being used in practice to benefit her students in the classroom.

I learned a lot regarding how to analyze data … Now I'm not just teaching the standards, I'm thinking about what's best and how it is best to teach them. When looking at data I not only look at it as a whole, but each student individually. That has really helped me understand my students better and be able to teach them better. (Participant O, Elementary Teacher)

This was a development, however, which required a significant change in approach and mindset, as explained by another of the elementary teachers.

We went through rigorous on how to analyze the MAP data to best meet the needs of the students. Something that (we) weren't used to doing was digging deep into the data. (Participant A, Elementary Teacher)

One of the instructional coaches interviewed explained how she had implemented a PLC model in the district which is data-driven and which involves a systematic process of involving teachers in professional development initiatives spanning a range of techniques and delivery methods. A major objective of this, she explained was to build teacher instructional capacity that would contribute to long term improvements in academic performance rather than focusing on short term professional development needs, an approach which, if successful, seems likely to

help avoid the shortcomings of earlier approaches to professional development in Allendale which were less strategic or sustainable.

> I worked with instructional leadership at that time to try to institute true professional learning communities … Ones that were driven by data … the goal was really to build capacity and sustainability so that when we left the people that were housed in our building would be able to continue on with that process …. We developed a professional development calendar, we got teachers on a weekly rotation, we set up a structure whereby teachers were giving feedback on the PLCs, where they were receiving support through coaching, through observations, sometimes through model lessons, sometimes through team teaching. (Participant D, Instructional Coach)

Increased Teacher and Stakeholder Engagement. According to one of the instructional coaches brought in to help implement PLCs in recent years, the success of this has required a considerable mindset shift on the part of educational leaders in the district, particularly with regard to engaging and involving teachers in the development and implementation of PLCs and in using a reflective approach to evaluate feedback and refine them to meet the needs of teachers and students.

> Typically, they wanted to just go in and tell teachers what to do. And so we had some very candid conversations that teaching isn't telling. If it was just a matter of us corralling a bunch of teachers and telling them a bunch of stuff, we wouldn't have the results that we have … On a day-to-day, week-to-week basis it was really about helping them slow down to evaluate the effectiveness of what they

were doing as it related to PLCs and make the plan to make the necessary shifts and adjustments. (D, Instructional Coach)

One of the high school teacher participants indicated that teachers are now much more involved in planning the PLCs and therefore feel more engaged in them, whereas before it was often felt that training was just being imposed on the teachers.

> Initially …. they weren't very teacher centered …. But as time progressed, they started asking our opinions on what kind of PLCs we would like, what was of interest to us, whether it be student engagement, data, using technology integrating in a classroom. They asked our opinions, so now we have a little bit more input into the type of PLCs that we got here at our school district … by virtue of … having these common goals versus it being something that's dictated to us and saying this is what you're going to do, since we have more input and more buy-in, it's made a more positive transition. (Participant C, High School Teacher)

The following quotes from an instructional coach and school principal, respectively, also highlight the more positive and collaborative approach to professional development that has been exhibited by Allendale's teachers in recent years as a result of the efforts to make cultural and mindset changes. These indicate that a more collaborative approach between teachers is becoming the norm as a result of the gradual establishment of PLCs in schools.

> There was a lot of resistance … I don't see that a lot now, and I see it's about the children … Now I see PLCs, I see them and I see teachers knowing that it's just a part of the norm, that's what they do. Collaboration, that's what they do because they're talking about what they're teaching, they're talking about what they're

> going to teach, they're discussing the standards. (Participant J, Instructional Coach)
>
> I think just the fact that teachers are coming together and collaborating ... We see more of that now, and it's not just you in your grade level. It's the mixture of grade levels. They're planning and they're in teams across grade levels, not just with their particular grade level. (Participant G, Principal)

One of the instructional coaches explained, however, that this had not just evolved naturally but had been a long process in which teachers had gradually accepted their own responsibilities with regard to the PLCs and the transfer of their own learning to their students.

> The message was crystal clear that, yes we were going to have PLCs, yes teachers were going to be accountable for attending them, yes teachers were going to be expected to implement and transfer to class the practice. As a function of that we were able to see some teachers really grow in that way. It was a tedious process, but we were able to see some really good outcomes and help some people feel more confident about their ability to deliver quality instruction. (Participant D, Instructional Coach)

Similarly, an Assistant Principal stressed the importance of explaining the purpose and goals of professional development to the teachers and engaging them in its implementation, in order to avoid the perception that it is being imposed on them, and thus helping to prevent resistance to it.

> If we show them what it looks like and we'll tell them the rationale behind why we're doing things, then they'll come on board. Where if it's more like a dictator thing and they don't know what's going on, and then it's not pre-planned, then there will be some resistance. (Participant E, Assistant Principal)

However, the changes in attitudes and approach are, according to some participants, not confined to teachers but the whole Allendale community, including parents, who are now more committed to being involved in improving the academic performance of the district.

> You have more parents coming out who have concerns about their children's growth in academics opposed to parents who are always running up to the district office and complaining about something … I've seen more volunteers coming out to volunteer in the classrooms and working with the students as a whole. I've seen a change. (Participant I, Elementary Teacher)

As highlighted by one of the school principals, achieving accountability among stakeholders at all levels in the education system is an important aspect of district leadership.

> If somebody comes in and they're pretty soft, people tend to be laid back. People that are just not self-motivated to do the right thing. But when you have a fire lit under you, when you're feeling the pressure, you're held accountable, I think that makes the difference ... Everybody accountable at every level. So the district office is accountable, the school is accountable, the teachers are accountable, the students are accountable, everybody has some level of accountability. (Participant G, Principal)

Adoption of New Teaching Methods and Practices. In their interviews the participants were asked about any ways in which they felt PLCs had had an impact on classroom practices or educational decision-making in Allendale. Several of the elementary teachers mentioned adopting new approaches or information learned from the PLCs into their teaching and classroom practices, in ways which they believed were beneficial in contributing to student learning and growth.

> If there were something I felt related to me or related to my students, I would take it back and try to incorporate it and use it in my classroom with them … If we had something on that and it taught how to teach this specific skill to them, I would take it back and do it in the classroom. It helped my classroom grow. (Participant B, Elementary Teacher)
>
> I was able to take a good much of the information that was introduced to me with the technology and use it my classrooms. My students were able to … do work that was more enrichment type lessons… more enrichment type lessons with the iPads. (Participant L, Elementary Teacher)
>
> I was able to get information on ways that I could incorporate more hands-on activities into my science lessons. (Participant L, Elementary Teacher)

Another teacher mentioned that she had found the support of her school's technology curriculum coordinator to be extremely useful, not only in delivering professional development but providing her with hands-on support in implementing the learning in the classroom.

> She actually would come in and work with our students, like show us how to incorporate technology into our lessons … She would come in and do those once a month if you wanted her to do that … I did find that very useful. (Participant H, Elementary Teacher)

Other teachers, as well as one of the instructional coaches gave accounts of ways new teaching styles were now being adopted within Allendale schools as a result of the PLCs, specifically more student-centered, group learning which was expected to help improve student achievement.

> Instead of teaching to just the whole group, I started doing more small groupings as best I could (Participant A, Elementary Teacher)
>
> I realized that I wanted to begin releasing more of the responsibilities in my classes to the students and become student centered versus teacher facilitating … I placed them in groups and allowed them to work together and let them be more in depth thinkers. (Participant L, Elementary Teacher)
>
> Before, it was very teacher centered, very heavy on lecture even though it's an elementary school … We saw some major shifts in the way the teachers began to approach their planning, to really look at "what is it the kids are telling us that they need?", not …. "what's my preference?", not what I've done in the past … We really had to have some very candid, very direct conversations with teachers about making a shift from what they were comfortable with doing, what they had done in the past to what students really needed them to do. (Participant D, Instructional Coach)

Perceived Impacts on Student Achievement. The majority of the participants (9) expressed the view that there had been at least modest improvements in student achievement which they attributed to the impact of the PLCs or other forms of professional development over time, since the initial state takeover in 1999 or more recently.

> Absolutely. We were able to see growth in the way of classroom data. (Participant D, Instructional Coach)
>
> I would say there has been some slow progress, but we're getting there. (Participant E, Assistant Principal)

> We have seen growth over time, but it has been in small increments (Participant G, Principal)

One District Administrator, however, expressed the view that there had been more substantial achievements in test scores that she attributed to the impact of the PLCs:

> We had big bulking test scores last year, especially at the high school level on the end of course tests. We saw a huge gain. That came from the learning communities and we also, for example, we were doing the HMH coaching, which helped improve the teachers using their core curriculum. (Participant N, District Administrator)

Among those participants who believed there had been positive impacts, the specific PLC-related factors they identified as drivers of these improvements included the use of a more collaborative approach, greater consistency in professional development and the use of data to identify and understand the needs of students.

> I'm thinking the growth is because it was some strong consistency. They had growth before but I don't think that it maintained because again, someone else came in and changed, and they changed it again, and they changed it again. (Participant F, District Administrator)

> That collaboration, everyone being on the same page, and not just looking at the data but actually understanding what it translates to be, has helped with pushing students. (Participant C, High School Teacher)

In contrast, other participants indicated that they did not feel there had been much impact on student achievement as a result of the PLCs, or gave more mixed responses, arguing for example that professional development in itself does not make much difference to the achievement of those students who are not prepared to make a greater effort in the classroom.

> I feel like more or less than not it really doesn't make that big of a difference. I feel like it's on the teacher and just going to those is not a major part of the student achievement, (Participant B, Elementary Teacher)

> Some of the students had improved. Some of them didn't. Again, I think a lot of it was because some of the children didn't give it their best, they didn't try for whatever reason. (Participant M, Elementary Teacher)

One elementary teacher argued that some students had not been receptive to the new teaching methods being introduced as a result of the PLCs since they were not used to these.

> They were used to a certain way of interacting in the classroom, and so then it made it difficult for them to interact or even try something new, getting into small groups and having an assignment and then having different students be responsible for different parts … Some kids just had difficulty when it came to having responsibility in groups. (Participant L, Elementary Teacher)

Other participants cited external, community-level factors as barriers to student achievement that professional development for teachers cannot overcome, unless a more holistic approach is adopted by Allendale County. These include, for example, the low educational achievement levels of parents and the ways in which a lack of interest in education has been passed on to the current generation of students.

> The student behavior, the parental support, all of that has a very impactful reason on why student achievement has not been where it needs to be in Allendale … There are great educators in Allendale … they are being overlooked due to the issues that Allendale County has as a whole … I had a lot of parents who didn't finish school

> and they were young and so that has caused their children to not be motivated and didn't care about school either. (Participant O, Elementary Teacher)
>
> We're really missing the part with the family. We're missing the psychological part where kids that need counseling, they're not getting that counseling until they get in trouble. A lot of things we could head off if we had the right outside agencies to come in and help us with that. (Participant A, Elementary Teacher)

Also discussing the barriers to student achievement in Allendale, an assistant principal interviewed in the current study highlighted the problem of constrained funding for professional development for teachers, "not having enough money and then you have to limit who can be trained for certain initiatives … (Participant E, Assistant Principal).

Furthermore, though positive developments were reported by the participants in the current study, which hopefully represent stepping stones to improved student achievement in Allendale, the documentary review revealed that a diagnostic report of Allendale-Fairfax High School, commissioned to consultants by state officials and issued in early 2019, noted that "students had little understanding of how assigned work was assessed or how progress toward mastery was communicated to them" (Bowers, 2017, June 19). This indicates that disconnects remain within the district between teacher professional development and impacts on student achievement.

Documentary Review Findings

An analysis of a range of relevant documents was conducted in order to triangulate the primary data with secondary research evidence and provide further insights into the professional development initiatives educators in Allendale experienced from 1999 to 2018. The documents reviewed included school board minutes, newspaper articles, professional development plans,

budgetary data, school board meeting agendas and minutes, and Title II professional development plans.

The documentary analysis followed a systematic procedure in which relevant content was recorded in a data collection sheet for the purpose of analysis. Each document was thoroughly reviewed, relevant content was extracted and incorporated in the data collection sheet, and notes were made regarding the relevance of the content to the study and its research questions. The full data collection sheet is included as Appendix B. The main findings are summarized in this section.

Political Factors and Financial Mismanagement. The review of evidence from School Board minutes revealed that one of the main factors contributing to the state takeovers of Allendale were allegations of financial mismanagement and nepotism, which were suggested to have hindered improvements in educational performance of the district and its students.

These findings provide supporting evidence for the claims of some of the research participants that throughout the period since the 1999 takeover, there was a general disconnect and a culture of blame and mistrust between district and state officials, which appears to have had a negative impact not only on performance but on the professional development of teachers.

For example, when two failing schools were called before the State Board of Education in 2008, during the period between the state takeovers when the district had control of education, Allendale school board chairman reportedly claimed that the district was being blamed for problems that were outside their control and had existed when the state was managing the school district. In turn, state officials retaliated by accusing the school board of failing to implement the agreed improvement plan since taking back control of the district (Smith, 2008, July 10). It proved difficult to find accurate information on spending by the district on the professional

development or on the improvement initiatives overall at that time. Indeed, in the March 28, 2011 minutes of the Board of Trustees, it was noted that Allendale was one of three counties reporting the lowest spending on implementing transformation requirements to date, but the same paragraph refers to a miscalculation of the dollars spent on the transformation model, with the corrected figures indicating a much higher monthly expenditure and adding to the confusion.

In her press release announcing the second state takeover of Allendale in 2018, however, Superintendent Spearman referred to "significant financial and programmatic concerns in key federal and state programs run by the district" and alleged that only 44% of spending per student in the 2015-16 year was in practice allocated to student instruction, though Allendale received one of the highest amounts of local, state and federal funding in South Carolina (Bowers, 2017, June 19; The Charleston Chronicle, June 28, 2017).

The minutes of the Allendale County School District Board of Trustees Regular Monthly Meeting from April 26, 2010 reported gains on state report cards and a celebratory reception for teachers: yet unofficial evidence obtained by the researcher indicates that many of the teachers and coaches working in the district at that time had been recruited under the controversial TAP initiative and paid disproportionate salaries via other school districts in order to comply with TAP funding and to retain the initiative. This may help explain the differential between local, state and national funding and the amounts actually allocated to instruction during this period of district control, including professional development for teachers.

Despite increases in standardized test scores during this initial period of state control, the district never achieved higher than "below average" on state report cards (Bowers, 2017, June 19). It was also reported, however, that more was spent per pupil in Allendale during this period of state control than in any other district within South Carolina, $11,302 per pupil in 2006

compared with the state average of $7,549 (Spratt-White, 2007, November 10), a difference perhaps accounted for by the disproportionate salaries paid to newly recruited teachers and external consultants and specialists recruited to provide professional development. As noted in the interviews, many external consultants were used in Allendale over the period between 1999 and 2017, yet there was little evidence of the development of a strong learning culture or the use of forms of personal development shown in previous literature to be most effective.

Analysis of official state documents announcing a state of emergency and the takeover of the district indicates that these were based on evidence of inefficient use of funding to meet the interests of adult stakeholders in the district rather than students, as well as financial and program mismanagement issues, and the recent lack of improvement in student test scores despite the provisions of a Memorandum of Agreement between the District and the State.

In official correspondence relating to the second state takeover, Superintendent Spearman also commented in 2017 on management decisions that put self-interests ahead of our students' achievement (Warthen, 2017, June 27). A related point was referred to in a 2017 news report commenting on the second state takeover of Allendale, when a community stakeholder commented that the Superintendent in charge of the first takeover did not implement a sustainable plan for growth once the district regained control (Bowers, 2017, June 25).

The reviewed School Board documents and media reports confirm the instability of the district in terms of changes of leadership as well as teacher turnover. For example, in the March 2017 Board minutes a former Board member refers to the many changes of superintendents, principals and teachers over time, and the lack of commitment of the Board to work closely with superintendents in the best interest of students. The reviewed April 19, 2017 Board minutes also record the dismissal of superintendents and the financial costs incurred as a result, which again

are likely to have reduced ability of the district to allocate sufficient funds to teacher professional development, while also contributing to the lack of stability and continuity in professional development initiatives reported by the research participants in the current study.

Organizational issues and inefficiencies apparently contributed to the threatened denial of accreditation to Allendale-Fairfax High School, according to the superintendent's report in the April 24, 2017 board minutes. Although it was acknowledged that some teachers were uncertified, feedback from the State Department of Education indicated that minor issues such as failing to turn in documents on time had contributed to the situation. Overall, it appears that organizational efficiencies, the conflicting interests of different stakeholders and financial mismanagement have largely contributed to the lack of adequate professional development for teachers which might have been effective in improving student performance and raising standardized test scores.

Professional Development Budgets and Initiatives. According to a report commissioned by the state at the time of the original state takeover in 1999 (Richard, 1999), very little professional development was being offered to teachers at this time, and around a quarter of teachers in Allendale were not fully certified. The report also noted that though there were low levels of student achievement on almost every measure, and annual spending per student was $600 higher than the state average, hardly any remediation was being provided by the district (Richard, 1999). This article documented the multiple problems facing the District and the failure of the school board to develop a five-year improvement plan despite having low test scores. The analysis presented in this article helps explain the contextual factors which hindered professional development, in terms of a severe lack of strategic planning.

Nonetheless, at the end of the first period of state control in 2007, the implementation of measures by Allendale schools including the recruitment of curriculum coordinators and other professional development measures were among the reasons why the district narrowly avoided a second state takeover in 2008, according to a media report published at that time (Smith, 2008, July 10). However, professional development budgetary data relating to the period 2010/11 to 2018/19 revealed a significant decline in available funding over time (Table 4 and Figure 2), which is likely to have hindered even further the implementation of a PLC strategy especially during the interim period of district control. The data shown in Table 4 and Figure 2 indicate a sharp decline in Allendale's professional development budget after the 2012/2013 fiscal year, with a low point in the 2016/2017 fiscal year – just before the second state takeover - when available funding was only around 13% of the professional development budget that had been available in 2012/2013.

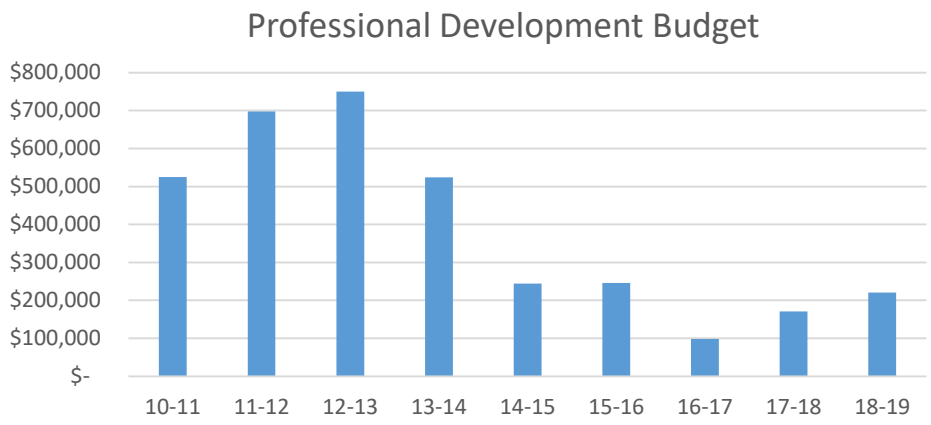
Table 4.

Allendale Professional Development Budget by Fiscal Year

Fiscal Year	**Budget**
10-11	$525,076
11-12	$697,705
12-13	$749,872
13-14	$523,915
14-15	$244,469
15-16	$245,792
16-17	$ 98,697
17-18	$170,538
18-19	$220,836

Figure 2.

Allendale County School District Professional Development Budget by Fiscal Year



A copy of PLC materials and coaching logs from 2016/2017 highlighted that although there was a professional development structure in place, this was not proving effective and its implementation was being hindered by the resistance of and lack of enthusiasm of teachers for the initiatives. Comments recorded on the coaching log included “Teachers stressed about time to plan, added responsibilities, lesson plan critiqued”; “Teachers unsure of how to use data”; “Six traits kits have never been opened!!”, and “First grade teachers did not take Dominie seriously. Folders were incomplete, no date, no analysis, turned in late!!!” This evidence suggests that prior to 2018, professional development was not only limited in Allendale, but did not exhibit the characteristics of effective professional development or PLCs, as discussed in Chapter 2. The comments suggest a lack of understanding or perceived relevance by the teacher of the value of the professional development, and indicate that they were unlikely to have been involved in its development.

Media reports (Bowers, 2017) documenting the second state takeover in 2017 provides supporting evidence for the arguments of some of the research participants that there was a

greater sense of commitment not just on the part of teachers but on the part of community stakeholders in taking the best possible action for the sake of students. In contrast with the 1999 takeover which has been vehemently opposed by the community, in 2017 there was broad support for the decision, even though the school board objected to it and filed a lawsuit against the state in protest. A positive impact has been a greatly increased focus on professional development in the district since 2017, as reflected in Title I grant application documents reviewed.

A review of content from Improving Teacher Quality State Grants Title II, Part A applications revealed a sharp increase over time in proposed professional development initiatives in Allendale. In the fiscal years ending 2016 and 2017, bids were submitted for only two professional development initiatives each year: Three-day, on-site district-wide Summer Institute for teachers which included workshops related to state standards, RTI, and technology; and a tailor-made First Year Teacher Mentoring Program. In 2018, following the state takeover, this had expanded to four separate initiatives: On-site district-wide professional learning opportunities to include workshops related to state standards, RTI, and technology for up to 110 certified staff; tuition fees and other costs for up to six certified teachers to pursue Gifted & Talented and/or English for Speakers for Other Languages (ESOL) certification and to support 60 teachers with Read to Succeed endorsement requirements; bi-monthly support professional learning after-school for first year teachers and teachers new to the district, and a two-day District Leadership Retreat for Principals and other district leadership to improve leadership quality. Title I budget detail documentation for fiscal years ending 2019 and 2020 show greatly increased budgets for professional development and a wide range of proposed initiatives. Overall allocated budgets for Improvement of Instruction and recruitment of teachers were

$81,814.33 in FY 2019 and $78,560.78 in FY 2020. The documentary review therefore provides supporting evidence for the interview data which indicates that PLCs are evolving in Allendale, with greater engagement and involvement on the part of teachers, and higher levels of commitment and support on the part of all stakeholders, including the State Education Department, and the wider community.

Chapter Summary

This chapter has set out the findings of the qualitative research interviews with the sample of educators and administrators in Allendale County School District, and has incorporated where appropriate evidence from a review of relevant documents relating to professional development in Allendale and the state takeovers of the district. The findings have been presented by themes identified inductively from the research data, which were seen as relevant to answering the research questions of the study. The final chapter summarizes these findings as they relate specifically to these questions, considers the implications of these, and sets out practical recommendations for the District and recommendations for future research.

Chapter 5. Summary, Conclusions and Recommendations

The purpose of this qualitative case study was to examine educator experiences during professional learning communities from 1999 to 2018 to understand the impact of building and supporting teacher instructional capacity and effective instructional strategies in Allendale County School District based on the experiences of a sample of 15 educators and administrators in Allendale County School District, as well as a review of relevant documentation. The sample included teachers, school leaders, instructional coaches and district administrators. This small rural district in South Carolina has undergone two state takeovers, in 1999 and 2017, in response to low levels of student achievement and allegations of mismanagement at the district level. Throughout the period since the first state takeover to the present day, various professional development initiatives were introduced including attempts to implement professional learning communities (PLCs), yet Allendale County School District continues to have low levels of student achievement. There is little information available as to why student performance does not improve in rural school districts that have been taken over by the state despite the use of PLCs and other professional development initiatives.

Based on studies conducted in other school districts, previous researchers have shown that high quality professional development is one of the most effective methods for improving teacher instructional capacity, teaching practices and student achievement (Cohen & Hill, 2000; Darling-Hammond & McLaughlin, 1995; Yoon et al., 2007). However, little is known about the use and effectiveness of PLCs and other forms of teacher professional development in rural school districts with low levels of student achievement and during a state takeover. Further, many researchers have identified weaknesses and shortcomings in the ways in which PLCs and other forms of professional development are implemented in practice by school districts across

the U.S. (Desimone & Garet, 2015; Franey, 2015; Hubbard, Mehan & Stein, 2006; Jacobs & McGovern, 2015). The research was therefore conducted in order to provide insights into the experiences of educators during PLCs and other forms of professional development in Allendale County School District from 1999 to 2018. It has generated important findings about the types of professional development that are perceived to have had a positive influence on teaching practices and student achievement, those which are perceived to have been less effective, and the perceived barriers to effective implementation of professional development in Allendale County School District. Based on the findings, recommendations are made later in the chapter for the future development and use of PLCs in this school district. The study extends the research literature relating to the types of professional development that are needed to help close the student achievement gaps in rural school districts that have been taken over by the state. The findings are also likely to be of value helping to inform the investment and resource allocation decisions of policy makers regarding professional development for teachers.

The first chapter of the thesis provided an overview of the study, set out background information relating to Allendale County School District and its history of state takeovers, and set out the research problem, purpose and significance of the study and the research questions. The limitations and delimitations of the study were also considered. Chapter 2 presented the findings of an extensive review of literature relevant to the current study, including literature relating to teacher professional development and professional learning communities, and the specific challenges and issues relating to these in the context of rural school districts and stake takeover situations. Chapter 3 described the research methods of the study, including the research design, sampling methods, data collection and analysis procedures. Research ethics and issues of research quality were also discussed in this chapter. In Chapter 4 the findings of the

study were presented, arranged by the main themes relevant to the research questions that were identified in the thematic analysis, and illustrated with verbatim quotes from the interviews. Chapter 4 also includes the findings of the secondary analysis of documents. Finally, the current chapter provides a summary of the main findings of the research, discusses their implications and sets out practical recommendations and recommendations for future research, followed by a brief overall conclusion to the study. The study was conducted within a theoretical framework developed by Desimone (2009), which proposed that for professional development to be effective in improving teaching practice and student learning, five specific features need to be in place. These were defined by Desimone as content focus, active learning, coherence, sustained duration, and collective participation. It focused specifically on exploring the extent to which professional development in Allendale between 1999 and 2018 exhibited the characteristics of PLCs, a distinct form of professional development which has been the focus of educational policy in the U.S. in recent years. Based on an extensive literature review, Hord (1997) defined the key characteristics of PLCs as: 1) supportive and shared leadership (Hipp & Huffman, 2003; Avenell, 2007); 2) shared values and vision (Stoll et. al., 2006); 3) collective learning and the application of that learning (DuFour, DuFour, Eaker & Many, 2006); 4) shared practice (Mitchell, Wood & Young, 2001), and 5) supportive conditions for the maintenance of the learning community (Fullan, 2006). When interpreting and analyzing the research findings, evidence was sought for the types of characteristics associated with best practices in professional development and PLCs (Desimone, 2009; Hord, 1997). The main findings relating to the two research questions of the study are summarized below.

Summary of Key Findings Relating to RQ1

Research Question 1 consisted of "How were district and school professional development initiatives addressed during professional learning communities from 1999 to 2018". Five inter-related main themes were identified from the interview data relevant to this research question and the findings relating to these are summarized in turn below. These themes were defined as:

- Discontinuity in professional development initiatives
- Reliance on external consultants and coaches
- Influence of political factors on professional development implementation
- Teachers' lack of perceived relevance and value of professional development
- Change in approach and adoption of PLC model

Discontinuity in Professional Development Initiatives. The interviews revealed that, as a whole, the professional development initiatives in Allendale County School District from 1999 to 2018 were not designed or offered within a systematic PLC-type model based on teacher collaboration, experiential learning and the use of data. Instead, much of the professional development took the form of individual initiatives or programs and appeared to be driven by the availability of funding for specific forms of training or the participation of the district in state- or national-level initiatives. Although the findings of the current study indicated that there were some perceived benefits for teachers and students from the professional development initiatives, the lack of a coherent, long term strategy as well as other weaknesses of these compared with the PLC model are likely to have reduced their potential for increasing teacher instructional capacity and generating sustainable positive gains in academic achievement. Some of the participants commented that programs that were starting to be successful were often discontinued. This

indicates that the approach to professional development in Allendale between 1999 and 2018 largely failed to meet the requirement of sustained duration which was one of the criteria defined by Desimone (2009) as being crucial for effectiveness. The findings suggested, however, that a more systematic approach was being adopted towards the end of the period, as discussed later in this chapter.

Reliance on External Consultants and Coaches. The findings revealed that, throughout much of the period from 1999 to 2018, there was a heavy reliance in Allendale on external specialists such as educational consultants and instructional coaches brought in from other school districts and agencies. To an extent, this was inevitable given the small size of the district and the limited expertise available within it, and reflected well-intentioned efforts to introduce best practices in teaching tools and methods in order to improve student achievement. However, despite the heavy investment over time in specialist expertise, academic performance in the district barely improved for much of that time, including the initial state takeover period as well as the interim period of district control. The interview findings as well as the analysis of documentary evidence suggest that this may be due to several factors. First, multiple changes of leadership in the district resulted in many concurrent changes in external contractors and in professional development initiatives, reflecting the preferences of educational leaders. In turn, these external stakeholders tended to promote their own interests in the use of particular educational methods or tools. This all contributed to the lack of continuity in professional development as discussed in the previous sub-section. It also appears that much of the educational spending of Allendale County School District during this time was accounted for by payments to external contractors as well as disproportionately high salaries paid to instructional

coaches or newly recruited teachers, and not on professional development initiatives specifically designed to help improve student instruction.

Influence of Political Factors. This theme relates to the reported negative aspects of the culture that have existed within Allendale County School District at least from the time of the first state takeover until very recently, and to the budgetary constraints that have been placed on professional development for teachers within the District. Interviewees gave accounts of a culture of perceived mistrust and suspicion between the state and the district, and a severe lack of communication and collaboration between individual schools within the District. A review of documentation such as school board minutes over time also revealed allegations by state officials of mismanagement on the part of the District, and vice versa, over the course of the time period under study. Finally, professional development budget data obtained by the researcher revealed a significant decline over time which seems likely to have hindered the implementation of a PLC strategy especially during the interim period of district control.

Teachers' Lack of Perceived Relevance and Value of Professional Development. The accounts of teachers also suggested that most of the professional development offered during this time period was not perceived to be of value or relevance to the teachers or to their students. Some explained that, especially during the state takeover period and during times of heavy reliance on external consultants, professional development was in the form of a one size fits all approach and was often delivered to teachers in all schools and across all grade levels at the same time. It was also often provided in the form of a top-down, workshop-style approach with little interaction on the part of the teachers who took the role of passive learners. Unsurprisingly, this resulted in very low levels of teacher engagement in the professional development initiatives and a widespread attitude of resistance and unwillingness to attend sessions. Furthermore, the

interviews indicated that teachers felt overwhelmed by pressure to participate in what they viewed to be too much professional development, especially as no time was allocated for this and sessions were often held at the end of the working day when they were already exhausted.

Change in Approach and Adoption of PLC Model. The final main theme identified in relation to RQ1 was the evidence of a more systematic, PLC-like approach being adopted towards the very end of the 1999-2018 period, at the time of the second state takeover. Overall, there was a significant contrast between most of the research participants' negative accounts of the approach to personal development that had existed in the District before this time, and their more positive accounts of recent developments. Although there was a continuing high level of professional development offered to teachers throughout the 1999-2018 period, the recent difference appears to be that professional development has now been more fully integrated into the organizational culture of the district and, as such, is more accepted by all stakeholders as an important tool for improving performance. There has also been a reported increase in the use of data to develop evidence-based professional development strategies, and a longer-term, more systematic approach to planning and implementing these. This has required a major shift in mindset on the part of teachers and leaders in the District, and a willingness to collaborate more fully in the interests of the students, which is gradually becoming more evident.

Summary of Key Findings Relating to RQ2

Research Question 2 consisted of "How did participation in professional learning communities from 1999 to 2018 influence a shift in teacher instructional capacity and classroom practices". As discussed above in relation to RQ1, the research data revealed that there was little participation in learning communities in Allendale County School District between 1999 and 2018, and that the approach to professional development in the district did little to influence a

shift in teacher instructional capacity and classroom practices. However, there was also evidence that this situation began to change in the later part of this time period and with the most recent state takeover. Three main themes were identified from the research data relevant to this which are discussed in turn below:

- Increased teacher and stakeholder engagement
- Adoption of new teaching methods and practices
- Perceived impacts on student achievement

Increased Teacher and Stakeholder Engagement. Many of the participants, including teachers as well as school and district leaders and instructional coaches, reported that there has been a notable increase in levels of teacher engagement and involvement in professional development initiatives in recent years. This appears to have resulted from adoption of a more systematic, data-based approach to professional development in which the teachers are becoming more convinced of and acknowledging its value and benefits. It has also reflected a gradual shift in district culture and stakeholder mindsets, with professional development for teachers now seen as the norm and fully integrated into the overall plans and strategies for the improvement of district performance. This has helped increase teacher instructional capacity by making teachers more receptive to learning new instructional methods and techniques and by empowering them to take control of their own professional development rather than perceiving that this is imposed on them. It was also noted by some participants that there has been a shift in attitudes on the part of the community in general and parents in particular, with all stakeholders working together more collaboratively in the best interests of students. Having a supportive community of parents who are more involved in the education of their children is also likely to help increase the capacity of teachers to facilitate and drive improvements in academic performance. Similarly, a

more co-operative and less confrontational relationship between district and state officials, which according to the accounts of some participants is starting to develop in Allendale, is likely to improve the efficiency and cost-effectiveness of professional development initiatives and ensure that these are focused on the longer term objective of building teacher instructional capacity in Allendale rather than on short term requirements or the immediate interests of individual leaders.

Adoption of New Teaching Methods and Practices. More specifically, many of the teachers as well as the instructional coaches referred to ways in which learning and information from PLCs had been transferred into teaching and classroom practices, in ways that were perceived to be beneficial in contributing to student learning and growth. As an example, several referred to the use of more student-centered, group learning approaches to teaching at the elementary level. Although one interviewee mentioned difficulties in implementing such approaches, others expressed the belief that these changes would contribute to improved student performance over time.

Perceived Impacts on Student Achievement. The research findings revealed that many participants perceived that teacher professional development has had at least modest positive impacts on student achievement over time, and conveyed the sense that these were increasing to some extent now that a more systematic PLC approach is being developed in the district. These were attributed, for example, to the use of a more collaborative approach, greater consistency in professional development and the use of data to identify and understand the needs of students. However, the findings in relation to this theme were mixed, with some participants expressing the view that the PLCs have not had much impact on student achievement. These participants argued that this has been due to the influence of other factors such as the unwillingness of some

students to make sufficient academic effort, and external, community-level factors such as low levels of interest in education on the part of many parents in the District.

Discussion

Professional development has been heavily used to drive recent education reforms in the United States, and has played a particularly important role in situations when school districts with consistently poor performance have been taken over by states (Grossman & Hirsch, 2009). Researchers have shown that high-quality sustained teacher professional development has positive effects on teaching practices and student outcomes (Rotermund et al., 2017; Santau et al., 2010; Saunders et al., 2009; Shaha et al., 2015; Yoon et al., 2007).

However, the findings of this study indicate that much of the professional development provided in Allendale during the 1999-2018 period did not exhibit the characteristics identified in the literature for effective professional development. Meeting these criteria effectively requires the use of a well-planned, systematic approach to professional development. But the research findings revealed little evidence of a systematic, planned approach to professional development in Allendale. Instead, the findings of the present study are similar to those of other researchers who have found that much of the professional development provided for teachers is short-term and fragmented and of the traditional workshop approach, and has relatively little impact on teaching (Desimone & Garet, 2015; Franey, 2015; Hunzicker, 2011; Kisa & Correnti (2015). The experience of Allendale with regard to professional development during the time period from 1999-2018 appears to have reflected the revolving door approach as discussed in the earlier literature by Alexander et al. (1996) in which new educational initiatives are continually introduced then quickly discontinued.

Darling-Hammond, et al. (2017) discussed effective professional development as "structured professional learning that results in changes to teacher knowledge and practices, and improvements in student learning outcomes" (p. 2), and Odden et al. (2002) emphasized that professional development "produces change in teachers' classroom-based instructional practices, which can be linked to improvements in student learning" (p. 53). Yet the findings of the present study revealed relatively little evidence, at least until the very end of the period under scrutiny in this research, that teachers were actively engaging in professional development and transferring their learning to the classroom in ways that were having a positive influence on student achievement. The participants expressed the view, on the whole, that only modest improvements in student achievement could be attributed to professional development over this time period, and the adoption of tools and practices learned from professional development initiatives by teachers were generally confined to just a few examples in which technological tools or specific practices had been adopted by participants.

More specifically, there was little evidence that the approach to professional development in Allendale during this period was aligned with the PLC approach which researchers have claimed is most successful in bringing about improvements in student performance. This requires the development of a school culture which supports the continuous and active learning of teachers and in which the approach to professional development is based on evidence, reflection and continual improvement (Miettinen, 2000; Rucinski, 2017; Sergiovanni, 1996); Stewart, 2014), as well as one in which teachers are actively involved in the development and implementation of professional development (Maloney & Konza, 2011). However, many of the teachers interviewed said that they felt that many of the professional development initiatives offered to them in the past had little relevance to them or their students. This was particularly the

case when the state was in control, and tended to deliver professional development that was standard for all schools or grade levels in the "one size fits all" approach to professional development which researchers have already identified as being ineffective in improving performance (Franey, 2015, p.1). There was some suggestion from the interviews that professional development was perceived by teachers to be better tailored to the needs of students, when planned and implemented at school or district level, but overall there was a sense that they did not perceive that they had gained much from the professional development initiatives provided over the course of almost two decades from 1999 onwards. As a result, the investments made by the state and the district into professional development in Allendale County School District were not effective in building teacher instructional capacity, improving instruction or contributing to enhanced student and school performance. This may at least in part be due to the influence of national education policies; it has been observed that the NCLB requirements for standardization in education reintroduced a top-down, non-collaborative approach to teacher development that many districts had been moving away from prior to this legislation (Colbert et al., 2008; Thomas & Magilvy, 2008). There was also little evidence that the state or district was adopting an evidence based approach during much of this time to identifying the strategies that improve teachers' knowledge, skills or practices or was measuring the costs and benefits of different approaches in order to maximize its return on investment in professional development, in the ways recommended, for example, by Chambers et al. (2008) and Knight et al. (2007).

The research findings suggest that in a situation of state takeover, despite best intentions to introduce or expand on teacher professional development as a strategy for improving performance, there are many inherent risks that can jeopardize or reduce the potential for doing so. They reveal that, at least in the case of the initial state takeover of Allendale County School

District and for many years following this, there was a confrontational and non-collaborative situation between state and district officials in which each group blamed the other for the poor performance of the district but failed to work together effectively to improve this. As a result, efforts and investments were likely to have been diverted away from the development of a long-term systematic professional development strategy that was effectively tailored to the needs of the district and its students, teachers and schools, and instead focused on short-term or discontinuous initiatives and on payments and salaries to organizations and individuals that were not necessarily effective in improving professional development and improving academic performance.

The difficulties that plagued the district throughout these years also resulted in many changes of leadership which only contributed to the lack of continuity in professional development and the failure to develop a long-term strategy for this. Although blame was cast between the district and the state, there seems to have been relatively little difference in their approaches to professional development for much of the time period until the more recent state takeover in 2018, with many leadership changes and a continuing lack of consistency in professional development for most of the period. The negative culture that developed in the district not only meant that stakeholders were not working together effectively in the interests of students but that teachers did not identify positively with the efforts to implement professional development and did not take ownership of these. This was exacerbated by the high levels of teacher turnover during this time period and the heavy reliance on substitute teachers and those recruited from abroad. These factors also appeared to have hindered collaboration and teamwork between the teachers and placed pressure on the professional development budget since there was a high and ongoing need for basic training for these more inexperienced teachers.

This is not to suggest that there were no benefits from professional development from the state takeover of Allendale from 1999 throughout the subsequent periods of state and district control. Many of the participants did cite individual programs or initiatives that they had found to be helpful, though it was often the case that these had been subsequently discontinued, to the disappointment of these participants. These especially included some of the technology focused programs in which teachers were trained to use computers and apps to improve student learning, and some initiatives that had been developed at school or district level and were felt to be more focused on and relevant to the needs of teachers and students. But the failure of the District to build on these successes highlights the lack of a systematic approach for reviewing the effectiveness of various professional development initiatives and incorporating best practices into a longer term professional development strategy.

The findings also highlighted the importance of school leadership in ensuring that school-level conditions are in place for effective professional development, including promoting a culture of collaboration and learning among teachers. Researchers have stressed that school leaders have a key role ensuring that the right environment and conditions necessary for the continuous learning of teachers are in place (e.g. Hord, 2009; Senge, 1990). In this study, many of the teachers interviewed reported feeling overwhelmed and under pressure to attend numerous professional development activities which they often did not find helpful, and were not provided with allocated time for professional development during the work day. This is a finding that was also reported in earlier studies (e.g. Cohen, 1990; Elmore & Burney, 1996). At the school level there is a clear need for principals to ensure that adequate time is made available for professional development, which may involve restructuring the timetable as emphasized by previous researchers (Donahoe, 1993; Raywid, 1993) or ensuring that adequate classroom coverage is

available for teachers while attending professional development. Time should also be allocated for follow-up activities such as planning instructional approaches based on the training or reviewing its effectiveness. The perception of many of the teachers that professional development had been imposed on them also suggests that their principals were not adequately meeting their responsibilities to involve teachers in the development and implementation of professional development in a shared leadership approach, or to clearly communicate its purpose and goals in the ways highlighted in the literature as being crucial (Hord, 2009; Leithwood et al., 1997; Louis & Kruse, 1995). Principals and other school leaders also have a responsibility to proactively seek opportunities to represent the professional development needs of teachers in their school to district administrators so that these can be taken into account in planning the professional development strategy and initiatives for the district. In turn, as highlighted by Senge (1990) and Chambers, Lam & Mahitivanichcha (2008), there is a need for effective district educational leaders, especially the superintendent who can ensure that principals are recruited with the right skills and attitudes to implement effective PLCs and can support them in doing so.

Nonetheless, the study also revealed evidence of a recent turning point, which appears to have coincided with the most recent state takeover, in which a more systematic and collaborative approach to professional development is now being adopted. It is not entirely clear why these changes have now occurred and have been easier to implement than at the time of the first state takeover, though one respondent indicated that this had been due to a concerted effort to change mindsets and to encourage all stakeholders to become more accountable for student achievement in the District. Regardless of the factors influencing this, there was a considerable amount of evidence from participants in various roles interviewed for this study, including teachers and district administrators, that Allendale is now at least on the way to adopting a PLC-type

professional development model for its teachers. However, there is still a long way to go before this becomes a full reality and it remains to be seen whether the political factors and inefficiencies which have plagued the District in the past will undermine this again in the future. It is hoped that the findings of this research, and the practical recommendations for Allendale County School District that are based on these and are set out below, will hopefully contribute to ongoing improvements in professional development and ultimately in student achievement and the overall academic performance of the District.

Recommendations for Practice

Based on the findings of this research, the following practical recommendations are made for developing and improving the use of PLCs in Allendale County School District, and avoiding the issues that have limited the potential of professional development for improving the academic performance of the District in the past. These recommendations have relevance to various stakeholder groups including school leaders, the Allendale County Schools Board of Trustees and the SCDOE.

1. The Board of Trustees should conduct or commission a skills audit and consultation of teachers, instructional coaches, and principals/assistant principals at Allendale County schools to investigate immediate and longer-term professional development needs and preferences.
2. A detailed district-wide review and analysis of student and school performance data should be conducted in order to identify the main areas of priority in which there is a need to target professional development for teachers.
3. The State Department Education should work closely with schools and the Board of Trustees to develop a strategic, long-term plan for teacher professional development,

based on the findings of the skills audit and consultation exercise and analysis of performance data.

4. A regular meeting of all school instructional coaches and principals/assistant principals should be held to promote and facilitate greater communication and collaboration between Allendale County schools with regard to teachers' professional development, and to ensure that this is delivered across schools in the most efficient and cost-effective way, while also being tailored where appropriate to the needs of teachers in specific schools or grade levels.
5. Regular meetings of state and district education officials should be held to promote and facilitate team-working and collaboration in efforts to improve professional development in the District; develop a long-term strategic professional development plan, and develop mechanisms for monitoring and review of professional development initiatives at school and district level.
6. State and district officials should ensure that sufficient funding is made available to support the identified immediate long-term strategic professional development initiatives to meet the needs of Allendale County school teachers and students.
7. Short-term or one-time professional development initiatives should be approved only if they clearly contribute to meeting the identified professional development needs of Allendale and building long term teacher instructional capacity for improving the performance of the District.
8. Both state and district education officials should ensure that there is accurate and transparent reporting of spending on professional development and other educational spending on Allendale County Schools.

9. Principals, assistant principals or other school representatives should be required or encouraged to undergo training in leadership of PLCs, in order to improve understanding of and the ability to implement the necessary conditions for success in these.
10. School leaders should be encouraged to review and modify school timetables in order to allocate dedicated time for teacher participation in PLCs.
11. Teachers should be encouraged to implement new instructional tools or methods learned in the PLC in their classrooms, to monitor and review impacts on student performance or behaviors and to share feedback with their peers.

Recommendations for Future Research

Based on the findings of the study the following recommendations are made for future research:

1. Much of the previous research on PLCs and professional development has been carried out in urban areas, it is recommended that further qualitative studies are conducted in other rural school districts to build a stronger evidence base regarding challenges and best practices in the use of professional development in these types of settings.
2. Quantitative, longitudinal studies in which the impact of specific types of professional development on student outcomes should be conducted and monitored over time to improve understanding of the relationship between teacher professional development and student achievement, and the specific characteristics of professional development that are associated with improved student performance.
3. Conduct case studies using multiple research methods within an under-performing rural school district such as Allendale to explore the experiences and perceptions of teachers and school leaders of implementing and participating in the PLC and quantitative

monitoring and analysis to explore the impact of the PLC activities on student and school outcomes. The findings might be used to improve the format and content of the PLC and to develop best practice guidance that could be adopted by similar schools.

4. Finally, case studies or evaluation projects might be conducted of the experiences and performance of school districts when taken over by the state to examine communications between state and district officials, the development and implementation of professional development activities in a state takeover situation; cost-effectiveness of professional development spending; media coverage and its impact on stakeholders, and other issues.

Conclusion

This dissertation has reported on qualitative case study research conducted in Allendale County School District, South Carolina. Semi-structured in-depth interviews were conducted with a sample of 15 educators and administrators, and relevant documentation was also consulted and incorporated into the analysis. The research was concerned with exploring why student performance had not improved in the District despite two state takeovers since 1999. The findings indicated that although a great deal of professional development had been implemented for teachers throughout the twenty years from 1999 to 2018, during consecutive periods of state and district control, much of this did not meet the characteristics of effective professional development as defined in the literature, and did not take the systematic, reflective, evidence-based and collaborative approach that is associated with PLCs. The interviews revealed evidence that political factors and instability of district leadership had contributed to a situation in which professional development was implemented in a discontinuous way as one-off programs and initiatives, and not as part of a strategic approach aimed at building longer-term teacher instructional capacity. However, the period of the latest state takeover appeared to be associated

with a more collaborative, systematic approach in which all stakeholders are working more effectively together to improve the performance of the District, and in which teachers are now more actively involved and engaged in professional development and acknowledging its benefits. The study is important in providing insights into the ways in which the potential of professional development for improving student performance can be increased or hindered when an underperforming school district is taken over the state, and in using the findings to develop recommendations for the future implementation of a more effective PLC model in Allendale. It is expected that the findings of the study will also be of interest and practical relevance to other under-performing school districts in the U.S., especially in similar situations where these are taken over by state education departments.

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APPENDICES

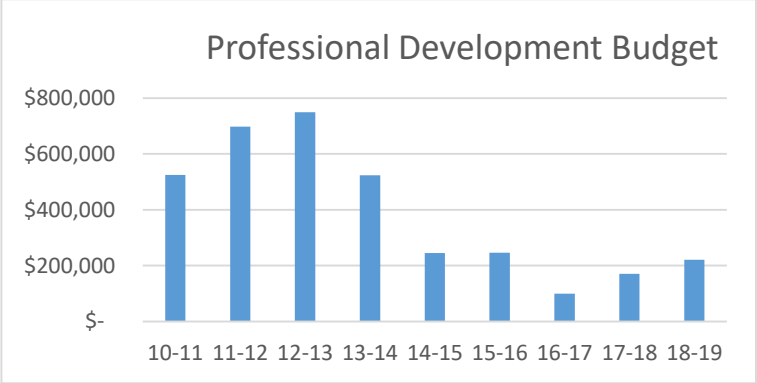
Appendix A. Participant Confirmability Matrix

Main Theme	**Participant**														
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Discontinuity in professional	x	x		x						x			x	x	
Reliance on external	x				x	x		x		x				x	
Influence of political factors on	x	x		x	x	x				x					
Teachers' lack of perceived	x	x	x	x		x		x	x	x		x	x	x	
Change in approach and			x			x	x					x		x	
Increased teacher and stakeholder			x	x	x		x			x				x	
Adoption of new teaching methods	x	x		x					x	x		x	x	x	x
Perceived impacts on student	x		x	x	x	x	x	x	x	x				x	

Appendix B. Documentary Review Data Extraction Sheet

Title of Document	Relevant Content & Notes
Allendale County School District Board of Trustees Regular Monthly Meeting April 26, 2010	District Report Card Improvement/Gains – Ms. Dukes said Allendale County Schools had the highest growth rating in the State on the District's Report Card. How does the State come up with districts growth ratings: 1) Elementary and middle school components (PASS and SC-Alt, grades 3-8) is 60%; 2) High school components are on- time graduation rate 30%; 3) HSAP first time attempt passage rate 5% and 4) End-of- course test results 5%. They look at the difference between the Absolute Growth index from one year to the next. The ratings range from excellent to at-risk. From the SDE website Allendale had a growth index of 0.27 which is rounded up to .3. All the other districts are in the negative numbers. Allendale was the only District in the State with a positive index rate. Notes: After the first takeover and while the district was participating in the TAP initiative which PLCs led by lead teachers was the center, the district showed gains according to the state report cards according to the board minutes attached. TAP was very controversial, it paid bonuses to master teachers and state reps were paid very well to work with the district.
Allendale County School District Board of Trustees Regular Monthly Meeting March 28, 2011	SIG Grant Update - Ms. Kennedy, Coordinator of the School Improvement Grant said information was included in the Board's packets. She outlined: 1) the purpose of the grant is to turn around persistently low performing schools. It addresses the components of the comprehensive reform strategies; increasing learning and creating community oriented schools; providing operational flexibility and sustained support and developing and increasing teachers and leader effectiveness. 2) SC Improvement Advisory Council report (background information: a link is sent to the contact person; the report is submitted quarterly by the Academic Interventionists to the SDE and comes back showing what has been submitted). 3) Page 3 outlines all school districts and the model selected for the School Improvement Grant. Allendale County has selected the Transformation Model. 4) Page 4 outlines the average instructional time by district; 5) Page 5 is the average percentage of highly qualified teachers by district. 6) Page 6 pay attention to the requirements. This is what the District's report is generated from – which are 10 requirements for the Transformation Model. 7) Page 7 tells the total dollars spend by Transformation requirements. 8) Page 8 the total dollars spent by the District on Transformation requirements. Note the summary part – Allendale, Bamberg and Spartanburg report the lowest dollars spend on implementing Transformation requirements to date. 9) Page 9 – the average percent rating on Transformation requirements. Districts who receive the SIG grant are not rewarding school staff for student achievement. 10) Page 10 average percent rating for district support Transformation requirements. 11) Page 11 average percent rating by LEA on Transformation requirements. On reviewing the report there were 2 areas of concerns: 1) the amount of minutes spend on instructional time – see page 4; 2) total dollars spend by the District on the Transformation model. This was a miscalculation because the Academic Interventionists were going off what they spend from the school as far as supplies and materials are concerned. This amount is not correct because it does not include

	trade books (which are about $46,000) or does not include the amount paid for SFA Consultants to come in each month – this is about $77,000. These two figures would put the total amount much higher than what is listed – again this is a miscalculation – did not include all the numbers that were used. We have come up with a plan to correct these problems for the next reporting period. Notes: Pages 3-4 talk about spending on a school improvement grant. The district gave a report that their costs for improving the district was one of the lowest in the state but then they talk about errors in the figures right after that statement.
Allendale County School District Board of Trustees Regular Monthly Meeting December 17, 2012	Mr. Mark Lott said his topic is transparency/accountability. He said: 1) in the community the average African American males ages 14-20 are lost. The system is failing these young men; 2) the community has been kept in the dark about these young males by Administrators; 3) the District takeover was done for financial reasons; 4) he does not see many community members in the audience tonight; 4) suggested having settings where the Board goes out into the community to get the community more involved; 5) let the community and Board come together and get better results for the funds spent in the District. Notes: It was argued that the District takeover was for financial reasons and not for the benefit of students. Also highlighted that there is little community involvement in schools.
Allendale County Schools Board of Regular Monthly Meeting March 20, 2017	Mr Carl Love said he was pleading with the Board, Superintendent and everyone to work together. What have we learned from the State Takeover? He was on the Board when the State gained control of the District. Board Members set the tone, be more visible in the schools, do not listen to the street committee, come out and see what is going on for yourselves. There are a lot of problems, but the students are working hard …. Everyone should be held accountable. When he was on the Board they went through a lot of superintendents, principals and teachers. The Board hires the superintendent. Have you tried working together and getting to know each other? Everything is about the students. Notes: Supporting evidence that Allendale has experienced high turnover of superintendents, principals and teachers. Call for greater collaboration from all stakeholders for the benefit of the students.
Allendale County Schools Board of Trustees – Special Called Meeting March 29, 2017	The Allendale County School Board voted to place Superintendent Leila Williams on leave, with full pay and benefits, while the Board reviews the current condition and direction of the District. The Board also voted to appoint Dr. Secaida Howell as Interim Superintendent, effective March 30, 2017, until further action of the Board, in order to ensure continuity in the District's leadership. Notes: Further evidence of change and instability in District leadership, which the interviews revealed has had negative impacts on teacher professional development strategies over time, and also at a cost to the District, reducing available funding for professional development and other requirements.

Allendale County Schools Board of Trustees – Special Called Meeting April 19, 2017	For the purpose of legal briefing. Ms Jennings moved that the Board, having made an effort to resolve this matter under Paragraph 12(a), terminate our contract with Ms Leila Williams Notes: The attached board minutes show that the board was concerned with Superintendent L. Williams and released her from her contract early (costing the district money and once again another change in leadership).
Allendale County Schools Board of Regular Monthly Meeting April 24, 2017	Mr. Howell said it would be a travesty if the boys and girls cannot attend a school that is accredited by the state of SC. This is a sad state of affairs. When he came to the District about 3 weeks ago he learned AFHS had been denied accreditation by the State of SC. He could not fathom how this had happened. He inquired with the SDE and they were very direct, some things just did not happen. Things as simple as turning documents in on time did not happen, documents that should have taken 30 seconds to complete as a check-off. Our children deserve to be taught by an appropriate, certified teacher. He does not want teachers in his child's classroom who are teaching things they are not certified to teach ….. A denial of State Accreditation would mean on graduation night, he as Superintendent could not confer diplomas. The diplomas students would receive would be worth nothing. They would attempt to go to college with a diploma that is worthless. T/hey had to complete some paperwork and the staff at the District Office worked tirelessly to get some things together by the deadline. He followed up with the SDE to make sure what they got was correct. They will remove the "Denial" and it will become "Advised". And his prayer is that on graduation on June 2nd, he can give students a diploma that is truly conferred. Notes: Highlights problems of lack of certified teachers and the high school being denied accreditation by the state, and revealed the inefficiencies that had contributed to this situation. The new superintendent (Howell) addresses the accreditation issues in the April 24th minutes on page 4. ...Howell later was fired by Superintendent Molly Spearman in June.
Professional Development Budget (Excel spreadsheet)	 Notes: Reveals a significant decline over time which seems likely to have hindered the implementation of a PLC strategy especially during the interim period of district control.

Education Week article October 13, 1999 (Richard, A.)	Starting From Scratch (Richard) Taylor has come out of retirement to try to turn around the struggling high school in South Carolina's most troubled school system--its first district to be declared in a state of emergency and taken over by the state. … What he and Tindal face in Allendale County are not just discipline problems, not just a lack of effective teaching and classroom management, not just abysmal test scores or inadequate leadership. It is all of these things and more: poverty, history, and culture. Many of those who are able to choose a school system have chosen against Allendale. In a county where one of every four people is white, almost all the 2,100 students in public schools are black. Half the babies in Allendale County are born to unwed mothers, and a quarter of the population never made it past the 9th grade. a combination of political factors set the stage for the takeover this past summer: the election of a new state schools chief last November, the power given state officials by a new accountability law, and a new governor elected on a platform that emphasized education. In August, Tenenbaum declared a state of emergency A small but vocal group of people initially opposed the takeover. But an inch-thick report from consultants hired by the state, detailing the failure of the district's schools, was hard to argue against. The study found that the school board had failed to write a five-year school improvement plan, though required to do so by law. And though the district spent $600 more each year per pupil than the South Carolina average of $5,721, test scores were at the bottom. Allendale isn't alone in having low test scores. What earned the district failing marks was its lack of effort to correct them. One-quarter of Allendale's teachers were not properly certified, and little additional training was offered, the consultants found. And despite low rankings on virtually every measure of student achievement, the district provided minimal remediation compared with other school systems. Notes: Comprehensive analysis of the background to the first State takeover of Allendale. Indicates that there was little or no professional development for teachers at that time, even though many teachers were uncertified and student achievement levels were low.
Media report July 10, 2008 (Smith, G.)	Allendale schools avoid second state takeover The Allendale County school district avoided a second state takeover Wednesday, despite its failure to enact a list of improvements at one struggling school. State Superintendent of Education Jim Rex said the move does not mean the state which took over the Allendale school district from 1999 to 2007 at a cost of more than $11 million is out of the business of running failing schools. But, he added, it will do so only as a last resort. https://www.heraldonline.com/news/local/article12226433.html Notes: Reports on the avoidance of a second state takeover in 2008 and on the costs involved in the first state takeover
Media report June 19, 2017 (Bowers, 2017a)	State takes over Allendale County schools — again — in ‘state of emergency’ Declaring a “state of emergency” related to academic performance in one of the state’s highest-poverty school districts, S.C. Education

	Superintendent Molly Spearman announced Monday she will take control of the Allendale County School District. Spearman met with community members June 7 in a packed Allendale-Fairfax High cafeteria where she announced she was considering a state takeover but had not made a decision at the time. At least one parent raised issues similar to those raised the last time this happened. "My concern is the environment that this decision that we're making will have on our children," the mother and former district employee said. "That's turmoil. OK, we've had enough of that." A diagnostic report from accreditors and state education officials painted a bleak picture in February at Allendale-Fairfax High. "The Team found that students had little understanding of how assigned work was assessed or how progress toward mastery was communicated to them," the report said. "The connection between content and real life experiences was absent." Spearman's statement also cited "significant financial and programmatic concerns in key federal and state programs run by the district." The district's most recent state report card data showed it spent $13,978 per student in the 2015-16 school year, of which only 44 percent went to student instruction. Spearman's press release said the district currently receives more than $17,000 per student in local, state and federal funds, among the highest dollar per student outlays in the state. "Allendale County Schools have received significant increases in funding yet continue to have some of the worst results. "I have significant concerns about district finances not being used efficiently nor effectively," she added. "We will take corrective action and ensure that every tax dollar is spent transparently in ways that improve student academic achievement." https://www.postandcourier.com/news/state-takes-over-allendale-county-schools-again-in-state-of/article_a51ac28c-5517-11e7-b0dd-a3c4a0336f40.html Notes: Documents the second state takeover announcement and the greater level of support from the community from this than was the case in 1999 Refers to the state commissioned report which found low levels of student learning and understanding, as well as financial and programmatic mismanagement which meant that education funding was not being used efficiently in the district.
Media report June 25, 2017 (Bowers, 2017b)	The first state takeover didn't solve Allendale schools' woes. Will the second apply lessons from the past? The state superintendent of education took drastic measures to turn the district around in 1999, exercising her authority to take control of the district. After eight years of state control, the district saw modest progress but was still nowhere near proficiency in 2007. Ten years later, the current state superintendent announced a second takeover on Monday. The local school board has challenged her authority to do so, filing a lawsuit in the state Supreme Court. The last time the state took control in Allendale, Wilda Robinson had just been named interim superintendent after a 27-year career as a teacher and administrator in the district.

	About a month into the job, she got news the Education Department would be replacing her with its own appointee. Robinson left the district during a tumultuous turnover in 1999 to teach at Claflin University. Now she serves on the Allendale County School Board, and she's wary of repeating mistakes. School board Chairwoman Patricia Jenkins said the board was in the process of negotiating an agreement with state officials when State Superintendent Molly Spearman wrested control from local leaders. Wilbur Cave, founder of the affordable-housing organization Allendale County Alive, said he sees broad support for the current takeover and hopes for the best. But he hopes Spearman learns a few lessons from the last takeover. He said Tenenbaum did not gather enough community input, and she did not set up a sustainable plan for growth once the state released control in 2007. Today as in 1999, a rift has opened between the state superintendent and the local school board. The Education Department released a February report from the accrediting group AdvancED that found "significant deficiencies in school board leadership" and "no sense of urgency" on academic progress and a lack of "community-supported vision" in Allendale County. https://www.postandcourier.com/news/the-first-state-takeover-didn-t-solve-allendale-schools-woes/article_da2b64e8-553c-11e7-856b-0734f7af46f5.html
State of South Carolina, Board Suspension letter June 29, 2018	On today's date, State Superintendent of Education Molly Spearman declared a state of emergency in Allendale County School District pursuant to the powers provided under the appropriations act of 2018, proviso 1A.12. As previously informed, Superintendent Spearman terminated for cause the Memorandum of Agreement on today's date. These circumstances alleviate the board of any and all duties previously designated to it. The board's compensation will be suspended effective immediately and board meetings will no longer be required. All board travel will remain suspended. The district will no longer pay any legal fees incurred by you or your fellow trustees after today's date. Notes: Announcement of state of emergency and board suspension pending state takeover of Allendale
State of South Carolina, Declaration of State of Emergency June 29, 2018	Today, I declare a state of emergency in Allendale County School District, pursuant to the powers provided to the state Superintendent of education under the Appropriations Act of 2018, Proviso 1A.12. Under this new declaration, a Memorandum of Agreement will no longer be in place. I initially declared a state of emergency in June 2017; however, following education brought by the Allendale scoreboard, I agreed to work collaboratively with them. While the Memorandum was signed with the students' interests in mind, the focus of our intention in working with the board has been to my dismay, solely on the adults and has caused tremendous time and resources to be dedicated to appease in their interests rather than improving classroom instruction and academic outcomes. In 2016 to 17 only 14.6% of Allendale students met or exceeded state standards in English Language Arts and only 13.9% in mathematics and 12.9% in science. Passage of End of Course tests were 36.2%, less than half of the state average. No students met ACT College Ready

<table>
<tr><td></td><td>benchmarks on the 2017 ACT assessment. This level of poor academic achievement cannot continue.
In addition to the lack of student achievement, I am also concerned about financial and programmatic issues in several federal and state programs. With additional technical assistance from the Department staff I believe Allendale can make significant improvements in financial oversight and provide a better return on taxpayer investment.

Notes:
Announcement of state of emergency and termination of existing Memorandum of Agreement between the district and state
Refers to inefficient use of funding for interests of adults rather than students as a main reason for decision, as well as financial and program mismanagement issues. Failure to improve test scores during this time.</td></tr>
<tr><td>Fairfax Elementary School Embedded Professional Development Fall/Winter 2017-2018</td><td>Shows daily PROFESSIONAL DEVELOPMENT activities:<table><tr><th>Monday Coaching and Feedback with Mini PROFESSIONAL DEVELOPMENT</th><th>Tuesday School Professional Development with Read to Succeed Coach</th><th>Wednesday District Professional Development</th><th>Thursday: Grade Level Planning</th><th>Friday Data Aggregation</th></tr></table></td></tr>
<tr><td>Lesson Plan/Observation Schedule Fairfax Elementary, 2016-2017</td><td>Sets out weekly grade level meetings schedule</td></tr>
<tr><td>Copy of PLC materials and coaching logs from 2016/2017</td><td>Lesson Plan/Observation Schedule Fairfax Elementary 2016/17
Weekly grade level meetings schedule 2016/17
Tiger Learning Community schedule
2 hour daily 5 literacy block
PLC meeting Agendas
Coach’s goal setting reflection sheet
Coaching logs: key material:
“Teachers stressed about time to plan, added responsibilities, lesson plan critiqued”
“Teachers unsure of how to use data”
“Six traits kits have never been opened!!”
“First grade teachers did not take Dominie seriously. Folders were incomplete, no date, not analyzed, turned in late!!!”
“We talked about how well she had chosen the sets based on Dominie data”

Notes:
Demonstrate existence PLC structure and professional development efforts at Allendale
highlighted that although there was a professional development structure in place, this was not proving effective and its implementation was being hindered by the resistance of and lack of enthusiasm of teachers for the initiatives.</td></tr>
<tr><td>South Carolina Department of Education
Improving Teacher Quality State Grants Title II, Part A
For Fiscal Year Ending 2016</td><td>Title II - Activities List
Three-day on-site district-wide Summer Institute for teachers during non-contract hours to include workshops related to state standards, RTI, and technology
The district will design a tailor-made First Year Teacher Mentoring Program to assist first-year teachers in acquiring the knowledge and</td></tr>
</table>

	developing the skills and attitudes necessary to have a successful induction year. Each teacher will be assigned a trained mentor who will earn a stipend during non-contract hours Notes: Only two professional development initiatives
South Carolina Department of Education Improving Teacher Quality State Grants Title II, Part A For Fiscal Year Ending 2017	Three-day on-site district-wide Summer Institute for teachers during non-contract hours to include workshops related to state standards, RTI, and technology - Approximately 35 teachers will be offered 1) a $100 per day stipend [($100 per day x 3 days) The district will implement a personalized First Year Teacher Mentoring Program to assist first-year core content area teachers in acquiring the knowledge and developing the skills and attitudes necessary to have a successful induction year. Each teacher will be assigned a trained mentor who is a certified core content area teacher who will earn a stipend during non-contract hours Notes: Only two professional development initiatives
South Carolina Department of Education Improving Teacher Quality State Grants Title II, Part A For Fiscal Year Ending 2018	On-site district-wide professional learning opportunities for personnel during non-contract hours to include workshops related to state standards, RTI, and technology - Up to 110 certified staff will be offered 1) a $125 per day stipend plus fringe benefits at a cumulative rate of 26.71% Fund tuition, registration, travel, lodging, and meals, to support no more than six existing certified teachers to pursue Gifted & Talented and/or English for Speakers for Other Languages (ESOL) Add-on and/or Initial Certification at accredited post-secondary institutions and to support 60 teachers with Read to Succeed endorsement requirements. Also, reasonable materials and supplies needed for such professional development activities such as books, etc. Evaluation: POs and Transcripts Provide bi-monthly support professional learning after-school beginning in September for first year teachers and teachers new to the district. Support will be provided in the areas of classroom management, instructional strategies, formative and summative assessment, rigor and relevance, creating relationships with children, families, and the community, etc. The district will use district level administrators to assist with the planning of teaching and learning of various concepts and skills necessary for a successful transition to the classroom and/or to another region/state/country. Sessions will be led by leaders such as the Director of Curriculum and Instruction, Director of Technology, Read to Succeed Coaches, Director of Federal, State, Testing and Accountability, Grade Level Leaders, Assistant Principals, to name a few. Host a two-day District Leadership Retreat for Principals and other district leadership to improve leadership quality throughout the district. The district will facilitate the retreat with leaders from the South Carolina Department of Education and possible one district/school improvement/motivational expert/leader(TBA). Topics to be covered may include instructional programs, curriculum design, data analysis, instructional technology and technology infrastructure, policies and regulations, district procedures, needs assessment, division updates, budget and finance, back to school planning (including Convocation), and professional development offerings and needs.

	Notes: Expanded to four initiatives
TITLE I SCHOOLWIDE PROGRAM/PRIORITY (TA) PLAN ADDENDUM TO SCHOOL RENEWAL PLAN Allendale Elementary	Activity Include Staff Development Provide professional development to support Schoolwide academic programs by attending off-site workshops and conferences such as SCIRA, Hilton Head, SC (Feb 23-25), EdTech, Myrtle Beach, SC (October 25-27) Readers' Workshop, Writers' Workshop, SCDE workshops and conferences, SCCTM, Greenville, SC (Nov 16-17). Funds will be provided for 15 Grade 3-6 teachers to attend conferences. Expenditures may include contracted services for workshop providers such as registrations, hotel, mileage and meals.
TITLE I SCHOOLWIDE PROGRAM/PRIORITY (TA) PLAN ADDENDUM TO SCHOOL RENEWAL PLAN Allendale Fairfax High	Activity Include Staff Development Provide contracted services and consultants to deliver professional development to all teachers and staff tied to improvement of student performance on ELA and Social Studies state assessments. Continue implementing research-based curriculum and instructional practices to teach and enhance the reading skills of students
TITLE I SCHOOLWIDE PROGRAM/PRIORITY (TA) PLAN ADDENDUM TO SCHOOL RENEWAL PLAN Allendale Fairfax Middle	Activity Include Staff Development Continue offering professional development opportunities for the Student Concern Specialist/Parent Liaison to acquire and implement best practices through workshops including but not limited to FMU COE, Parents Leading the Way, Parenting Partners, and etc.
South Carolina Department of Education Application for Grant to Meet the Special Educational Needs of Educationally Deprived Children Under Title I of Public Law 107-110 2018	The applicant designated below hereby applies for a grant of Federal funds to provide instructional activities and services to meet the special educational needs of educationally deprived children as set forth in this application. District Set-Aside Activities Professional Development Supplemental 220-312 The district will focus on assisting district personnel through professional development in the areas of leadership, personalized learning and instructional technology. The district will provide contracted trainers and technology consultants such as Microsoft Corp., Education Research Group, and Fountas and Pinell for training at the cost of $ 1,500 per trainer for up to 7 trainers for multiple days to train employees in the use of relevant instructional strategies, pedagogy and technology across district platforms such as Promethean interactive boards, Apple, Microsoft 360, etc. The training will take place throughout the school year and in the summer. 220-200 The district will focus on assisting personnel through professional development in the areas of personalized learning and instructional technology: Benefits (Retirement 19.06% and Social Security 7.65%) for one hundred (100) employees. Training will be in the use of relevant instructional techniques, pedagogy, and technology across district platforms such as Promethean interactive boards, Apple, Microsoft 360, etc. The training will take place throughout the school year and the summer. 220-100 The district will focus on assisting personnel through professional development in the areas of personalized learning and instructional technology: stipends at $125/person and benefits (Retirement

	19.06% and Social Security 7.65%) for one hundred (100) employees. Training will be in the use of relevant instructional techniques, pedagogy, and technology across district platforms such as Promethean interactive boards, Apple, Microsoft 360, etc. The training will take place throughout the school year and the summer. 223-332 The district will focus on assisting district leaders through job-embedded professional development in the areas of leadership, personalized learning, and instructional technology: All principals of Title I schools, the District Director of Curriculum and Instruction and the District Title I director will attend a professional development conference such as EDTech, ISTE, SCDE Trainings and Workshops, SCASA, National Principals Conference, and other State and/or National Conferences. Expenses will include registrations, lodgings, meals, and mileage.
TITLE I SCHOOLWIDE PROGRAM/PRIORITY (TA) PLAN ADDENDUM TO SCHOOL RENEWAL PLAN Fairfax Elementary 2017/2018	Provide professional development to support Schoolwide academic programs by provided onsite professional learning and attending off-site workshops and conferences such as Guided Math, SCIRA, Hilton Head, SC (Feb 23-25), EdTech, Myrtle Beach, SC (October 25-27) Readers' Workshop, Writers' Workshop, SCDE workshops and conferences, SCCTM, Greenville, SC (Nov 16-17), and CDEPP required training. 28 Teachers and teacher assistants from grades pre-K-2 will attend. Continue providing professional development opportunities for teachers to acquire and implement best practices through workshops and conferences including but not limited to EdTech, SCATA, SCASA, Research to Practice, etc
Budget detail 0301 - Allendale County Schools (0301) Public District - FY 2019 - Title I Part A - Rev 6 - Title I Part A F/Y 2019	224 - Improvement of Instruction Use of funds: PROFESSIONAL DEVELOPMENT - Stipends to teachers On-site district-wide professional learning opportunities for personnel during non-contract hours to include workshops related to curriculum development, state standards, RTI, and technology - Up to 110 certified staff will be offered 1) a $125 per day stipend plus fringe benefits at a cumulative rate of 28.26% (retirement at 20.61% and social security at 7.65%, and (2) recertification credit toward certificate renewal. Evaluation: Daily Agendas, Daily Sign-In Sheets, and Presenter Agreements Identified need: Improvement of instructional skills Improvement of content knowledge Provide funds towards a contract with a national professional developmentcompany to provide Data Teams Professional Development Courses and Job-embedded Coaching for teachers and administrators. 2 Professional Development Training Days & 4 Job-embedded Data Teams Coaching Days - $9760.00 Provide contracted professional development consultants at $1500/day for not more than $6000 for on-site professional development for certified teachers. Evaluation: Daily Agendas, Daily Sign-In Sheets, and Presenter Agreements Provide registration and travel including lodging, mileage, meals, parking, etc. for novice principals and assistant principals to attend leadership development professional development such as those provided by SCASA and SCDE. Host a two-day District Leadership Retreat for Principals and other district leadership to improve leadership quality throughout the district. The district will facilitate the retreat with a district/school improvement/motivational expert/leader(TBA). Topics to be covered may

	include instructional programs, curriculum design, data analysis, instructional technology and technology infrastructure, policies and regulations, district procedures, needs assessment, division updates, budget and finance, back to school planning (including Convocation), and professional development offerings and needs. Some time will also be set aside for reflection on the district program as a whole for 2019. Expenses will include but not be limited to consultants at no more than $750/day or $1500. Provide bi-monthly support through an Induction/New Teacher Academy to deliver professional learning after-school beginning in September for first year teachers and teachers new to the district. Support will be provided in the areas of classroom management, instructional strategies, formative and summative assessment, rigor and relevance, creating relationships with children, families, and the community, etc. The district will use district level administrators to assist with the planning of teaching and learning of various concepts and skills necessary for a successful transition to the classroom and/or to another region/state/country. Sessions will be led by leaders such as the Director of Curriculum and Instruction, Director of Technology, Read to Succeed Coaches, Director of Federal, State, Testing and Accountability, Grade Level Leaders, Assistant Principals, to name a few. Expenses will include stipends to in-district ($100) and out- of-district presenters ($300). Fund travel, lodging, and meals, to support no more than six existing certified teachers to pursue Gifted & Talented and/or English for Speakers for Other Languages (ESOL) Add-on and/or Initial Certification at accredited post-secondary institutions. Evaluation: POs and Transcripts Fund tuition and/or registration to support no more than six existing certified teachers to pursue Gifted & Talented and/or English for Speakers for Other Languages (ESOL) Add-on and/or Initial Certification at accredited post-secondary institutions and Advanced Read to Succeed course towards R2S Literacy Specialist and R2S Literacy Coach endorsement. Evaluation: POs and Transcripts Host a two-day District Leadership Retreat for Principals and other district leadership to improve leadership quality throughout the district. The district will facilitate the retreat with a district/school improvement/motivational expert/leader(TBA). Topics to be covered may include instructional programs, curriculum design, data analysis, instructional technology and technology infrastructure, policies and regulations, district procedures, needs assessment, division updates, budget and finance, back to school planning (including Convocation), and professional development offerings and needs. Some time will also be set aside for reflection on the district program as a whole for 2019. Expenses will include but not be limited to reasonable materials and supplies (such as a leadership book study, binders, tab dividers, easel charts, post-it notes, highlighters, markers, etc.) for participants at no more than $2000.00. Provide bi-monthly support through an Induction/New Teacher Academy to deliver professional learning after-school beginning in September for first year teachers and teachers new to the district. Support will be provided in the areas of classroom management, instructional strategies, formative and summative assessment, rigor and relevance, creating relationships with children, families, and the community, etc. The district will use district level administrators to assist with the planning of teaching and learning of various concepts and skills necessary for a successful transition to the classroom and/or to another region/state/country.

	Sessions will be led by leaders such as the Director of Curriculum and Instruction, Director of Technology, Read to Succeed Coaches, Director of Federal, State, Testing and Accountability, Grade Level Leaders, Assistant Principals, to name a few. Expenses may include supplies and materials which may include but are not limited to professional development books, videos, folders, flip charts of instructional strategies, posters, markers, post-it notes, journals, binders, tab dividers for the activities.
Budget detail 0301 - Allendale County Schools (0301) Public District - FY 2019 - Title I Part A - Rev 6 - Title I Part A F/Y 2020	On-site district-wide professional learning opportunities for personnel during non-contract hours to include workshops related to curriculum development, state standards, RTI, and technology - Up to 110 certified staff will be offered 1) a $125 per day stipend plus fringe benefits at a cumulative rate of 29.26% (retirement at 21.61% and social security at 7.65%, and (2) recertification credit toward certificate renewal. Evaluation: Daily Agendas, Daily Sign-In Sheets, and Presenter Agreements On-site district-wide professional learning opportunities for personnel during non-contract hours to include workshops related to curriculum development, state standards, RTI, and technology - Up to 110 certified staff will be offered 1) a $125 per day stipend plus fringe benefits at a cumulative rate of 29.26% (retirement at 21.61% and social security at 7.65%, and (2) recertification credit toward certificate renewal. Evaluation: Daily Agendas, Daily Sign-In Sheets, and Presenter Agreements Provide contracted professional development consultants at no more than $1500/day for on-site professional development for certified teachers. Evaluation: Daily Agendas, Daily Sign-In Sheets, and Presenter Agreements Provide registration and travel including lodging, mileage, meals, parking, etc. for novice principals and assistant principals to attend leadership development professional development such as those provided by SCASA and SCDE. Provide bi-monthly support through an Induction/New Teacher Academy to deliver professional learning after-school beginning in September for first year teachers and teachers new to the district. Support will be provided in the areas of classroom management, instructional strategies, formative and summative assessment, rigor and relevance, creating relationships with children, families, and the community, etc. The district will use district level administrators to assist with the planning of teaching and learning of various concepts and skills necessary for a successful transition to the classroom and/or to another region/state/country. Sessions will be led by leaders such as the Director of Curriculum and Instruction, Director of Technology, Read to Succeed Coaches, Director of Federal, State, Testing and Accountability, Grade Level Leaders, Assistant Principals, to name a few. Expenses will include stipends to in-district ($100) and out- of-district presenters ($300). Host a two-day District Leadership Retreat for Principals and other district leadership to improve leadership quality throughout the district. The district will facilitate the retreat with a district/school improvement/motivational expert/leader(TBA). Topics to be covered may include instructional programs, curriculum design, data analysis, instructional technology and technology infrastructure, policies and regulations, district procedures, needs assessment, division updates, budget and finance, back to school planning (including Convocation), and professional development offerings and needs. Time will also be set aside

	for reflection on the district program as a whole for 2019. Expenses will include but not be limited to consultants at no more than $750. Fund tuition and/or registration to support no more than six existing certified teachers to pursue Gifted & Talented and/or English for Speakers for Other Languages (ESOL) Add-on and/or Initial Certification at accredited post-secondary institutions. Evaluation: POs and Transcripts Fund travel to support no more than six existing certified teachers to pursue Gifted & Talented and/or English for Speakers for Other Languages (ESOL) Add-on and/or Initial Certification at accredited post-secondary institutions. Evaluation: POs and Transcripts Provide bi-monthly support through an Induction/New Teacher Academy to deliver professional learning after-school beginning in September for first year teachers and teachers new to the district. Support will be provided in the areas of classroom management, instructional strategies, formative and summative assessment, rigor and relevance, creating relationships with children, families, and the community, etc. The district will use district level administrators to assist with the planning of teaching and learning of various concepts and skills necessary for a successful transition to the classroom and/or to another region/state/country. Sessions will be led by leaders such as the Director of Curriculum and Instruction, Director of Technology, Read to Succeed Coaches, Director of Federal, State, Testing and Accountability, Grade Level Leaders, Assistant Principals, to name a few. Expenses may include supplies and materials which may include but are not limited to professional development books, videos, folders, flip charts of instructional strategies, posters, markers, post-it notes, journals, binders, tab dividers for the activities. Fund reasonable materials and supplies needed for professional development activities such as books, etc. to support no more than five existing certified teachers to pursue Gifted & Talented and/or English for Speakers for Other Languages (ESOL) Add-on certification at accredited post-secondary institutions. Evaluation: POs and Transcripts Host a two-day District Leadership Retreat for Principals and other district leadership to improve leadership quality throughout the district. The district will facilitate the retreat with a district/school improvement/motivational expert/leader(TBA). Topics to be covered may include instructional programs, curriculum design, data analysis, instructional technology and technology infrastructure, policies and regulations, district procedures, needs assessment, division updates, budget and finance, back to school planning (including Convocation), and professional development offerings and needs. Time will also be set aside for reflection on the district program as a whole for 2019. Expenses will include but not be limited to reasonable materials and supplies (such as a leadership book study, binders, tab dividers, easel charts, post-it notes, highlighters, markers, etc.) for participants at no more than $500.

VITA

KAKELA O'BANNER ROBINSON

Education: B.S. Business Administration, University of South Carolina, Columbia, South Carolina 1998

Master of Education, University of South Carolina, Columbia, South Carolina 2003

Educational Specialist, Converse College, Spartanburg, South Carolina 2014

Doctor of Education, East Tennessee State University, Johnson City, Tennessee 2020

Professional Experience: Teacher, Wade Hampton High School; Hampton, South Carolina, 1998-2001

Teacher, Laurens District 55 High School; Laurens, South Carolina, 2001-2002

Assistant Principal, Wade Hampton High School; Hampton, South Carolina, 2003-2006

Director of Student Support Services; Hampton District One; Hampton, South Carolina, 2006-2017

Director of Human Resources & Middle School Curriculum Leader, Hampton District One; Hampton, South Carolina, 2017-2018

Chief Human Resources Officer, Marlboro County School District; Bennettsville, South Carolina 2018-2019

Chief of Staff, Marlboro County School District;
Bennettsville, South Carolina 2019-Present

Presentations: National Education Leaders' Workshop. (2019).
"Empowering Educators to Excel District Showcase.
Charleston, SC.

Honors and Awards: Lovette Promising Leader Award.
Converse College, 2014