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Evaluation of the Implementation of Professional Learning Communities and the Impact on Student Achievement

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Evaluation of the Implementation of Professional Learning Communities and the Impact
on Student Achievement

By
Cristi M. Bostic

A Dissertation Submitted to the
Gardner-Webb University School of Education
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

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Abstract

Evaluation of the Implementation of Professional Learning Communities and the Impact on Student Achievement. Bostic, Cristi M., 2013: Dissertation, Gardner-Webb University, Professional Learning Communities/Teacher Collaboration/Teacher Isolation/Focus on Learning/Focus on Results

This dissertation evaluated the implementation of professional learning communities in a large suburban school district in North Carolina. The presence of shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, supportive conditions for relationships, and supportive conditions for structures are all attributes that were assessed to determine the degree of implementation.

A quantitative and qualitative program evaluation was conducted using the CIPP evaluation model to determine the degree of implementation of professional learning communities and whether or not the implementation has had an impact on student achievement based on state end of course test results. The CIPP model of program evaluation is a systematic process to evaluate the context, input, process and product of a particular program to determine the effectiveness of the program. Teacher members of the Algebra I, English 9, and Biology professional learning communities at each of the six high schools were asked to complete the *Professional Learning Communities Assessment – Revised* survey. The researcher also requested to observe a sample of professional learning community meetings with these teachers to determine whether or not there is evidence that certain characteristics of the professional learning community concept exist. Interviews were conducted with each of the 6 principals, the assistant superintendent of secondary education and the facilitator of professional development.

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Chapter 1: Introduction

After decades of failed attempts to improve America's educational system, there is mounting evidence to support significant educational reform can be achieved by transforming schools into professional learning communities (DuFour & Eaker, 1998). The term "professional learning community" has become a common phrase among educators; however, there is some question as to whether or not the practices of effective learning communities have become as common and routine.

Albert Einstein once said, "We cannot solve the problems of today with the same thinking that gave us the problems in the first place" (as cited in Dufour, Dufour & Eaker, 2008, p. 31). America's educational system dates back to the days of Thomas Jefferson in the late 1700's. This period's "factory model" of education consisted of everyone in the class getting the same education at the same age from the same textbooks, being tested and graded the same based upon the same scale, regardless of their individual talents, goals, interests, or personal mission (DeMille, 2008). America's educational system has endured decades of legislation and reform efforts; yet, the system looks scarcely different than it did in the 1700s.

Historical Reform Efforts

The launching of the satellite "Sputnik" by the Soviet Union in 1957 brought about the first realization of the American government that math and science education were lagging compared to other countries (US Department of Education, 2012). The solution, at the time, was the National Defense Education Act (1958) which provided educational funding for American schools at all levels and began decades of educational legislation and reform efforts. The 1960s brought the Elementary and Secondary Education Act (ESEA) (AECT, 2001). ESEA was based initially on the inaccurate

assumption that poverty caused illiteracy, hence the need for legislation to provide funding for primary and secondary education (AECT, 2001). ESEA also banished the establishment of the standardized schooling system of the 1700s by forbidding the establishment of a national curriculum and emphasizing equal access to education and the establishment of high standards and accountability. This act has been renamed and reauthorized a number of times over the years, most recently in 2010, changing little of the original language while adding more and more regulations (US Department of Education, 2012).

In 1993, a major revision to ESEA, known as “Improve America’s Schools Act,” came on the heels of the release of the groundbreaking study, *A Nation at Risk*, released in 1983. This report described the nation’s steady fall of standing in the global competitive market as a result of America’s educational performance being mediocre at best, as well as a steady decline of industrial productivity (National Commission on Excellence in Education [NCEE], 1983). The “Improve America’s Schools Act” increased the emphasis on at-risk, low-income students and schools. In 2002, ESEA became known as “No Child Left Behind” (NCLB) (US Department of Education, 2012). NCLB called for annual reporting of state testing for the total group tested at a particular school and by individual subgroups (race, gender, ethnicity, socioeconomic status, and students with disabilities) (US Department of Education, 2010). Schools were required to demonstrate “adequate yearly progress” (AYP), or they would face increasingly severe sanctions (US Department of Education, 2010). For schools receiving Title I funds, the sanctions included: writing a school improvement plan; offering school choice; offering supplemental educational services; taking corrective action and making a plan to restructure, including replacing teachers and administrators (US Department of

Education, 2010). NCLB also required teachers be “highly qualified” or fully licensed to teach in their discipline and schools to provide parents with detailed reports regarding student achievement (report cards) on an annual basis (US Department of Education, 2010). This law was by far the most ambitious and comprehensive educational initiative in the history of America to date (Dufour et al., 2008).

The most recent attempts at educational reform have come through the American Recovery and Reinvestment Act (ARRA) of 2009 and the reauthorization of ESEA in 2010. ARRA was signed into law by President Obama on February 17, 2009, with an \$840 billion budget (Recovery.gov, 2012). ARRA was created to offer an unprecedented jumpstart to the economy, create or save millions of jobs, and place a down payment on addressing long-neglected challenges, so the country can thrive in the 21st century. According to the US Government website, ARRA is an extraordinary response to a crisis unlike any since the Great Depression and includes measures to modernize the nation's infrastructure, enhance energy independence, expand educational opportunities, preserve and improve affordable health care, provide tax relief, and protect those in greatest need (Recovery.gov, 2012). Education received a \$90 billion allocation of the funds for the stabilization of state education funds, student aid, training and employment services, and aid for the disadvantaged, special education and rehabilitative services (Recovery.gov, 2012). From this, a \$4.35 billion grant known as “Race to the Top” was created. In order for states to receive a portion of the grant dollars, they were required to commit to closing historic achievement gaps and enrolling more students in college (US Department of Education, 2012). More specifically, states must link teacher and principal pay to test scores, adopt internationally benchmarked academic standards (Common Core Standards), turn around low-performing schools, track student progress to ensure all

students are prepared for college when they graduate high school, and remove the cap on the number of charter schools that states allow each year (US Department of Education, 2012). Common Core Standards were developed to provide a clear and consistent framework of what students need to know in the areas of math and literacy to prepare them for college and the workforce no matter where they live (National Governor's Association [NGA] and Council of Chief State School Officers [CCSSO], 2012). Common Core Standards were designed to be relevant to the real world, prepare students for what they will need to be successful in college and careers, provide teachers and parents with clear and consistent expectations of what students are expected to know, and ultimately position communities for competing in a global economy (NGA & CCSSO, 2012).

In March of 2010, the Department of Education released "A Blueprint for Reform," the latest reauthorization of ESEA (US Department of Education, 2012). This plan calls for better assessments, raising of standards, great teachers and leaders in every school by strengthening preparation and recruitment standards, equity and opportunity for all students, raising the bar and rewarding excellence through the Race to the Top initiative, and promoting innovation and continuous improvement resulting in career and college ready students (US Department of Education, 2012).

Most Americans continue to question why previous reform efforts have not made a significant impact on the educational system and if this most recent attempt will be successful. A number of researchers have identified several key issues regarding school reform efforts that give some explanation as to why past endeavors have yielded little to no progress and why American education continues to fall behind other countries. Ann Lieberman (1992), while president of the American Educational Research Association,

completed an extensive 5-year study of school improvement programs that had been implemented in various schools. Her study focused on the relationship between the educational theory behind what improves schools and what actually takes place in practice to reform schools (Leiberman, 1992). She found improvement initiatives focused on only one aspect of education at a time, whether it be curriculum, delivery of instruction, student diversity, student equity, or academic excellence (Leiberman, 1992). Lieberman (1992) also revealed a focus on quick short-term fixes, instead of attempts to address long-term comprehensive needs and a failure to involve teachers in the planning stages, making implementation a huge hurdle. Mike Schmoker (2004), after working with a large number of schools during the 1980s to develop strategic plans that included lofty long-term goals that lacked clarity and coherence, determined these efforts had no impact on student achievement outcomes. Instead, Schmoker (2004) found it was far more productive when thought and action occurred in team-based, short-term experimental cycles. From this work, he concluded, major reform efforts have been ineffective because the implementation is “too complex and cumbersome, leading to fragmentation and overload” (p. 427) and planning cycles are too long (Schmoker, 2004). Large numbers of activities and initiatives often included in improvement plans that are too cumbersome to monitor let alone successfully implement lend to the complexity issue. He contends teachers collaboratively working in small groups on relatively short-term goals will solve these problems and make schools work better for students (Schmoker, 2004). After their own extensive review of the literature surrounding school reform, Richard DuFour and Robert Eaker (1998) identified complexity of the task, misplaced focus, lack of clarity on intended results, lack of perseverance, and failure to

appreciate and attend to the change process as explanations for why improvement efforts have not achieved their intended results.

Michelle Rhee, former chancellor of Washington, DC, schools, shared her insight into the problem with reform efforts during an interview with the *Washingtonian* magazine in December, 2010:

This country is in a significant crisis in education, and we don't know it. If you look at other countries, like Singapore—Singapore's knocking it out of the box. Why? Because the number-one strategy in their economic plan is education. We treat education as a social issue. And I'll tell you what happens with social issues: When the budget crunch comes, they get swept under the rug, they get pushed aside. We have to start treating education as an economic issue. (Jaffe, 2010, para. 1)

Thomas L. Friedman and Micheal Mandelbaum (2011) describe America's lack of vision when it comes to education in their latest book, *That Used To Be Us: How America Fell Behind In The World It Invented and How We Can Come Back* as a hindrance to reform efforts. Throughout history, education has been seen as a localized, decentralized issue and not a national one (Friedman & Mandelbaum, 2011). America must begin to see education as an investment in both national growth and national security (Friedman & Mandelbaum, 2011). The question is no longer where American schools rank against one another but where they rank against schools all around the world (Friedman & Mandelbaum, 2011).

Teacher Isolation

Teachers are the leading factor in the development of recent school improvement strategies (Flinders, 1988). David Flinders (1988), a professor and researcher in the

College of Education at the University of Oregon, identifies teacher isolation as a primary concern to policymakers because past research indicates isolation is a common characteristic of professional life in schools; and isolation restricts opportunities for professional growth, thus creating a barrier to implementing reform initiatives. Flinders' (1988) study of isolation involved two high schools and six teachers, three from each school. He observed each of the teachers throughout the school day for 5 consecutive days in addition to conducting taped interviews with each teacher over a period of several months. He learned that teachers not only accepted their relative isolation but seemed to actively strive to maintain it. When teachers had opportunities to engage in collegial interactions during lunch or planning times, they instead chose to remain alone in their classroom to prepare lessons (Flinders, 1988). However, during the interview process, some of the teachers indicated having conversation about the work that they do to be therapeutic (Flinders, 1988). In 2003, Richard Elmore, Harvard professor, determined through case studies of two low-performing schools, the existing structure in schools not only allows for but also seems to foster teacher isolation (Elmore, 2003). Elmore (2006) later described how isolation inhibits the process of reform and improvement:

The design of work in schools is fundamentally incompatible with the practice of improvement. Teachers spend most of their time working in isolation from each other in self-contained classrooms. ... The problem with this design is that it provides almost no opportunity for teachers to engage in continuous and sustained learning about their practice in the setting in which they actually work. ... This disconnect between the requirements of learning to teach well and the structure of teachers' work life is fatal to any sustained process of instructional improvement. (p. 127)

Jerry Davis (1986), education professor at Hofstra University, points out teachers are left in their classrooms for the better part of each day with their students, without the opportunity to observe each other's performance, share ideas, or work in collaborative ways. This level of isolation often leads to educator burn out (Davis, 1986). Teacher isolation has been identified as one of several reasons why teachers leave the profession (Davis, 1986). The National Center for Educational Statistics reported a 17% national average turnover of teachers annually. The National Commission on Teaching America's Future (NCTAF, 2011) estimated one-third of all new teachers leave the profession in the first 3 years and 46% have left within 5 years. The National Education Association (NEA, 2002) identified NCLB mandates, too little support, student discipline, underfunding and underpayment, and lack of influence and respect as key contributors to the turnover rate. The NEA also reported teachers feel overwhelmed by the scope of the job, unsupported, and isolated, while others feel that the expectations are unclear (NEA, 2012). In 2010, a record 105,688 educators responded to the North Carolina Teacher Working Conditions Survey (NCTWC). Since the inception of this survey in 2002, time needed to work with students, learn from each other, analyze data, and develop instructional strategies geared toward ensuring all students learn, have been identified as the most significant working-conditions challenges (NCTWC, 2010). In 2010, 56% of teachers reported having less than 1 hour per week of collaborative planning time (NCTWC, 2010). The working conditions that have been found to yield the highest results are: teachers teaching in the fields in which they are prepared; having adequate time to work with colleagues on instructional planning; having ready access to information, materials and technology; and receiving helpful feedback about their teaching (Berry, Daughtery, & Weider, 2010). The working conditions associated with

teachers leaving a school, district, or the profession altogether includes: lack of influence on school decisions, lack of access to professional development, class load including average class size, lack of autonomy, and accountability and increase in use of high stakes testing (Berry et al., 2010).

This notion of isolation in teaching holds far more significance than working in isolation in other professions due to the ambiguous task of teaching and because isolation has a direct impact on professional development. When teachers work alone in their respective classrooms, they do not realize the interdependence that exists in a school, and they forget their actions affect everyone else in the system to some degree (Lezotte & McKee, 2002). In order to break the cycle of ongoing reform efforts, actually improve schools, and build the capacity to meet student's needs, the "formidable barrier" of teacher isolation must be removed from our schools (Dufour et al., 2008).

Accountability and Data-Driven Instruction

Accountability for student performance is, and has been for some time, one of the most prominent policy issues in state and local government. The push for accountability has grown out of the common perception that states pay close attention to the "inputs" in education, such as the number of computers and library books to which students have access, but little attention to the performance outcomes ("Accountability," 2004). With the latest reauthorization of ESEA, the stakes are higher than ever for students to achieve.

Assessment is considered to be, at least in part, the process used to gather information to inform instructional decisions (Stiggins, 2008). Appropriate assessment strategies must be matched with curricular goals and instructional methodologies (Stiggins & DuFour, 2009). In order for an assessment to be balanced and effective, it must include a framework of clear learning targets, reflect the commitment that all

students can learn, be designed to provide a high-fidelity representation of the learning targets, and include a process for delivering the results in a timely and understandable form (Stiggins & DuFour, 2009). Common assessments, developed by collaborative teams, allow teachers to pool their collective wisdom in making sound instructional decisions based on results and establish where each student is in his learning progression and where students are collectively across classrooms. In order to build common assessments, teachers must have shared knowledge of relevant state standards, district curriculum guides, and state assessment frameworks, all contributing to learning target clarity (Stiggins & DuFour, 2009). Common assessments foster student learning through high-quality assessments that are developed based on clearly defined learning targets and agreed upon criteria for assessing student work (Stiggins & DuFour, 2009).

NCLB triggered much of the focus on data-driven instruction due to its emphasis on raising student achievement across all socioeconomic groups and ethnic backgrounds. Data-driven decision making involves collecting appropriate data, analyzing that data in a meaningful fashion, placing the data into the hands of the people who need it, using the data to increase school efficiencies and improve student achievement, and communicating data-driven decisions to key stakeholders (Messelt, 2004). Teachers must create assessments *for* learning, rather than assessments *of* learning (DuFour et al., 2008). In order for data derived from assessments to drive instruction, teachers must carefully analyze why students did not perform proficiently on the assessment, diagnose the problem, and then prescribe activities to help those students identified as struggling (DuFour et al., 2008). According to Fullan (2008),

Assessment for learning ... when done well is one of the most powerful, high leverage strategies for improving student learning that we know of. Educators

collectively at the district and school levels become more skilled and focused on assessing, disaggregating, and using student achievement as a tool for ongoing improvement. (p. 71)

DuFour et al. (2008) contended data must be transformed into information in order for an impact on student learning to be realized. This transformation occurs when there is an opportunity for a comparison of the data to occur. The transformation of data to information occurs when teachers work together in a PLC to create a common assessment that gives them ongoing feedback regarding the proficiency of their students achieving a standard that has been agreed upon as essential, an assessment that is valid, and results that can be compared to other students attempting to achieve the same standard (DuFour et al., 2008). When teachers have clear evidence that the performance of their students is consistently keeping their team from achieving its goals, they are typically willing to change their instructional practices to address the problem (DuFour et al., 2008). Richard Elmore (2006) supports this idea by stating, “Teachers have to feel that there is some compelling reason for them to practice differently, with the best direct evidence being that students learn better” (p. 38).

Statement of the Problem

According to the research of DuFour, DuFour, Eaker, and Karhanek (2004), “Public school educators in the United States are now required to do something they have never before been asked to accomplish: ensure high levels of learning for all students” (p. 1). As the expectations through legislation intensify and the stakes grow higher and higher, educators are desperate to find ways to ensure learning for all. Unlike other professions, the nature of teaching, including the structure of the organization, has historically fostered teachers working in isolation of one another (Flinders, 1988).

Mounting research indicates teachers will not be able to meet the current and future demands of educating America's youth by working alone. Teachers will have to work interdependently in Professional Learning Communities to achieve common goals in order to meet students' individual learning needs (DuFour et al., 2004).

Setting

The expectation that Professional Learning Communities (PLC) be implemented in every school in a large suburban district in the southwestern region of North Carolina began in 2008. There are a total of 55 schools in the district, serving just over 31,000 students, including 30 elementary/primary schools, two intermediate schools, 11 middle schools, 10 high schools, one special needs school, and one alternative school. The district was divided into three implementation cohorts, each made up of elementary, middle, and high schools. The schools in cohort I received training during the summer of 2008, cohort II during the summer of 2009, and cohort III during the summer of 2010. Each school was expected to send a group of teachers and an administrator to a three-day training conducted by the district's professional development staff and trainers from Solution Tree. Solution Tree is an educational professional development provider started by Rick and Becky DuFour, gurus of professional learning communities. Each school was also expected to designate a PLC facilitator who would lead the implementation at each school and continue to receive training at regular meetings with the district's professional development staff throughout the year. During the summer of 2011, a fourth cohort comprised of counselors, media specialists, social workers, and specialty area teachers from the areas of art, music, and physical education received training. According to the district's *Professional Learning Communities Sustainability Plan* (2009), the district's objectives for PLCs were:

1. Understand the concept and attributes of a professional learning community.
2. Examine research-based best practices and standards for becoming a professional learning community.
3. Experience and create sample processes and products reflective of professional learning communities.
4. Acquire strategies and tools for designing, implementing, and evaluating a school's journey towards becoming a professional learning community.
5. Design a plan of action for implementing the professional learning community concept at each school.
6. Apply new learning to REAL work.
7. Participate actively by engaging in conversations and teamwork.
8. Reflect on and self-assess personal knowledge, skills, and beliefs.

Each school was expected to maintain either one comprehensive PLC notebook for the school or a notebook for each PLC in the school that contained data on student achievement (EOGs, EOCs), evidence of common formative assessments, team norms, SMART (Specific, Measureable, Attainable, Relevant, Time-bound) goals, and evidence of analysis of student data as a team.

Purpose of the Study

The purpose of this study was to evaluate the implementation of professional learning communities in select high schools of a large suburban school district in southwestern North Carolina, using a program evaluation process. This study examined the components of an effective professional learning community and determined whether or not those components are in place in the district's high schools. This study also looked for a relationship between the implementation of professional learning

communities and student achievement based on End of Course (EOC) test results.

Brief Description of Methodology and Research Design

A program evaluation, using the CIPP (Context, Input, Process, Product) model of the implementation of professional learning communities was completed. Data were collected through interviews, PLC meeting observations, and surveys. Interviews were conducted with the facilitator of professional development and the assistant superintendent of secondary education. PLC meeting observations were conducted with various PLC groups across the district's high schools. Surveys were completed by a sample of teachers and administrators at six of the nine high schools to determine the degree of implementation based on research based factors of successful PLCs.

Research Questions

The specific research questions investigated were:

1. What were the conditions that warranted the implementation of professional learning communities?
2. What has been done at the district level and at the high schools to support the implementation of professional learning communities?
3. To what degree did the stakeholders of the high schools implement professional learning communities?
4. How effective are professional learning communities at the high schools?

Definition of Terms

Teacher collaboration. The direct interaction between at least two equal parties who voluntarily engage in shared decision-making as they work toward a common goal.

Planning time. Time allotted to teachers, usually daily, to create lessons and grade student work.

Assessment. A formal attempt to determine a student's status with respect to an educationally relevant variable. Assessment is typically diagnostic, formative or summative in nature and one assessment can contain more than one of these elements.

Common formative assessment. An assessment created by a collaborative team used to identify students who need additional support, which teaching strategies are most effective in helping students acquire intended knowledge, areas with which students are generally struggling, and improvement goals for individual teachers and the team.

Professional learning community (PLC). Educators committed to working collaboratively in ongoing processes of collective inquiry and action research to achieve better results for the students they serve.

Shared mission, vision, values and goals. The school and everyone in it are collectively committed to a common purpose and a clear direction. They set indicators, timelines, and targets that guide their everyday work with a focus on student learning.

Collaborative culture. All teachers in a school are willing to work interdependently to analyze and impact their practice in an effort to improve results for their students, their team, and their school.

Collective inquiry. Teachers are willing to candidly clarify their current practices and honestly assess their students' current levels of learning.

Action orientation. Teachers analyze the level of learning of their students and then take action to increase engagement and attainment of knowledge. They understand different results are only achieved by doing differently.

Continuous improvement. Continuously searching for a better way to achieve the goals and accomplish the purpose of the organization.

Results oriented. Initiatives are regularly assessed and based on tangible results.

Summary

Decades of school reform efforts have come and gone, yet there has been little to no change in the face of America's educational system. Researchers such as Peter Senge (1990), Stephen Covey (1996), and Charles Handy (1995) all agree that only a *learning organization* will have the capability of meeting these demands and bringing about real reform to the American educational system.

Recent reform efforts have dramatically increased the emphasis on student achievement. To meet these demands, a teacher working in isolation no longer seems to be an option. In order for America's educational system to compete globally, educators will need to focus on student learning, create collaborative cultures that allow teachers to share the work load and best instructional practices, and analyze data to determine specific student learning needs.

Chapter 2: Literature Review

Introduction

Uniformity, standardization, and bureaucracy are characteristics used to describe the “factory model” of education that became the face of American education in the late nineteenth and early twentieth centuries (Dufour & Eaker, 1998). This model has proven to be inadequate with the ever increasing demand for *all* students to master rigorous content, learn how to learn, be prepared for the twenty-first century workforce and have the ability to compete in a global economy. Researchers such as Peter Senge (1990), Stephen Covey (1996), and Charles Handy (1995) all agree that only a *learning organization* will have the capability of meeting these demands and bringing about real reform to the American educational system. In order for educators to create a learning organization and impact student achievement, there must be a focus on student learning, collaboration among educators, and results (DuFour & Eaker, 1998).

Focus on Learning

The fundamental purpose of schools is to ensure all students learn at high levels. This purpose can only be realized when effective educators are committed to learning and schools align all practices, procedures, and policies to ensure student learning (DuFour et al., 2008). The mission, vision, values, and goals of a school serve as the foundation for everything that occurs in a school by not only addressing *how* educators will work to improve their school but also *why* their everyday work is so important. The mission describes the purpose of the existence of the organization; the vision dictates a clear direction the organization plans to move in; and the goals detail the indicators, timelines, and targets that will be utilized along the journey to measure progress and opportunities for celebration (DuFour et al., 2008). The mission of any organization should clarify

priorities and give direction to everyone in the organization by answering specific questions. Why do we exist? What are we here to do together? What is the business of our business? (DuFour & Eaker, 1998). Mission, vision, and values must be shared beliefs among all members of the organization and must be focused on student learning in order to impact student achievement (DuFour et al., 1998).

Researchers from Sam Houston University, Texas A&M, and Arkansas State University examined 100 Texas elementary school mission statements (Slate, Jones, Weisman, Alexander, & Saenz, 2008). Fifty of the mission statements were from low-performing schools and 50 were from high-performing schools with performance measures being based on state testing (Slate et al., 2008). The most important difference they found between the mission statements of the high- and low-performing schools was the mission statements of high-performing schools consistently focused on providing a challenging environment that emphasized academic success and the low-performing did not (Slate et al., 2008). Based on their findings of the study, the final recommendations dictated the importance of having a mission statement that places a clear focus on academic achievement and incorporates a commitment to the challenge and support necessary for high levels of academic success to occur (Slate et al., 2008).

Fred Newmann and Gary Wehlage (1995) completed a 5-year study for The Center on Organization and Restructuring of Schools that involved 24 significantly restructured public elementary, middle, and high schools across 16 states and 22 districts. They sought to determine how well each school's organizational features contributed to authentic pedagogy and authentic student achievement (Newmann & Wehlage, 1995). After spending one year at each school observing, analyzing data, and interacting with school staff, they found that learning is more likely to occur when students and teachers

are focused on clear and consistent messages regarding learning objectives and methods of learning to reach their achievement goals (Newmann & Wehlage, 1995).

The *Coalition of Essential Schools* (2012) identified the creating of the vision as one of the major components in the process of continuous school improvement. The Coalition of Essential Schools (CES) is a network of schools, centers, districts, organizations, and individuals committed to powerful student learning through the implementation of the CES Common Principles. All schools that join this network must create a vision focused on equity and the fundamental belief in every child's potential and then insist this vision shape the teaching and the work of every member of the school community. There is also a commitment to accountability through the utilization of a set of consistent benchmarks against which performance is evaluated that connects the vision of the particular school to the work done by each student (CES, 2012). The schools in this network, adhering to these principles, have realized consistent increases in student achievement rates and decreases in drop-out rates (CES, 2012).

Educators in effective schools recognize that “until members of the organization *do* differently, there is no reason to anticipate different results” (DuFour, & Eaker, 1998, p. 16). Jeffrey Pfeffer and Robert Sutton (2000), Stanford Organizational Behavior professors and authors of *The Knowing-Doing Gap*, point out that many organizations substitute *talking* about something for actually *doing* anything. Mission statements and professional development are common means that organizations use to substitute talk for action (Pfeffer & Sutton, 2000). Through their research of the links between managerial knowledge and organizational action, they found that organizations that were most successful kept the talk simple, focused on common sense, maintained simple concepts and structures, and showed a sense of urgency for turning knowledge into action (Pfeffer

& Sutton, 2000). In order to put words into action, DuFour et al. (2008) suggest focusing on two simple questions: “What would it look like if we really meant what we said?” and “What specific actions can we expect to see in light of our priorities?” (p. 26).

Collaboration

Ensuring that all students learn at high levels cannot be realized if teachers continue to work in isolation. School administrators and teachers must work together to build a collaborative culture where they work interdependently and assume collective responsibility for the learning of all students (DuFour et al., 2008).

The Merriam-Webster dictionary (2012) defines collaboration as the act of “working jointly with others or together especially in an intellectual endeavor” (“Collaborate,” para 1). Winer and Ray (1994), authors of *Collaboration Handbook*, identified through their research of a number of organizations and organizational behaviors three levels of interaction in which teachers engage. This continuum includes cooperation, coordination, and collaboration (Winer & Ray, 1994). Cooperation is short term, lacks a clearly defined mission and structure, and involves no planning effort. Coordination is longer term, has an understood mission, includes a focus on a specific effort or program, and some planning is involved. Collaboration is longer term, includes a commitment to a common mission, results in a new structure, and involves comprehensive planning (Winer & Ray, 1994). Educators must be willing to not only work together but also work interdependently through a systematic process “to analyze and impact professional practice in order to improve results for their students, their team and their school” (DuFour, DuFour & Eaker, 2008, p. 16).

Researchers Yvonne Goddard, Roger Goddard, and Megan Taschannen-Moran (2007) conducted a study of a large urban district in the Midwest to examine whether or

not teacher collaboration impacts student achievement. They surveyed 452 teachers in 47 elementary schools to determine the extent to which the teachers worked collectively to influence decisions related to school improvement, curriculum and instruction, and professional development. While controlling for school context and student characteristics such as prior achievement, reading and math achievement scores for 2,536 fourth-graders were used to measure student achievement. Their findings indicated a positive relationship between teacher collaboration and the differences among schools in mathematics and reading achievement (Goddard, Goddard, & Taschannen-Moran, 2007).

The National Center for Educational Evaluation and Regional Assistance through the U.S. Department of Education (2012) has developed a guide for turning around low-performing schools after conducting ten case studies involving 35 low-performing schools. The case studies revealed schools that successfully improved student achievement had teachers who were involved in collaboration and had a focus on instructional goals. The teachers were engaged in an array of professional development opportunities targeted at improving teaching in critical subject areas. Teachers in these schools shared common planning time, participated in workshops on using data to guide instructional decision-making, and received regular support from a designated person, such as a teacher leader (US Department of Education, 2012).

The National Association of Secondary School Principals (NASSP) released a report in 2001 on the high school of the 21st century titled, *Breaking Ranks: Changing an American Institution*. This report supported teacher collaboration, even at the high school level, stating:

The success of a high school depends on its being more than a collection of unconnected individuals. The word “community” implies a commonality of

interests and so it should be in any high school. The building of community very much involves the members of the staff. And, on a practical level, the synergy of cooperation ought to end up enabling the educators in a high school to accomplish more for the students than they could by acting on their own. School improvement more readily succeeds in situations in which teachers work in a collegial manner. (p. 90)

Phillip Schlechty (2002), founder and CEO of the Center for Leadership in School Reform and author of *Working on the Work (WOW)*, emphasized the importance of teacher collaboration and stated the following: “No teacher, acting alone can meet the demands the WOW framework imposes” (p. 90). He later stated, “There is no question that a school that is focused on providing all children with authentically engaging experiences every day will require much different patterns of interaction between and among faculty members than is typical in schools today” (Schlechty, 2002, p. 90). Louis and Marks (1998) found through a qualitative study of 4,165 teachers surveyed across the United States that when a school is organized into a professional community, the following occurs:

1. Teachers set higher expectations for student achievement.
2. Students can count on the help of their teachers and peers in achieving ambitious learning goals.
3. The quality of classroom pedagogy is considerably higher.
4. Achievement levels are significantly higher. (p. 535)

The literature also emphasized the importance of teachers engaging in collective inquiry to determine the best and most current instructional practices for teaching and learning, as well as a true assessment of student learning. Ross, Smith, and Roberts

(1994), along with Peter Senge (1990), have authored numerous books on learning organizations. They identify four steps in the process of collective inquiry: public reflection, shared meaning, joint planning, and coordinated action (Ross et al., 1994). Public reflection involves discussing and challenging each member's assumptions and beliefs. Shared meaning allows the team to develop a common ground of shared insights. Joint planning includes developing action steps for completing goals. Coordinated action involves each member of the team independently carrying out the joint action plan. The team can then evaluate the results of its actions and repeat the four-step process (Ross et al., 1994). This level of inquiry allows teachers to make informed and therefore better decisions regarding student learning; consequently, they are more likely to bring a variety of instructional practices to their classroom (DuFour, & Eaker, 1998).

Another common theme in the literature is the importance of the principal to support and guide the collaborative process as the instructional leader. James Champy (1995), author of *Reengineering Management*, asserted any improvement initiative is doomed to fail if someone in a key leadership position does not support the change. Leadership creates the conditions and environment for a collegial atmosphere that builds the leadership capacity of all individuals within the organization (Newmann & Wehlage, 1995). According to Leithwood and Riehl (2003), in a study through Temple University, "Effective leaders enable the school to function as a professional learning community to support and sustain the performance of all key workers, including teachers as well as students" (p. 7). Effective leaders achieve this in the following ways: developing school cultures that embody shared norms, values, beliefs and attitudes and that promote mutual caring and trust; modifying organizational structures as needed to promote positive conditions for teaching and learning; and building collaborative processes creating

opportunities for staff to participate in decision-making about issues that effect them and for which their knowledge is crucial (Leithwood & Riehl, 2003).

Focus on Results

Larry Lezotte and Kathleen McKee (2002), champions of effective schools, indicated no matter the model of school improvement being used, there must be an explicit focus on results and student achievement and evidence of student learning. In their opinion, an effective model of sustainable school reform is results-oriented, focused on both quality and equity, data-driven, research-based, collaborative, ongoing, and self-renewing (Lezotte & McKee, 2002). Recent government mandates and education reform efforts have brought the emphasis on student achievement results to an all-time high. The publishing of the “Coleman Report” in 1966 marked the beginning of the Effective Schools movement and a more intense look at the actions impacting student achievement (Lezotte, 2005). The “Coleman Report” concluded that student achievement was impacted by the homes the students came from and not by the schools they attended (Lezotte, 2005). A number of independent educational researchers, including Larry Lezotte (2005), set out to prove that schools actually do impact student achievement. Over the past 40 years, a number of studies across dozens of districts have isolated the common characteristics that consistently impact student achievement, even in minority, low-income schools (Lezotte, 2005). These characteristics are now referred to as the “Correlates of Effective Schools” (Lezotte, 2005). The seven correlates of effective schools are instructional leadership, clear and focused mission, safe and orderly environment, climate of high expectations for success, frequent monitoring of student progress, positive home-school relations, and opportunity to learn and time on task (Lezotte, 2005). This effective schools framework has been used by regional

accreditation agencies, included in Federal Title I policies, and is represented in the core ideas of No Child Left Behind (such as the required disaggregation of data) as a basis for continuous improvement (Lezotte, 2005).

In a study conducted with the Connecticut state schools, where factors impacting student achievement were examined, parent, teacher and administrator related factors were all found to have an impact on the performance of these schools (McCoach et al., 2010). This study included 224 schools across 147 districts in the state of Connecticut and used the Connecticut Mastery Test and the Connecticut Performance Test as the basis for measuring high- and low-performing schools (McCoach et al., 2010). Teachers, administrators, and parents completed surveys that sought to gain information on factors the literature review revealed as having an impact on the test results (McCoach et al., 2010). The study revealed that schools deemed as high achieving had teachers who were focused on collaboration and communication, spent most of their time engaged in instructional activities, and had high goals and expectations for their students (McCoach et al., 2010). The parent surveys revealed that an increased and more effective level of communication between the school and parents was evident at the higher-performing schools. Administrator surveys revealed peer collaboration, parent participation, and teachers using data to make instructional decisions as prevalent factors in the higher-performing schools (McCoach et al., 2010).

After conducting several years' worth of studies that included both meta-analyses and research syntheses in a variety of settings including classrooms, schools, after school programs, and at-risk schools, Mid-Continent Research for Education and Learning (McRel) identified five areas that are the most likely to have positive effects on student success: guaranteeing challenging, engaging, and intentional instruction; ensuring

curricular pathways to success; providing whole-child student supports; creating high-performance school cultures; and, developing data-driven, high-reliability systems (Goodwin, 2010). Members of an effective school engage in a commitment to continuous improvement by *gathering* evidence of current levels of student learning, *developing* strategies to build on student strengths and address weaknesses in their learning, *implementing* those strategies and ideas, *analyzing* the impact of the changes to determine what was effective and what was not, and *applying* the new knowledge in the next cycle of continuous improvement (DuFour, & Eaker, 1998).

In order for purposeful improvement to occur, ongoing assessment of tangible results must exist (DuFour, DuFour, Eaker, & Many, 2006). According to DuFour et al. (2006), “This focus on results leads each team to develop and pursue measureable improvement goals that are aligned to school and district goals for learning” (p. 5). Doug Reeves (2000) identified *focus on student achievement* as one of the five prevailing characteristics during his research conducted through the Center for Performance Assessment on 90/90/90 Schools. These schools are characterized by having over 90% of their students eligible for free and reduced lunch, more than 90% of the students are from ethnic minorities, and more than 90% of the students met or achieved high academic standards, according to independently conducted tests of academic achievement. After considering data from more than 130,000 students in 228 buildings, Reeves (2000) concluded, “The distinguishing characteristic of the 90/90/90 Schools was not merely that they had standards, but rather, how the standards were implemented, monitored, and assessed” (p. 192).

Lorna Earl (1998), a contributor to the NEA’s “Keys to Success” document, claimed “classroom assessment can be one of the most powerful levers for enforcing

student learning” (p. 6). She supports this idea by saying the following:

When teachers share the decisions about how to assess, there will be fewer discrepancies in student assessment standards and procedures between grades and/or classes; they will develop a deeper understanding of curriculum and of individual students; and they will engage in the intense discussions about standards and evidence that lead to a shared understanding of expectations for students, more refined language about children and learning and consistent procedures for making and communicating judgments. (Earl, 1988, p. 6)

DuFour et al. (2004) identified “What do you do when a student does not learn?” as being one of the most challenging aspects of a PLC. In order for a PLC to positively impact student achievement when a student is struggling to learn, there must be a systematic and timely response that is directive in nature and is based on intervention and not remediation (DuFour et al., 2004). Phillip Schlechty (2002), author of *Working on the Work*, described a framework for making student work more engaging by focusing on the final product, having clear standards for the final product, making lessons authentic, and offering students choice and variety. In order for continuous improvement to occur, each member of the PLC should consider four key questions:

1. What is our fundamental purpose?
2. What do we hope to achieve?
3. What are our strategies for becoming better?
4. What criteria will we use to assess our improvement efforts? (DuFour & Eaker, 1998, p. 28)

Professional Learning Communities

A professional learning community (PLC) is defined by DuFour et al. (2006) as

“educators committed to working collaboratively in ongoing processes of collective inquiry and action research to achieve better results for the students they serve” (p. 217).

They furthered this definition by adding that PLCs “operate under the assumption that the key to improved learning for students is continuous, job-embedded learning for educators” (DuFour et al., 2006, p. 217). Dufour and Eaker (1998) asserted,

Each word of the phrase “professional learning community” has been chosen purposefully. A “professional” is someone with expertise in a specialized field, an individual who has not only pursued advanced training to enter the field, but who is also expected to remain current in its evolving knowledge base. . . .

‘Learning’ suggests ongoing action and perpetual curiosity. The school that operates as a professional *learning* community recognizes that its members must engage in ongoing study and constant practice that characterize an organization committed to continuous improvement. (pp. xi-xii)

Peter Senge (1990) feels a defining practice of a learning organization is the active participation of employees in creating a shared vision and culture to support collaboration so that they can work together more effectively in identifying and resolving problems.

DuFour et al. (2008) identify six characteristics of PLCs that must be present in order for a school to make a true transformation to a learning community and ultimately positively impact student achievement. The six characteristics include shared mission, vision, values, and goals; a collaborative culture with a focus on learning; collective inquiry into best practices and current realities; action orientation (learning by doing); a commitment to continuous improvement; and results orientation.

Dufour and Eaker (1998) suggest that if schools are to be significantly more effective or better able to meet their educational objectives, “they must break from the

industrial model upon which they were created and embrace a new model that enables them to function as learning organizations” (p. 15). Teachers need to be brought in as “stakeholders” and be accountable for specific outcomes in order to increase the likelihood of successful implementation of the reform effort (Gable & Manning, 1997). Gable and Manning (1997), Harvard University education professors, see the recent renewed emphasis on educational reform efforts as being due to a continuous decrease of funding, concern about the quality of education, and the push to move away from the traditional “one size fits all” model of educational structure.

Members of an effective PLC work to clarify what each student must learn, monitor each student’s learning on a timely basis, provide systematic interventions that ensure students receive additional time and support for learning when they struggle, and extend and enrich learning when students have already mastered the intended outcomes (DuFour et al., 2008). These structures create job-embedded learning as part of educators routine work practices (DuFour et al., 2008). According to Jay Saphier (2005), author of several publications on teaching, leadership, and school reform,

Strong professional learning communities produce schools that are engines of hope and achievement for students. . . . There is nothing more important for education in the decades ahead than educating and supporting leaders in the commitments, understanding, and skills necessary to grow such schools where a focus on effort-based ability is the norm. (p. 12)

Model PLCs

A true PLC involves teachers meeting together on a regular basis to identify essential student learning, develop common formative assessments, analyze current levels of achievement, set achievement goals, share strategies, and then create lessons to

improve upon current levels of performance (Schmoker, 2005). The PLC process is enhanced when all teachers involved are open to improvement and trust and respect exists within the group (Schmoker, 2005). School structures with supportive leadership that encourage the sharing of the school's vision and mission are also important (DuFour, 2004). Implementing PLCs requires school staff to focus on learning rather than teaching, work collaboratively on matters related to learning, and hold themselves accountable for the kind of results that fuel continuous improvement (DuFour, 2004). Rosenholtz (1989) determined in her study of 78 schools, where there were characteristics of "learning-enriched schools" there was evidence of "collective commitments to student learning in collaborative settings . . . where it is assumed improvement of teaching is a collective rather than individual expertise, and that analysis, evaluation, and experimentation in concert with colleagues are conditions under which teachers improve" (p. 145).

Professional Organization Support

There are a number of organizations that endorse teacher collaboration efforts and creating PLCs. The National School Reform Faculty (NSRF, 2012) is an organization devoted to developing collaborative relationships and reflective practice among educators using a model called Critical Friends Group (CFG). CFG groups are designed to:

- Create a professional learning community; make teaching practice explicit and public by "talking about teaching"; help people involved in schools to work collaboratively in democratic, reflective communities; establish a foundation for sustained professional development based on a spirit of inquiry; provide a context to understand our work with students, our relationships with peers, and our thoughts, assumptions, and beliefs about teaching and learning; help educators

help each other turn theories into practice and standards into actual student learning; and, improve teaching and learning. (NSRF, 2012, para. 3)

A strong CFG group exists when the following characteristics are present: openness to improvement, trust and respect, a foundation in the knowledge and skills of teaching, supportive leadership, socialization, and school structures that extend the school's mission (NSRF, 2012). According to CFG, these characteristics are best achieved by applying protocols, or structured ways to work and communicate that promote adult growth, and are directly linked to student learning (NSRF, 2012).

The National Commission on Teaching and America's Future [NCTAF] (2012), "develops prototypes for innovative teacher preparation, collaborative teaching teams, and strategies to leverage community engagement, sharing the impact of these programs with those who influence education legislation and policy" (para. 1). NCTAF has identified the building of "Strong Learning Communities" as a core strategy for improving teaching and learning in schools.

The National Board for Professional Teaching Standards (NBPTS) was created in 1987 after the Carnegie Forum on Education and the Economy's Task Force released *A Nation Prepared: Teachers of the 21st Century* (NBPTS, 2012). The first policy statement released by the NBPTS, *What Teachers Should Know and Be Able To Do*, included five core propositions (NBPTS, 2012). The five propositions were teachers are committed to students and their learning; teachers know the subjects they teach and how to teach those subjects to students; teachers are responsible for managing and monitoring student learning; teachers think systematically about their practice and learn from their experience; and teachers are members of learning communities (NBPTS, 2012). NBPTS

emphasized these five areas foster accomplished teaching practices. The National Education Association (NEA) has created its own recommended school improvement model: *The Keys to Excellence*. While this model does not use the term “professional learning community,” the five identified keys to a quality school are consistent with PLC principles, including shared understanding and commitment to high goals; open communication and collaborative problem solving; continuous assessment for teaching and learning; personal and professional learning; and resources to support teaching and learning (NEA, 2012).

The Association for Middle Level Education (AMLE) endorsed building learning communities in the position paper titled *This We Believe: Keys to Educating Young Adolescents* (AMLE, 2012). This paper outlined 16 characteristics that contribute to successful middle-level education. Of the 16, four relate directly to the attributes of a professional learning community, including the following: a shared vision developed by all stakeholders guides every decision, leaders demonstrate courage and collaboration, organizational structures foster purposeful learning and meaningful relationships, and varied and ongoing assessments advance learning as well as measure it (AMLE, 2012).

The goal of The National Association of Secondary School Principals (NASSP) is to make schools more student centered by personalizing programs and support systems and meeting intellectual challenges of each student (NASSP, 2012). NASSP developed the *Breaking Ranks* framework to be a model for school improvement that builds upon the individual school’s data to assess strengths and identify needs so that a customized plan for school success can be developed. This framework includes three core areas: collaborative leadership; personalizing the school environment; and curriculum, instruction, and assessment to improve student performance (NASSP, 2012). Proponents

claim that regardless of grade level, these three core areas must be addressed in order for improvement to occur and that collaboration within grade level, across grade levels, and across the school provides the backbone for the sustainability of the framework (NASSP, 2012).

Summary and Conclusion

Researchers and professional organizations have come to endorse Professional Learning Communities as America's best hope for sustained, substantive school improvement. As DuFour & DuFour (2006) asserted, "Never in the history of American education has there been greater consensus regarding the most powerful strategy for helping all students learn at high levels" (p. 2). Schmoker (2005) contended,

If there is anything that the research community agrees on, it is this: The right kind of continuous, structured teacher collaboration improves the quality of teaching and pays big, often immediate, dividends in student learning and professional morale in virtually any setting. (p. xii)

Chapter 3: Methodology

Introduction

Professional Learning Communities (PLCs) have been endorsed by researchers and professional organizations as a viable component of substantive school improvement (DuFour & DuFour, 2006).

Chapter 3 describes the methodology used in this quantitative and qualitative program evaluation. Included in this chapter are the research design, research questions, study design, procedures, participants, data collection procedures, and data analysis.

Program Evaluation Model

The purpose of this study was to evaluate the implementation of PLCs, including the examination of the components of an effective PLC, how this framework supports teacher collaboration, and how it impacts student achievement. Implementation of PLCs was evaluated in the six largest high schools of a large suburban school district in southwestern North Carolina. A Context, Input, Process, Product (CIPP) evaluation model, created by Daniel Stufflebeam (1987), provided the foundation for evaluating the program's components. The purpose of the CIPP Evaluation Model is to "help program leadership and personnel to systematically collect information about their program and to use that information as programs are implemented and carried out" (Stufflebeam, 1987, p. 20). The information obtained by this study will allow district leaders to determine the extent of implementation of PLCs in the six largest high schools, identify areas where additional emphasis and professional learning may need to occur, and evaluate whether or not the implementation of PLCs has impacted student achievement results. To assess the various aspects of the program, research participants, including teachers of Algebra I, English 9, and Biology, (areas where state end of course testing occurs) completed a

survey and were observed during a PLC meeting. The principals of these schools were also asked to complete the survey. The facilitator of professional development and the assistant superintendent of secondary education were interviewed to gain information on their role and perspective on the implementation process. The researcher analyzed the data collected to determine the effectiveness of professional learning communities in the high schools.

The CIPP model involves the examination of four components of a particular program: context, input, process, and product. The evaluation of the context measures the extent to which the goals and objectives of the program match the assessed needs of the program (Stufflebeam, 1987). Input evaluation is an assessment of the action plan of the program. Input evaluation is designed to assess the extent to which program strategies, procedures, and activities support the goals and objectives identified through the needs assessment and context evaluation of the program (Stufflebeam, 1987). It is important that all program administrators, participants, and stakeholders be able to articulate the same short- and long-term goals, as well as how those goals should be achieved in order for improvement to be realized. Process evaluation is the ongoing and systematic monitoring of the program through continuous assessment of the implementation of the action plan. Process evaluation helps refine program activities to ensure they are tied to both identified needs and desired outcomes (Stufflebeam, 1987). Finally, the product evaluation measures the extent to which improvement efforts have impacted long and short-term goals. Product evaluation focuses on outcomes and examines both intended and unintended consequences of the improvement efforts (Stufflebeam, 1987). This evaluation process will allow district leaders to understand the degree of implementation and effectiveness of PLCs in the district. The information

obtained will be used to make recommendations to improve the implementation of PLCs throughout the school district.

Context Evaluation

Context evaluation was used in this study to determine the conditions that warranted the implementation of PLCs, including the culture that existed. Information was gathered by interviewing the facilitator of professional development for the district and the assistant superintendent of secondary education. Program goals and objectives were examined. The interviews were recorded and transcribed by the researcher.

Information gathered during these interviews was used to determine the culture that was present in the district's schools before the introduction of PLCs.

Input Evaluation

Input evaluation was used to determine what occurred at the district level and at each of the select high schools to implement PLCs. This information was gathered through interviews with the facilitator of professional development, the assistant superintendent of secondary education, and the high school principals. Additional information was also gathered through observations of PLC meetings with the identified teachers. All interviews and observations were recorded and transcribed by the researcher. The interview responses were analyzed for common themes that identified specific actions that have been taken to effectively implement PLCs. The observations of six individual PLC meetings served to identify whether or not evidence of the characteristics of effective PLCs was actually present and apparent during a typical meeting.

Process Evaluation

The third step in the CIPP evaluation model is process evaluation. This step

allowed the researcher to determine to what degree the stakeholders of the high schools implemented PLCs. Hipp and Huffman (2010) designed a Likert scale assessment, The Professional Learning Communities Assessment – Revised (PLCA-R) (see Appendix A). The PLCA-R's reliability was tested by Hipp and Huffman (2010) using the Cronbach's coefficient alpha and was determined to maintain a high level of internal consistency with a coefficient span from .83 to .93. This instrument has been validated with contributions from various researchers and experts in the field and study of PLCs. Authors of the instrument granted permission for future researchers to use the PLCA-R through the SEDL website at a charge of one dollar per survey (Oliver & Hipp, 2013). The PLCA-R was the survey used during this step of the evaluation. Themes indicated throughout the research as components of effective learning communities were evaluated on this survey through a series of questions that supported each area. The themes evaluated on this survey included shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, supportive conditions – relationships, and supportive conditions – structures. The survey consists of statements about practices that can occur in schools. Respondents used a 4-point Likert scale to indicate the degree to which they agreed or disagreed with each statement. The researcher attached a numeric value to each response so the average of each survey response could be calculated. This calculation was used as a basis for comparing each of the attributes to determine the level of the presence of each. This information gives district leaders a basis for determining successful areas in PLCs and areas that still need work. *Strongly disagree* was valued as a one (1), *disagree* was valued as a two (2), *agree* was a three (3), and *strongly agree* was valued as a four (4). The average score for each question was assigned a strength value. Based on what was done in another program evaluation study, an average score of 3.0 to

4.0 was considered strong; a score of 2.0 to 2.99 represented a moderate response; and an average score of 1.0 to 1.99 was considered a weak response (Mingo, 2012). The survey evidence of these themes was used to determine the degree of implementation of PLCs.

Product Evaluation

That final step in the CIPP model is product evaluation. For this step, the researcher determined how effective PLCs are at the high schools. Both quantitative and qualitative data were collected to determine the overall effectiveness of the PLCs. Quantitative data included the proficiency and growth change on state End-of-Course (EOC) test results in the areas of Algebra I, English 9, and Biology between the 2008-2009 school year when PLCs were first introduced in the district and the 2011-2012 school year, the most recent data year at the time of this study. Table 1 shows the percent change in both the dropout rate and graduation rate between 2008 and 2012.

Table 1

District Data

Accountability Data	Percentage Per Category		Percent Change
	2008	2012	
Dropout Rate	4.02	3.06	- 0.96
Graduation Rate	72.3	78.8	+ 6.50
Algebra I EOC Proficiency	72.0	78.7	+ 6.70
Growth	0.414	1.185	+.771
English 9 EOC Proficiency	68.7	82.0	+ 13.30
Growth	-0.09	0.099	+0.009
Biology EOC Proficiency	61.6	83.0	+ 21.40
Growth	0.05	0.845	+0.795

Qualitative data included information gathered through interviews of the high school principals, the facilitator of professional development, and the assistant superintendent of secondary education, focusing on the district's objectives for the PLCs as outlined in the district's *Professional Learning Communities Sustainability Plan* (2009).

Research Questions

The purpose of this research was to evaluate the implementation of PLCs and their impact on student achievement. The primary research for this study focused on the question, "Have professional learning communities been fully implemented in this district?" More specific research questions include:

1. What were the conditions that warranted the implementation of professional learning communities?

2. What has been done at the district level and at the high schools to support the implementation of professional learning communities?
3. To what degree did the stakeholders of the high schools implement professional learning communities?
4. How effective are professional learning communities at the high schools?

Study Design

This study followed the CIPP model of examining the context, input, process, and product of the implementation of PLCs (Stufflebeam, 1987). A program evaluation seemed to be the most reasonable method to use for this study as it allowed for useful feedback from individuals in this school district. Central office staff, principals, and teachers shared their feedback regarding the culture that existed before the implementation of PLCs began, what has been done to support the implementation of PLCs, and the practices that currently exist. This study was conducted in an effort to identify strong and weak areas of the PLC process as it currently exists in the district's largest high schools, allowing weak areas to be the focus of improvement to ultimately improve student achievement. The researcher gathered data using the CIPP model of program evaluation as it allows for surveys, interviews and observation information to be captured. Data were then analyzed and tabulated to determine recurring themes.

Procedures

The first data-collection procedure that was used in this study was to send a letter to the superintendent requesting permission to complete the study (see Appendix B). After the research proposal was approved, the researcher contacted the principals of the six largest high schools in the district to request their support of the study and request the names of their teachers who were teaching the areas of Algebra I, English 9, and Biology.

Those teachers were then emailed a letter of explanation and a link to the survey (see Appendix C). The researcher also requested to observe a PLC meeting. Input data were gathered through interviews with the facilitator of professional development, the assistant superintendent of secondary education, and the high school principals. Responses from interviews, meeting observations, and surveys were all analyzed to determine the strong and weak areas of the PLC process as it currently exists in the district's high schools. The surveys were analyzed by calculating the percent of positive responses, determining the central tendency of the responses, and then assigning strength codes based on the central tendency.

Participants

The school district being used in this study is a large suburban district in the southwest region of North Carolina. This study focused on the six largest high schools in the district. The principals of each of these schools and the teachers of Algebra I, English 9, and Biology (these are the areas of focus due to being state EOC tested providing for standard student achievement data) were invited to participate in this study. The teachers were asked to complete a survey which addresses the key components of PLCs including shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, supportive conditions – relationships, and supportive conditions – structures. In addition, the facilitator of professional development, who was responsible for organizing the professional development to support the implementation of PLCs, and the assistant superintendent of secondary education, who evaluates each of the principals, were also invited to participate in the study through interviews. The results were used to determine whether or not PLCs have been effectively implemented in this district.

Data Collection Procedures

The researcher sent a cover letter outlining the purpose of the study, indicating participation was voluntary and the responses were anonymous as teachers were not asked to identify themselves, to all Algebra I, English 9, and Biology teachers at the six high schools, the principals of the six high schools, the assistant superintendent of secondary education, and the facilitator of professional development. The six principals, the assistant superintendent of secondary education, and the facilitator of professional development were all interviewed separately. To gain information on the conditions, including the culture that existed that led to the implementation of PLCs, the assistant superintendent of secondary education and the facilitator of professional development were asked the following questions:

1. What were teachers doing to address student achievement prior to the implementation of professional learning communities?
2. What factors led to the decision that professional learning communities needed to be implemented in the district?
3. How do you feel the implementation of professional learning communities has impacted student achievement? What evidence do you have of this?
4. How do you feel leadership impacts the implementation of professional learning communities?

These questions sought to provide a picture of the culture that existed, likely one of isolation, before the implementation of PLCs, as well as support or deny the information gathered in the surveys regarding the current status of PLCs in the district. The answers to all of the interview questions may also shed light on whether or not the teachers, principals, and central office staff have the same or different perceptions regarding the

implementation status of the PLCs. To determine what the district and the high schools have done to support the implementation of PLCs, the six principals were asked the following questions:

1. What does the idea of effective professional learning communities mean to you?
2. What are the processes you used to create your professional learning communities?
3. What are the processes you are using to sustain your professional learning communities?
4. What factors in your school help you develop your professional learning communities?
5. What factors in the district help you develop your professional learning communities?
6. What school factors appear to get in the way of the development of your professional learning communities? What are you doing to reduce these factors?
7. What district factors appear to get in the way of the development of your professional learning communities?

To gain more of a district perspective on the implementation of PLCs, the assistant superintendent of secondary education and the facilitator of professional development were asked the following questions:

1. What does the idea of effective professional learning communities mean to you?
2. What are the processes you used to support the creation of professional

learning communities in the schools?

3. What are the processes you are using to sustain professional learning communities?
4. What factors in the district support the development of professional learning communities?
5. What district factors appear to get in the way of the development of professional learning communities?

The researcher attended an Algebra I, English 9, or Biology PLC meeting at each of the six high schools to observe the actions of the members and record the effective professional learning attributes that were observed. The attributes the researcher monitored were developed with input from Dr. Rebecca DuFour (personal communication, December 12, 2013). The attributes included:

1. Evidence of the existence of meeting norms: yes no
2. Evidence of the existence of SMART goals: yes no
3. Evidence of a format/structure for maintaining meeting minutes: yes no
4. Evidence of alignment of instruction among the teachers: yes no
5. Evidence there is a sharing of instructional materials: yes no
6. Evidence common formative assessments are developed and utilized: yes no
7. Evidence results of common formative assessments are discussed as overall proficiency by teacher: yes no
8. Evidence results of common formative assessments are discussed student by student: yes no
9. Evidence of discussion of how to help struggling students: yes no

The researcher also administered a survey to gather data regarding the degree of

implementation on PLCs. The survey assessed for the presence of the components that are present in *effective* PLCs, according to DuFour and Eaker (1998), which are: shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, supportive conditions for relationships, and supportive conditions for structures.

Data Analysis

Interviews. Eight primary interviews were conducted, one with the assistant superintendent of secondary education, one with the facilitator of professional development, and one with each of the six high school principals. Interview questions were designed to prompt a discussion about the program objectives for implementing PLCs in order to determine whether or not the objectives have been met. The program objectives included:

1. Understand the concept and attributes of a professional learning community.
2. Examine research-based best practices and standards for becoming a professional learning community.
3. Experience and create sample processes and products reflective of professional learning communities.
4. Acquire strategies and tools for designing, implementing, and evaluating a school's journey towards becoming a professional learning community.
5. Design a plan of action for implementing the professional learning community concept at each school.
6. Apply new learning to REAL work.
7. Participate actively by engaging in conversations and teamwork.
8. Reflect on and self-assess personal knowledge, skills, and beliefs.

Interview responses were recorded and transcribed. The responses were then compared, looking for consistent ideas in the responses. The frequency of the interview responses were then categorized into themes.

Observations. Observations of PLC meetings taking place were conducted to assess for evidence of the components of effective PLCs.

Survey Results

Participants in the study included Algebra I, English 9, and Biology teachers, principals, and select central office staff. The teachers were invited to complete a 52-item survey that uses a 4-point Likert agreement scale. Survey statements were organized around the six components of effective PLCs: shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, supportive conditions – relationships, and supportive conditions – structures. All surveys were submitted electronically via an emailed link. The researcher calculated the percentage of 3-point (agree) and 4-point (strongly agree) responses for each survey item. The researcher also calculated the mean for each survey item so the items could be compared to one another in order to determine the strong and weak components of the PLC process collectively across the subject schools.

Methodological triangulation was used by analyzing multiple data sources, including frequency tables from data collected from surveys and observations and an analysis of the information collected from interviews.

Summary

The purpose of this study was to evaluate the implementation of PLCs in the select high schools of a large suburban school district in southwestern North Carolina. The participants were teachers, principals, and central office staff. The researcher

distributed surveys and analyzed the results represented in various themes. The researcher also gathered data using observations and interviews. The more information the district has about the implementation of PLCs the better it is able to support and improve the process.

Chapter 4: Results

A teacher working in isolation is more significant than other professionals working in isolation, due to the ambiguous task of teaching and because isolation has a direct impact on professional development. When teachers work alone in their respective classrooms, they do not realize the interdependence that exists in a school, and they forget their actions affect everyone else in the system of teachers within the school to some degree (Lezotte & McKee, 2002). In order to break the cycle of ongoing reform efforts, actually improve schools, and build the capacity to meet students needs, the “formidable barrier” of teacher isolation must be removed from our schools (Dufour et al., 2008).

A PLC is defined by DuFour et al. (2006) as “educators committed to working collaboratively in ongoing processes of collective inquiry and action research to achieve better results for the students they serve” (p. 217). A true PLC involves teachers meeting together on a regular basis to identify essential student learning, develop common formative assessments, analyze current levels of achievement, set achievement goals, share strategies, and then create lessons to improve current levels of performance (Schmoker, 2005). The PLC process is enhanced when all teachers involved are open to improvement, and trust and respect exist within the group (Schmoker, 2005). School structures with supportive leadership that encourage the sharing of the school’s vision and mission are also important (DuFour, 2004). Implementing PLCs requires school staff to focus on learning rather than teaching, work collaboratively on matters related to learning, and hold themselves accountable for the kind of results that fuel continuous improvement (DuFour, 2004).

The purpose of this program evaluation was to evaluate the implementation of

PLCs in a large suburban school district in southwestern North Carolina. This study utilized the CIPP model of examining the context, input, process, and product of the implementation of PLCs (Stufflebeam, 1987). The study examined the processes currently in place for PLCs through teacher feedback on an electronic, anonymous survey, observations of PLC meetings, principal interviews, and interviews with key central office staff.

Research Questions

The purpose of this research was to evaluate the implementation of PLCs and its impact on student achievement. The primary research for this study focused on the question, “Have professional learning communities been fully implemented in this district?” More specific research questions included:

1. What were the conditions that warranted the implementation of professional learning communities?
2. What has been done at the district level and at the high schools to support the implementation of professional learning communities?
3. To what degree did the stakeholders of the high schools implement professional learning communities?
4. How effective are professional learning communities at the high schools?

Responses to these questions and an analysis of the data are reported in this chapter.

Study Participants

Algebra I, English 9, and Biology teachers, in addition to the principals at the six participating high schools, were emailed a 52-item Likert scale survey with directions for completion. The survey responses’ scale included: strongly disagree, disagree, agree, and strongly agree. All survey responses were captured electronically through the SEDL

website and only identified respondents by the position they held to ensure anonymity. A total of 53 surveys were sent to Algebra I, English 9, and Biology teachers. An additional six surveys were sent to the six participating school principals. Thirty-nine of the teacher surveys were completed for a 74% response rate. Five of the six principal surveys were completed for an 83% response rate.

One PLC, selected by the principal, was observed at each of the six high schools. When making this selection, all indicated the PLC they selected was a “good” PLC, by their own definition. Based on these principal selections at each school, two Algebra I, two English 9, and two Biology PLCs were observed across the six schools. When setting up dates and times to observe the PLC meetings, the teachers were asked to select a date and time when they would normally meet and to plan to conduct the meeting as they typically would. Upon entering the meetings, the researcher did not request introductions of the teachers in order to maintain anonymity of the group.

Data Analysis

In analyzing the data, interview responses from the assistant superintendent of secondary instruction and the facilitator of professional development were used to determine the culture that was present in the district’s schools before the introduction of PLCs and to determine what has been done at the district level to support the implementation of PLCs, answering the first and second research questions. The first research question is: What were the conditions that warranted the implementation of professional learning communities? The second is: What has been done at the district level and at the high schools to support the implementation of professional learning communities? Interview responses from each of the six high school principals were used to determine what was occurring at the school level to support the implementation of

PLCs. Survey responses measuring current PLC practices were compared between the teacher and principal respondents looking for similarities and differences in their perspectives of the current level of implementation of PLCs. Observations of PLC meetings were used to compare the data collected on the survey regarding current PLC practices to the practices that were actually observed during a typical meeting. Finally, a review and a calculation of the change over a 5-year period (from the inception of PLCs to the most recent data year) of district data including EOC scores, attendance, and dropout rates were used to determine the impact the PLC initiative had on the district.

Interview with Assistant Superintendent of Secondary Education. The assistant superintendent of secondary education was interviewed to gain his insight into the conditions and culture of the district when PLCs were implemented and what his role has been in supporting the process. He indicated, before the implementation of PLCs, teachers were offering students reteach and retest opportunities to gain a higher score on a test and a fifth period after school where they could recover credit. At the time PLCs were implemented, he stated there was a realization that scores on End-of-Grade (EOG) and End-of-Course (EOC) state-mandated assessments were not making any real gains, only increases and decreases over a long period of time. He reported PLCs were looked at as a way to break that pattern and be an instructional strategy that would have a real impact on student achievement.

When asked about the meaning of an effective PLC and his role in supporting the PLC process at the school level, the assistant superintendent of secondary education described teachers working together to plan, reflect, and build assessments and then utilizing the results. He felt using the results is the key to actually impacting student achievement. He also described leadership as being the “motivating factor” for

implementing PLCs. The leadership must set a high standard for what everyone contributes and then monitor implementation. His role in supporting the PLC process included asking every principal, “How do you know that you have an effective PLC and what is the benefit for students?” Principals were asked to discuss PLCs in their schools at each evaluation meeting.

The assistant superintendent’s response to the final interview question, “What district factors appear to get in the way of the development of professional learning communities?” included concerns of the way the initiative was rolled out over a span of three to four years instead of everyone being trained at the same time, central office staff not all having the same level of understanding and expectations, and not having a strong consistent monitoring system in place.

Interview with Facilitator of Professional Development. The facilitator of professional development was interviewed to gain her insight into the conditions and culture of the district when PLCs were implemented and what her role has been in supporting the process. She indicated that the majority of teachers in the district were “working in isolation and *hoping* for students to succeed.” She articulates data were not an integral part of the conversation among teachers, and she did not feel data were used to drive instruction as there was not any evidence of this. She felt the focus was on *teaching* and not necessarily on *learning* as most of the professional development opportunities focused on instructional strategies, without an emphasis on whether or not learning was taking place. The implementation of PLCs began with a directive from the superintendent and the assistant superintendent of support services.

The facilitator of professional development indicated that an effective PLC is “a collaborative team whose members work interdependently in order to impact their

classroom practice in ways that will lead to better results for their students, their team, and their school.” She feels that the only schools that have effective, school-wide PLCs are those that have strong leadership where the administrators create conditions that allow the PLCs to flourish and have integrated PLCs into of the school’s culture. She has supported the implementation of PLCs at the district level by planning and organizing all of the training that has taken place and provides ongoing support through monthly newsletters and regularly scheduled monthly support sessions for the PLC facilitator at each school.

The facilitator’s response to the final interview question, “What district factors appear to impede the development of professional learning communities?” included concerns over principals indicating there is a lack of time to implement PLC concepts and leaders, both at the school level and central office level, who are unwilling to require and confront their expectations with PLCs. She also feels there is a lack of modeling effective PLCs at the central office level.

Interview with Principals. The six high schools principals were interviewed to gain insight on what effective PLCs mean to them and what they were providing in their schools to support and sustain PLCs. Their responses were all very closely aligned as they all indicated very similar beliefs and expectations related to PLCs. All six principals indicated an effective PLC includes a focus on learning and affords teachers an opportunity to share instructional strategies, create assessments, and collectively analyze results. All six principals also indicated that they require a regularly scheduled time for PLCs to meet whether it is during a common planning time or before or after school. All six principals indicated they require teachers to maintain documentation of their work in PLCs. Three of the six principals described the building administrator’s role in

participating in and monitoring their assigned PLCs. Time for PLCs to meet was consistently given as the number one factor impeding the development of PLCs, especially when common planning is unable to be provided. Two of the six principals indicated having a flex schedule at least once a week where students could arrive late or leave early allowing teachers the necessary time to meet together and thus be more effective during their instructional time. The principals indicated allotments, lack of funding, and an abundance of new mandates as other external factors that hinder the development of their PLCs.

Surveys. Data collected from surveys were used to answer the third research question: To what degree did the stakeholders of the high schools implement professional learning communities? The survey questions were divided into six themes indicated throughout the research as components of effective learning communities, including: shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, supportive conditions–relationships, and supportive conditions–structures. Each of the six themes is shown in the following tables with the survey items that measured that theme and a comparison of the teachers’ and principals’ responses. For each theme, there is a table to indicate the percentage of three and four responses (which were agree and strongly agree), the central tendency of the responses (the mean of all the responses for each statement), and a strength code (assigned to mean scores indicating whether the responses more to the agree or disagree side of the Likert scale) for each of the central tendencies.

The first theme, shared and supportive leadership, had a teacher percentage between 76.9% and 92.3% for three and four responses, while the principal responses were all 98.2% or higher as indicated in Table 2. Table 3 illustrates the central tendencies

of responses relating to shared and supportive leadership for teachers and principals. For teachers, all were greater than 3.0 with the exception of “shared responsibility for student learning” which had a central tendency of 2.92. The central tendencies for the principal group were all above 3.0. Strength codes assigned to mean scores are indicated in Table 4.

Table 2

Responses to Survey Questions--Shared and Supportive Leadership

Survey Statement Items	Percentage of 3 & 4 Responses	
	EOC Teachers n=39	Principals n=5
1. Involved in discussing and making decisions	82.1	100
2. Principal incorporates advice from staff	92.3	100
3. Accessibility to key information	84.6	100
4. Principal is proactive	92.3	100
5. Staff have opportunities to initiate change	84.6	100
6. Principal shares responsibility and rewards for innovative actions	89.7	100
7. Principal shares power and authority with staff	84.6	100
8. Leadership is promoted and nurtured among staff	87.2	98.2
9. Decision-making through committees	87.2	100
10. Shared responsibility for student learning	76.9	100
11. Use of multiple sources of data to make decisions	92.3	98.2

Table 3

Central Tendencies of Survey Questions--Shared and Supportive Leadership

Survey Statement Items	Mean by Group	
	EOC Teachers n=39	Principals n=5
1. Involved in discussing and making decisions	3.03	3.00
2. Principal incorporates advice from staff	3.13	3.60
3. Accessibility to key information	3.15	3.40
4. Principal is proactive	3.28	3.40
5. Staff have opportunities to initiate change	3.08	3.20
6. Principal shares responsibility and rewards for innovative actions	3.10	3.40
7. Principal shares power and authority with staff	3.05	3.20
8. Leadership is promoted and nurtured among staff	3.13	3.40
9. Decision-making through committees	3.10	3.20
10. Shared responsibility for student learning	2.92	3.00
11. Use of multiple sources of data to make decisions	3.26	3.00

Table 4

Strength Codes for Central Tendencies--Shared and Supportive Leadership

Survey Statement Items	Strength Code by Group	
	EOC Teachers n=39	Principals n=5
1. Involved in discussing and making decisions	Strong	Strong
2. Principal incorporates advice from staff	Strong	Strong
3. Accessibility to key information	Strong	Strong
4. Principal is proactive	Strong	Strong
5. Staff have opportunities to initiate change	Strong	Strong
6. Principal shares responsibility and rewards for innovative actions	Strong	Strong
7. Principal shares power and authority with staff	Strong	Strong
8. Leadership is promoted and nurtured among staff	Strong	Strong
9. Decision-making through committees	Strong	Strong
10. Shared responsibility for student learning	Moderate	Strong
11. Use of multiple sources of data to make decisions	Strong	Strong

The second theme, shared values and vision, had a teacher percentage for three and four responses between 64.1% and 92.3%, while the principal responses were all

95.6% or higher as indicated in Table 5. Table 6 illustrates the central tendencies of responses relating to shared values and vision for teachers and principals. The central tendencies for the teachers ranged from 2.82 to 3.86 while the principal group ranged from 2.60 to 3.40. Strength codes assigned to mean scores are indicated in Table 7.

Table 5

Responses to Survey Questions--Shared Values and Visions

Survey Statement Items	Percentage of 3 & 4 Responses	
	EOC Teachers n=39	Principals n=5
12. Collaborative process for developing shared values	92.3	100
13. Shared values guide decisions	84.6	100
14. Shared visions for school improvement	82.1	95.6
15. Decisions align with values and vision	89.7	100
16. Collaborative process for developing shared vision	79.5	100
17. Goals focus on student learning	64.1	95.6
18. Policies and programs align to vision	92.3	100
19. Stakeholders are actively involved in creating high expectations	64.1	97.8
20. Data are used to prioritize actions	82.1	100

Table 6

Central Tendencies of Survey Questions--Shared Values and Visions

Survey Statement Items	Mean by Group	
	EOC Teachers n=39	Principals n=5
12. Collaborative process for developing shared values	3.08	3.40
13. Shared values guide decisions	3.03	3.40
14. Shared visions for school improvement	3.08	2.60
15. Decisions align with values and vision	3.26	3.20
16. Collaborative process for developing shared vision	2.97	3.40
17. Goals focus on student learning	2.77	3.00
18. Policies and programs align to vision	3.15	3.20
19. Stakeholders are actively involved in creating high expectations	2.82	3.00
20. Data are used to prioritize actions	3.13	3.20

Table 7

Strength Codes for Central Tendencies--Shared Values and Vision

Survey Statement Items	Strength Code by Group	
	EOC Teachers n=39	Principals n=5
12. Collaborative process for developing shared values	Strong	Strong
13. Shared values guide decisions	Strong	Strong
14. Shared visions for school improvement	Strong	Moderate
15. Decisions align with values and vision	Strong	Strong
16. Collaborative process for developing shared vision	Moderate	Strong
17. Goals focus on student learning	Moderate	Strong
18. Policies and programs align to vision	Strong	Strong
19. Stakeholders are actively involved in creating high expectations	Moderate	Strong
20. Data are used to prioritize actions	Strong	Strong

The third theme, collective learning and application, had a teacher percentage for three and four responses between 59.0% and 92.3%, while the principal responses were all 98.0% or higher as indicated in Table 8. Table 9 illustrates the central tendencies of responses relating to collective learning and application for teachers and principals. The central tendencies for the teachers ranged from 2.74 to 3.21 while the principal group ranged from 2.80 to 3.60. Strength codes assigned to mean scores are indicated in Table

10.

Table 8

Responses to Survey Questions--Collective Learning and Application

Survey Statement Items	Percentage of 3 & 4 Responses	
	EOC Teachers n=39	Principals n=5
21. Staff members work together and apply new learning to work	84.6	98.0
22. Collegial relationships exist	79.5	100
23. Staff members plan and work together to address diverse needs	79.5	98.0
24. Opportunities and structures exist for collective learning	74.4	100
25. Dialogue leads to continued inquiry	79.5	98.0
26. Professional development focuses on teaching and learning	92.3	98.0
27. Staff members learn together to solve problems	59.0	100
28. Commitment to enhanced learning	84.6	100
29. Collaborative analysis of data	76.9	100
30. Collaborative analysis of student work	82.1	100

Table 9

Central Tendencies of Survey Questions--Collective Learning and Application

Survey Statement Items	Mean by Group	
	EOC Teachers n=39	Principals n=5
21. Staff members work together and apply new learning to work	3.10	2.80
22. Collegial relationships exist	3.08	3.40
23. Staff members plan and work together to address diverse needs	3.15	3.20
24. Opportunities and structures exist for collective learning	3.03	3.60
25. Dialogue leads to continued inquiry	3.08	3.00
26. Professional development focuses on teaching and learning	3.21	3.20
27. Staff members learn together to solve problems	2.74	3.20
28. Commitment to enhanced learning	3.10	3.00
29. Collaborative analysis of data	2.97	3.40
30. Collaborative analysis of student work	3.18	3.40

Table 10

Strength Codes for Central Tendencies--Collective Learning and Application

Survey Statement Items	Strength Code by Group	
	EOC Teachers n=39	Principals n=5
21. Staff members work together and apply new learning to work	Strong	Moderate
22. Collegial relationships exist	Strong	Strong
23. Staff members plan and work together to address diverse needs	Strong	Strong
24. Opportunities and structures exist for collective learning	Strong	Strong
25. Dialogue leads to continued inquiry	Strong	Strong
26. Professional development focuses on teaching and learning	Strong	Strong
27. Staff members learn together to solve problems	Moderate	Strong
28. Commitment to enhanced learning	Strong	Strong
29. Collaborative analysis of data	Moderate	Strong
30. Collaborative analysis of student work	Strong	Strong

The fourth theme, shared personal practice, had a teacher percentage for three and four responses between 59.0% and 97.4%, while the principal responses were all 97.1% or higher as indicated in Table 11. Table 12 illustrates the central tendencies of responses relating to shared personal practice for teachers and principals. The central tendencies for

the teachers ranged from 2.74 to 3.41 while the principal group ranged from 2.80 to 3.60.

Strength codes assigned to mean scores are indicated in Table 13.

Table 11

Responses to Survey Questions--Shared Personal Practice

Survey Statement Items	Percentage of 3 & 4 Responses	
	EOC Teachers n=39	Principals n=5
31. Opportunities to observe peers	64.1	100
32. Peers provide feedback related to instructional practices	74.4	100
33. Informal sharing of ideas and suggestions for improving student learning	97.4	100
34. Collaborative review of student work	76.9	97.1
35. Opportunities for coaching and mentoring	74.4	100
36. Opportunity to apply learning and share results of their practices	87.2	100
37. Regular sharing of student work to guide overall school improvement	59.0	97.1

Table 12

Central Tendencies of Survey Questions--Shared Personal Practice

Survey Statement Items	Mean by Group	
	EOC Teachers n=39	Principals n=5
31. Opportunities to observe peers	2.79	3.60
32. Peers provide feedback related to instructional practices	2.92	3.00
33. Informal sharing of ideas and suggestions for improving student learning	3.41	3.40
34. Collaborative review of student work	2.97	2.80
35. Opportunities for coaching and mentoring	2.87	3.60
36. Opportunity to apply learning and share results of their practices	3.10	3.00
37. Regular sharing of student work to guide overall school improvement	2.74	3.00

Table 13

Strength Codes for Central Tendencies--Shared Personal Practice

Survey Statement Items	Strength Code by Group	
	EOC Teachers n=39	Principals n=5
31. Opportunities to observe peers	Moderate	Strong
32. Peers provide feedback related to instructional practices	Moderate	Strong
33. Informal sharing of ideas and suggestions for improving student learning	Strong	Strong
34. Collaborative review of student work	Moderate	Moderate
35. Opportunities for coaching and mentoring	Moderate	Strong
36. Opportunity to apply learning and share results of their practices	Strong	Strong
37. Regular sharing of student work to guide overall school improvement	Moderate	Strong

The fifth theme, supportive conditions – relationships, had a teacher percentage for three and four responses between 76.9% and 97.4%, while the principal responses were all 100% with the exception of a 92% response rate for “outstanding achievement is recognized and celebrated,” as displayed in Table 14. Table 15 illustrates the central tendencies of responses relating to supportive conditions – relationships for teachers and principals. The central tendencies for the teachers ranged from 2.92 to 3.36 while the principal group ranged from 2.80 to 3.20. Strength codes assigned to mean scores are presented in Table 16.

Table 14

Responses to Survey Questions--Supportive Conditions – Relationships

Survey Statement Items	Percentage of 3 & 4 Responses	
	EOC Teachers n=39	Principals n=5
38. Caring relationships exist	97.4	100
39. Culture of trust and respect exists	87.2	100
40. Outstanding achievement is recognized and celebrated	79.5	92.0
41. Sustained and unified effort to embed change into culture	76.9	100
42. Relationships support honest and respectful examination of data	89.7	100

Table 15

Central Tendencies of Survey Questions--Supportive Conditions – Relationships

Survey Statement Items	Mean by Group	
	EOC Teachers n=39	Principals n=5
38. Caring relationships exist	3.36	3.20
39. Culture of trust and respect exists	3.18	3.20
40. Outstanding achievement is recognized and celebrated	2.95	2.80
41. Sustained and unified effort to embed change into culture	2.92	3.20
42. Relationships support honest and respectful examination of data	3.13	3.20

Table 16

Strength Codes for Central Tendencies--Supportive Conditions – Relationships

Survey Statement Items	Strength Code by Group	
	EOC Teachers n=39	Principals n=5
38. Caring relationships exist	Strong	Strong
39. Culture of trust and respect exists	Strong	Strong
40. Outstanding achievement is recognized and celebrated	Moderate	Moderate
41. Sustained and unified effort to embed change into culture	Moderate	Strong
42. Relationships support honest and respectful examination of data	Strong	Strong

The sixth theme, supportive conditions – structures, had a teacher percentage for three and four responses between 66.7% and 89.7%, while the principal responses were 98% and higher as indicated in Table 17. Table 18 illustrates the central tendencies of responses relating to supportive conditions – structures for teachers and principals. The central tendencies for the teachers ranged from 2.56 to 3.18, while the principal group ranged from 2.80 to 3.40. Strength codes assigned to mean scores are indicated in Table 19.

Table 17

Responses to Survey Questions--Supportive Conditions – Structures

Survey Statement Items	Percentage of 3 & 4 Responses	
	EOC Teachers n=39	Principals n=5
43. Time is provided for collaborative work	76.9	98.0
44. Schedule promotes collective learning and shared practice	76.9	98.0
45. Fiscal resources are available for professional development	69.2	98.0
46. Appropriate technology and instructional materials are available	66.7	98.0
47. Resource staff are available	82.1	100
48. Facility is clean and inviting	89.7	100
49. Proximity of grade levels and/or departments is conducive to collaboration	74.4	98.0
50. Communication system promotes flow of information among staff	74.4	100
51. Communications system promotes flow of information to community	71.8	100
52. Data is organized and available for easy access	74.4	100

Table 18

Central Tendencies of Survey Questions--Supportive Conditions – Structures

Survey Statement Items	Mean by Group	
	EOC Teachers n=39	Principals n=5
43. Time is provided for collaborative work	2.97	3.20
44. Schedule promotes collective learning and shared practice	2.85	3.20
45. Fiscal resources are available for professional development	2.74	3.20
46. Appropriate technology and instructional materials are available	2.56	2.80
47. Resource staff are available	2.92	3.20
48. Facility is clean and inviting	3.18	3.40
49. Proximity of grade levels and/or departments is conducive to collaboration	2.85	3.20
50. Communication system promotes flow of information among staff	2.85	3.20
51. Communications system promotes flow of information to community	2.92	3.00
52. Data is organized and available for easy access	2.79	3.20

Table 19

Strength Code for Central Tendencies--Supportive Conditions – Structures

Survey Statement Items	Strength Code by Group	
	EOC Teachers n=39	Principals n=5
43. Time is provided for collaborative work	Moderate	Strong
44. Schedule promotes collective learning and shared practice	Moderate	Strong
45. Fiscal resources are available for professional development	Moderate	Strong
46. Appropriate technology and instructional materials are available	Moderate	Moderate
47. Resource staff are available	Moderate	Strong
48. Facility is clean and inviting	Strong	Strong
49. Proximity of grade levels and/or departments is conducive to collaboration	Moderate	Strong
50. Communication system promotes flow of information among staff	Moderate	Strong
51. Communications system promotes flow of information to community	Moderate	Strong
52. Data is organized and available for easy access	Moderate	Strong

Observations. In addition to the data collected from the survey, observations of PLC meetings were also used to answer the third research question: To what degree did the stakeholders of the six high schools in this study implement professional learning communities? Because the language of PLCs has become so common in many schools,

the researcher questioned whether what we verbalize we are doing is actually what we execute. Therefore, the observations were intended to either support or deny what was reported on the surveys. Table 20 displays the attributes of an effective PLC that were looked for during the observation. The data collected indicate consistency among the PLCs in maintaining meeting minutes and the sharing of instructional practices, but analysis of data and the subsequent development of interventions to assist struggling students were not a commonly observed practice.

Table 20

Professional Learning Community Observations

Observation Items	Number of Times Observed
	n=6
1. Evidence of the existence of meeting norms.	1
2. Evidence of the existence of SMART goals.	2
3. Evidence of a format/structure for maintaining meeting minutes.	5
4. Evidence of alignment of instruction among the teachers.	5
5. Evidence there is a sharing of instructional materials.	3
6. Evidence results of common formative assessments are developed and utilized.	4
7. Evidence results of common formative assessments are discussed as overall proficiency by teacher.	2
8. Evidence results of common formative assessments are discussed student by student.	1
9. Evidence of discussion of how to help struggling students.	1

District data. A review of district data was used to answer the fourth research question: How effective are professional learning communities at the high schools? Table 1 shows a comparison of district data including dropout rate, graduation rate, and a state-defined score of proficient on an End-Of-Course (EOC) assessment in Algebra I, English 9, and Biology for 2008, when PLCs were first introduced, compared to 2012, the most recent data year. While the scope of this study did not isolate the work of PLCs as being the only contributing factor to the positive movement of all the data points, it stands to reason that teachers working together to plan lessons and share instructional strategies has had a positive impact.

Summary

The purpose of this study was to evaluate the implementation of PLCs in select high schools of a large suburban school district in southwestern North Carolina. The participants were teachers, principals, and central office staff. Data were collected through interviews, surveys, and observations.

Chapter 5: Summary and Conclusion

As DuFour et al. (2004) found in their study, “Public school educators in the United States are now required to do something they have never before been asked to accomplish: ensure high levels of learning for all students” (p. 1). As the expectations through legislation intensify and the stakes grow higher and higher, educators are desperate to find ways to ensure learning for all. Unlike other professions, the nature of teaching, including the structure of the organization, has historically fostered teachers working in isolation of one another (Flinders, 1988). Mounting research indicates teachers will not be able to meet the current and future demands of educating America’s youth by working alone. Teachers will have to work interdependently in PLCs to achieve common goals in order to meet student’s individual learning needs (DuFour et al., 2004).

Purpose of the Study

The purpose of this study was to evaluate the implementation of PLCs in the select high schools of a large suburban school district in southwestern North Carolina using a program evaluation process. This study examined the components of an effective PLC and determined whether or not those components are in place in the district’s select high schools.

The primary research for this study focused on the question, “Have professional learning communities been fully implemented in this district?” More specific research questions included:

1. What were the conditions that warranted the implementation of professional learning communities?
2. What has been done at the district level and at the high schools to support the implementation of professional learning communities?

3. To what degree did the stakeholders of the high schools implement professional learning communities?
4. How effective are professional learning communities at the high schools?

Various methods were used to collect data for this study including: surveys distributed to teachers currently teaching Algebra I, English 9, and Biology at the district's six largest high schools; personal interviews and surveys distributed to the principals of the six largest high schools; personal interviews with the assistant superintendent of secondary education and the facilitator of professional development; and data collected from observations of a PLC meeting at each of the six schools. The selected teaching areas all carry the state required End-of-Course (EOC) test.

Results

Methodical triangulation was used to increase the reliability and validity of the findings of this study by combining multiple data sources. Based on the data collected in Chapter 4, conclusions were summarized and findings reported for each research question addressed.

After reviewing the data analysis for this study, there is evidence that PLCs are a common practice in the district's high schools. It was also revealed that certain components of the PLC process are practiced more than others. Data collected from interviews and surveys demonstrated a number of consistencies. However, data collected from the observations were slightly different than the interview and survey results. This is likely due to the common language of PLCs where, as the review of the literature indicated, educators know what the practices of the PLC should be but don't always practice them.

The survey was divided into six themes: shared and supportive leadership, shared

values and visions, collective learning and application, shared personal practice supportive conditions – relationships, and supportive conditions – structures. Data collected from the surveys, interviews with the facilitator of professional development and the assistant superintendent of secondary education, and document review of the district’s *Professional Learning Communities Sustainability Plan* (2009) confirmed triangulation when answering the research questions, “What were the conditions that warranted the implementation of professional learning communities?” and “What has been done at the district level and at the high schools to support the implementation of professional learning communities?”

Data collected from surveys from teachers and principals, observations of PLC meetings, and interviews with principals helped confirm triangulation to answer the research question, “To what degree did stakeholders of the high schools implement professional learning communities?” To confirm the support and degree of implementation of PLCs, the results of each of the six areas of the survey were examined and compared to the interview responses and observation data that were collected.

Shared and supportive leadership. The assistant superintendent of secondary education and the facilitator of professional development both described the importance of leadership in developing and sustaining PLCs. They described the leader as the *motivating factor* behind the development of PLCs and as the person who *creates the conditions* that allow PLCs to flourish. The teachers and principals indicated a strong existence of shared and supportive leadership as indicated by the strength codes for each of the statements in this section, as shown in Table 4. However, many teachers did not feel there is a shared responsibility for student learning based on only 76.9% offering a positive response to this statement. In contrast, 100% of the principals felt there is a

shared responsibility. Shared responsibility for student learning is an important factor for addressing and meeting students' needs and impacts whether or not teachers feel supported. It would be worthwhile for the district to determine where the perceived gaps in shared responsibility are and then work toward bringing teachers, administrators and central office staff together to set the priorities and responsibilities for student learning. In addition, to maintain sustainability of the PLC process as school leaders transition from one school to another, prominence on preparing the new leader for where PLCs stand and where improvements could be made would increase the continuity and place immediate emphasis on the PLC process in the school.

Shared values and visions. Overall, there is evidence, based on the strength of the responses, of shared values and visions in the six high schools as indicated by Table 5. The teachers indicated more work could be done in the areas of strengthening the collaborative processes for developing a shared vision, having goals that focus on student learning, and having stakeholders actively involved in creating high expectations. The observations of PLCs revealed a lack of evidence to support the existence of SMART (Specific, Measureable, Attainable, Relevant, Time-bound) goals (Table 20), which supported the lack of vision and focus on student learning indicated on the survey. The assistant superintendent of secondary education indicated the district moved to PLCs to increase the focus on student learning. Based on the survey results shown in Table 5, the teachers felt this focus has not been fully realized with the survey statements “goals focus on student learning,” “stakeholders are actively involved in creating high expectations,” and “data are used to prioritize actions” receiving the lowest positive responses for this section. The principals indicated there is a lack of a shared vision for school improvement as evidenced by their moderate response to survey item 14. The facilitator

of professional learning shared concerns over all central office leadership not being on the same page about PLCs, and therefore indicated a shared, consistent vision is not realized. The assistant superintendent of secondary education supported this notion by sharing what he sees as a lack of consistent monitoring of the work of the PLCs. This data pointed to the need for further refining of the school improvement vision for the district to address *why* the organization exists. Once the *why* is established, the next step would be to focus on the *how* through a collective commitment on the part of every member of the organization in order to see a change in the culture. In addition, employing monitoring criteria for the work of the PLCs that are consistent among all stakeholders will be key. This level of monitoring will likely require additional training for all involved.

Collective learning and application. The observations of PLC meetings revealed a high level of evidence that there is instructional alignment among the teachers of the PLCs (Table 20). Based on the conversation that took place during the PLC meetings, it was evident that teachers do meet regularly and are comfortable engaging in conversation around curriculum, instructional strategies, and the assessment of learning. This idea was supported on the survey based upon every statement on this portion of the survey receiving a strength code of “strong” except for “staff learn together to solve problems” and “collaborative analysis of data,” which were each coded as moderate (Table 10) by the teachers. The moderate code of these two areas supported the notion that teachers are not spending enough time analyzing data nor using the data to determine how to help struggling students, as shown in Table 20.

Administration of common formative assessments and analyzing the data as a team is one of the most consistent findings in the research on effective schools and

effective teaching. Teachers' creating common formative assessments shifts the focus from teaching to learning, and analyzing the results of the assessments not only allows teachers to identify the strengths and weaknesses of their students but also analyze their own strengths and weaknesses as well. This process may be the single most important component of the entire PLC process. With the findings of this study indicating that teachers are not taking the time to analyze the assessment results as a group, this should be a high priority area for further staff development and ongoing monitoring.

Shared personal practice. Only 64.1% of the teachers who responded to the survey felt they are afforded opportunities to observe peers, while 100% of the principals felt they provide these opportunities for their teachers. Principals may need to do more in providing a structure for teachers to observe peers in order for it to be a more common practice among teachers. Survey statement 33, "informal sharing of ideas and suggestions for improving student learning," had a 97.4% positive response rate from teachers (Table 11). The observations of PLC meetings supported this notion with the existence of evidence of alignment among teachers and the sharing of instructional materials. This data indicated teachers have grown comfortable talking with each other about what they do in their classrooms but have not moved to the next level of actually watching each other teach.

Supportive conditions – relationships. Both principals and teachers agreed that caring relationships exist within the PLCs with ratings of 100% and 97.4% respectively on this survey item. The survey data also indicate there is a culture of trust and respect. Schmoker (2005) contends the PLC process is enhanced when all teachers involved are open to improvement, and trust and respect exist within the group. Principals and teachers also agree that more could be done in the area of recognizing and celebrating

outstanding achievement as this survey item had a strength code of “moderate” for both groups.

Supportive conditions – structures. Time, a schedule that promotes collective learning and shared practice, and teacher proximity that is conducive to collaborative learning were consistently identified as factors inhibiting the development of PLCs on the survey and through interviews with both principals and central office staff. The six high schools in the study received a smaller learning community’s grant around the same time PLCs were being introduced in the district. The six largest high schools were required to organize into topic-based academies and move away from subject-area departments. High school teachers often do not have common planning times due to the nature of the high school schedule. It stands to reason that teachers in a particular PLC would benefit from being in close proximity to one another to increase the likelihood of the sharing of materials, observations of one another, and increased formal and informal meetings together.

Limitations

There were several limitations, which may have affected this study. Only a sample of the district’s schools was used in this study, which may not have given an accurate picture of how well PLCs have been implemented in each of the district’s 55 schools. Including elementary and middle schools in the study may have yielded different strengths and weaknesses in the PLC process.

Only six observations of PLC meetings were conducted and the PLCs observed were in areas where there is state testing. These PLCs tend to have greater administrative support and monitoring since they are tied to high-stakes testing. A higher number of PLC meeting observations and meeting observations of non-EOC tested PLCs may have

produced different results.

Finally, the teachers responding to the survey were not identified by school. Identifying the teacher respondents by school may have revealed school-specific characteristics of PLCs, including the impact of leadership styles.

Delimitations

The participants for the study, teachers of state-tested subjects, principals, the facilitator of professional learning, and the assistant superintendent of secondary education, were all invited to participate in this study. No random samples were used. The researcher intentionally made this decision in an effort to gather as much data as possible from participants involved in shaping and implementing the PLC process.

The six largest high schools were chosen as subject schools due to the researcher's perception that large high schools may be the most difficult place to implement PLCs due to their size and lack of proximity of teachers within a department to one another. If these schools revealed evidence of the existence of PLCs, it is likely other smaller schools in the district would show an existence of PLCs due to the schools being smaller in size and the teachers in closer proximity to one another.

Recommendations

Based on the data collected and the findings of this study, the researcher has noted the following recommendations. First, most of the six selected schools in this study had an administrator assigned to individual PLCs for monitoring purposes. These individuals would benefit from additional training in how to facilitate the PLC process, especially in leading teachers in the collection and analysis of data and providing individualized interventions to students, as these were observed areas of weakness as noted in Table 22. If administrators are going to lead teachers through the process of gathering and

analyzing data and creating student-specific interventions, they are going to need the tools, gained through professional development, to lead and support this conversation.

Second, all district level leaders should come together to determine what the district expectations are for PLCs at both the district and school level and how those expectations are going to be implemented and monitored on a consistent basis. These expectations should address what leaders want to see in regards to frequency of meetings, evidence of SMART (Specific, Measureable, Attainable, Relevant, Time-bound) goals, evidence of common assessments, how the data is analyzed, and how the data is utilized to assist struggling students.

Third, each school should have a PLC facilitator who is responsible for regularly attending the monthly update meeting held by the facilitator of professional learning and who meets with administration frequently to establish the PLC expectations for the school and to facilitate monitoring of the PLC process within the school. This should be an area that is expected and monitored from the central office level. Each school level facilitator should receive training directly from Rick and Becky DuFour, experts in PLCs.

Fourth, the teachers at each school should be offered PLC professional development. This professional development should focus on creating common assessments, analyzing the data from the assessments, and then creating student-specific interventions. There are teachers at each school who have never received any formal PLC training; it would be a refresher for others in the areas in which they are the weakest, based on the observation and survey data.

Finally, a number of the principals, during their interviews, indicated creating time for teachers to meet in collaborative groups is difficult due to the structure of the schedules at the high schools. Creating a common planning time for teachers during the

school day can cause issues for student schedules when building the master schedule. Expecting teachers to meet after school often conflicts with after-school tutoring, coaching sports, and holding club meetings where teachers are the sponsors. If this district truly wants to emphasize the PLC process and have teachers work collaboratively to identify and meet students' needs, then time to do this needs to be built into the schedule. DuFour et al. (2006) suggest adjusting the school start and end time one day per week to allow teachers uninterrupted time to meet in their PLCs. For example, teachers could meet from 7:30-8:30. Students who drive or are car riders could arrive at 8:30 instead of 8:00. Bus riders would come at the normal time and be supervised by administration and non-instructional staff. School would end at the normal time, and teachers who do not have duty would be allowed to leave with the students. With state testing reaching more subject areas than ever before through Measures of Student Learning (MSLs), teachers must have a built-in time for collaboration to take place if the value of the work of PLCs is ever to be fully realized and make a real impact on student achievement.

Recommendations for Further Research

To get a true sense of the level of implementation of PLCs across the district, further research may include PLCs at the elementary and middle school levels. It may be interesting to compare the survey results of each of the levels to see if certain practices are more or less prominent at the various levels. Conducting another similar study that contains a higher number of PLC meeting observations, including PLCs of non-EOC tested subjects, would be interesting to see if it would yield different results. A study that involved PLCs for subject areas that are assessed with a state-mandated Measure of Student Learning (MSL) in comparison to PLCs for subject areas that have an EOC test

may produce interesting findings due to the fact that EOCs have been an emphasis area for some time and MSLs are a new state-level student achievement measure.

Several correlation studies could be conducted to determine whether or not years of experience, education levels, or being National Board Certified have any bearing on the survey results. This would show whether or not the perceptions of the work done in PLCs varies with number of years of experience, further education, or being National Board Certified.

A recommendation for further research that emerged from one of the limitations of this study would be to study individual schools and the leadership style to determine the leadership style that best supports the work of PLCs.

Summation Statement

This study was conducted because this district made a large commitment to implement PLCs in each of its 55 schools beginning in 2008. Since that time, there has not been a formal evaluation of whether or not a cultural shift from teachers working in isolation to teachers working in a collaborative, structured PLC had actually taken place. In keeping with the program evaluation context of this study, each research question follows with a summary of what this study revealed.

What were the conditions that warranted the implementation of professional learning communities? Interview responses from both the facilitator of professional learning and the assistant superintendent of secondary education revealed prior to PLCs little was being done to address individual student needs, nor were interventions taking place that were based on data. Teachers were more likely to work in isolation than collaboratively, and none of the strategies being utilized were having a significant long-term impact on student achievement.

What has been done at the district level and at the high schools to support the implementation of professional learning communities? The district provided incremental training over a 3-year period to all schools in the district and created a district sustainability document. The facilitator of professional learning continues to hold monthly meetings with a PLC facilitator from each school and provides a regular newsletter containing PLC updates. The assistant superintendent of secondary education includes the PLC expectation and conversation in all evaluation meetings with the principals, and the principals expect teachers to meet regularly and maintain documentation of their meetings. Many of the principals have also assigned an administrator to facilitate and monitor individual PLCs.

To what degree did the stakeholders of the high schools implement professional learning communities? Overall, data collected through interviews, observations, and surveys indicated teachers meet regularly to share ideas and have developed, caring relationships. Common assessments are regularly created and administered and teachers maintain documentation of their PLC meetings. Teachers also feel professional learning has shifted to a focus on teaching and learning.

How effective are professional learning communities at the high schools? Based on the findings of this study, PLCs are certainly a part of the culture of this district. Teachers value the opportunity to come together to share resources and plan their instruction. Work remains to be done in the area of setting goals that are specific, measurable, attainable, relevant, and time-bound (SMART) to be used to guide the work of the PLC. There also needs to be more of an emphasis on collecting and analyzing data and then using the data to determine how to best meet students' needs. A culture of caring, trusting, and respectful relationships must exist in order for the difficult

conversations around data analysis to take place. Fortunately, as this study revealed, the relationship foundation is in place to dig deeper into the data and ask the hard questions as an attainable goal.

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Appendix A

Professional Learning Community Assessment – Revised Survey

Professional Learning Communities Assessment – Revised

Directions:

This questionnaire assesses your perceptions about your principal, staff, and stakeholders based on the dimensions of a professional learning community (PLC) and related attributes. This questionnaire contains a number of statements about practices which occur in some schools. Read each statement and then use the scale below to select the scale point that best reflects your personal degree of agreement with the statement. Shade the appropriate oval provided to the right of each statement. Be certain to select only one response for each statement. Comments after each dimension section are optional.

Key Terms:

- Principal = Principal, not Associate or Assistant Principal
- Staff/Staff Members = All adult staff directly associated with curriculum, instruction, and assessment of students
- Stakeholders = Parents and community members

Scale: 1 = Strongly Disagree (SD)

2 = Disagree (D)

3 = Agree (A)

4 = Strongly Agree (SA)

STATEMENTS		SCALE			
	Shared and Supportive Leadership	SD	D	A	SA
1.	Staff members are consistently involved in discussing and making decisions about most school issues.	0	0	0	0
2.	The principal incorporates advice from staff members to make decisions.	0	0	0	0
3.	Staff members have accessibility to key information.	0	0	0	0
4.	The principal is proactive and addresses areas where support is needed.	0	0	0	0
5.	Opportunities are provided for staff members to initiate change.	0	0	0	0
6.	The principal shares responsibility and rewards for innovative actions.	0	0	0	0
7.	The principal participates democratically with staff sharing power and authority.	0	0	0	0
8.	Leadership is promoted and nurtured among staff members.	0	0	0	0
9.	Decision-making takes place through committees and communication across grade and subject areas.	0	0	0	0
10.	Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.	0	0	0	0
11.	Staff members use multiple sources of data to make decisions about teaching and learning.	0	0	0	0
COMMENTS:					
	STATEMENTS	SCALE			
	Shared Values and Vision	SD	D	A	SA
12.	A collaborative process exists for developing a shared sense of values among staff.	0	0	0	0
13.	Shared values support norms of behavior that guide decisions about teaching and learning.	0	0	0	0
14.	Staff members share visions for school improvement that have an undeviating focus on student learning.	0	0	0	0
15.	Decisions are made in alignment with the school's values and vision.	0	0	0	0

16.	A collaborative process exists for developing a shared vision among staff.	0	0	0	0
17.	School goals focus on student learning beyond test scores and grades.	0	0	0	0
18.	Policies and programs are aligned to the school's vision.	0	0	0	0
19.	Stakeholders are actively involved in creating high expectations that serve to increase student achievement.	0	0	0	0
20.	Data are used to prioritize actions to reach a shared vision.	0	0	0	0
COMMENTS:					
	Collective Learning and Application	SD	D	A	SA
21.	Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work.	0	0	0	0
22.	Collegial relationships exist among staff members that reflect commitment to school improvement efforts.	0	0	0	0
23.	Staff members plan and work together to search for solutions to address diverse student needs.	0	0	0	0
24.	A variety of opportunities and structures exist for collective learning through open dialogue.	0	0	0	0
25.	Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.	0	0	0	0
26.	Professional development focuses on teaching and learning.	0	0	0	0
27.	School staff members and stakeholders learn together and apply new knowledge to solve problems.	0	0	0	0
28.	School staff members are committed to programs that enhance learning.	0	0	0	0
29.	Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.	0	0	0	0
30.	Staff members collaboratively analyze student work to improve teaching and learning.	0	0	0	0
COMMENTS:					
	STATEMENTS	SCALE			
	Shared Personal Practice	SD	D	A	SA

31.	Opportunities exist for staff members to observe peers and offer encouragement.	0	0	0	0
32.	Staff members provide feedback to peers related to instructional practices.	0	0	0	0
33.	Staff members informally share ideas and suggestions for improving student learning.	0	0	0	0
34.	Staff members collaboratively review student work to share and improve instructional practices.	0	0	0	0
35.	Opportunities exist for coaching and mentoring.	0	0	0	0
36.	Individuals and teams have the opportunity to apply learning and share the results of their practices.	0	0	0	0
37.	Staff members regularly share student work to guide overall school improvement.	0	0	0	0
COMMENTS:					
	Supportive Conditions - Relationships	SD	D	A	SA
38.	Caring relationships exist among staff and students that are built on trust and respect.	0	0	0	0
39.	A culture of trust and respect exists for taking risks.	0	0	0	0
40.	Outstanding achievement is recognized and celebrated regularly in our school.	0	0	0	0
41.	School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.	0	0	0	0
42.	Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.	0	0	0	0
COMMENTS:					
	Supportive Conditions - Structures	SD	D	A	SA
43.	Time is provided to facilitate collaborative work.	0	0	0	0
44.	The school schedule promotes collective learning and shared practice.	0	0	0	0
45.	Fiscal resources are available for professional development.	0	0	0	0
46.	Appropriate technology and instructional materials are available to staff.	0	0	0	0

	STATEMENTS	SCALE			
		SD	D	A	SA
47.	Resource people provide expertise and support for continuous learning.	0	0	0	0
48.	The school facility is clean, attractive and inviting.	0	0	0	0
49.	The proximity of grade level and department personnel allows for ease in collaborating with colleagues.	0	0	0	0
50.	Communication systems promote a flow of information among staff members.	0	0	0	0
51.	Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.	0	0	0	0
52.	Data are organized and made available to provide easy access to staff members.	0	0	0	0
COMMENTS:					

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Source: Olivier, D. F., Hipp, K. K., & Huffman, J. B. (2010). Assessing and analyzing schools. In K. K. Hipp & J. B. Huffman (Eds.). *Demystifying professional learning communities: School leadership at its Best*. Lanham, MD: Rowman & Littlefield.

Appendix B

Letter of Permission to School District Superintendent

January 10, 2013
 Mr. xxxxxxxx
 Superintendent of xxxxxx County Schools
 xxx xxxx St., xxxxxx, NC xxxxx

RE: Permission to Conduct Research Study

Dear Mr. xxxxxxxxxxxxxx:

I am writing to request permission to conduct a research study with Xxxxx Xxxxx Schools. I am currently enrolled in the doctoral program at Gardner-Webb University in Boiling Springs, NC and am in the process of writing my dissertation. The study is entitled Evaluation of the Implementation of Professional Learning Communities and The Impact on Student Achievement.

Teachers of Biology, Algebra I and English 9 and principals at East Gaston, North Gaston, Hunter Huss, Ashbrook, Forestview and South Point will be asked to complete an electronic survey developed by the Southwest Educational Development Laboratory (SEDL) entitled *Professional Learning Communities Assessment –Revised*. The aforementioned teachers will also be observed during a professional learning community meeting with their actions and behaviors being documented based on whether or not predetermined events take place during the meeting. The Facilitator of Professional Development and the Assistant Superintendent of Secondary Education will also be interviewed to provide additional information about the implementation of Professional Learning Communities. After receiving permission from you, all study participants will be contacted electronically with a cover letter and a link directing them to the survey.

Confidentiality will be maintained at all times throughout this process. All participants will remain anonymous throughout the duration of the study. Questions specific to position are for assessment purposes only. The results of this survey will be made available to you upon request.

Your approval to conduct this study will be greatly appreciated. You may contact me by phone xxx-xxx-xxxx or by email xxxxx@gardner-webb.edu with any questions or concerns that you may have. If you agree, kindly sign the second page of this letter and return the signed form in the enclosed self-addressed envelope.

Sincerely,

Cristi M. Bostic
 Doctoral Candidate
 Gardner-Webb University

Appendix C

Letter of Invitation to Participate in Study

Letter of Invitation to Participate in Research
for
High School Teachers and Principals
Gardner-Webb University
College of Education

Date: February 12, 2013

Dear High School Teachers and Principals,

The purpose of this letter is to invite you to participate in a research study conducted by Cristi M. Bostic, doctoral student in the educational leadership program at Gardner-Webb University. My faculty advisor is Dr. Douglas Eury, Dean of the School of Education.

The purpose of this study is to examine the implementation of professional learning communities in the districts six largest high schools. I am asking that you complete a 52 item survey, which should take approximately 10-15 minutes to complete. This survey contains questions that seek to gain information about your experience with the professional learning community process. Your responses will be anonymous and confidential.

Your participation in this study is completely voluntary. If you choose to participate you may discontinue your participation at any time. Your completion of the survey at the link below indicates your consent to participate in this study. Feel free to contact me at xxxx@gardner-webb.edu or 704-xxx-xxxx if you have questions. If you have questions about your rights as a research participant, you may contact Dr. Douglas Eury at xxx-xxx-xxxx.

Thank you in advance for your assistance in this study.

Sincerely,

Cristi M. Bostic

Cristi M. Bostic

INSERTION OF LINK FOR SURVEY