THE IMPACT OF PROFESSIONAL LEARNING COMMUNITIES ON STUDENT ACHIEVEMENT AT AN UNDERPERFORMING SCHOOL: TEACHERS' AND ADMINISTRATORS' PERCEPTIONS

A Dissertation

Presented to the Dissertation Committee of the College of

Trident University International

In Partial Fulfillment of the Requirements for the Degree of

Doctor of Education

by

CORA E. KINCAIDE-CUNNINGHAM

Cypress, California

2017

Defended June 29, 2017

Approved by:

Office of Academic Affairs

September 21, 2017

Dean: Heidi Gilligan, Ed.D.

Director, Ed.D. Program: Heidi Gilligan, Ed.D.

Committee Chair: Dr. Allison Deegan, Ed.D.

Committee Member: Dr. Heidi Gilligan, Ed.D.

Committee Member: Dr. Fredrick Robinson Ed.D.

ABSTRACT

THE IMPACT OF PROFESSIONAL LEARNING COMMUNITIES ON STUDENT ACHIEVEMENT AT AN UNDERPERFORMING SCHOOL: TEACHERS' AND ADMINISTRATORS' PERCEPTIONS

Trident University International 2017

This three-article dissertation contains three approaches to the topic of professional learning communities and their impact on student achievement. Article I is a synthesis of the literature related to the purpose of professional learning communities. Implications in educational settings are also presented in this article. The context of the review acknowledges the role of constructivism as the theoretical basis for the participation of teachers in professional learning communities, and highlights the significance of the problem. Article II describes a qualitative case study which explores data collected from teachers (via survey, N=35) and administrators (via in-person interviews, N=3) about the implementation and impact of a professional learning community at an underperforming school. Article III provides a training manual that may be utilized to revise and expand a pilot model of professional learning communities in an elementary school.

DEDICATION

First, I would like to thank the almighty God for giving me the knowledge and strength needed to accomplish this milestone in my life. I would like to dedicate this dissertation to my mother (Lue Willie Travis-Kincaide) and my brother (Jimmy Lee Kincaide), who are deceased. My brother has always called me a very smart lady and mother. If he felt that I made a bad choice he would say, "I respect you, you're too smart, beautiful and intelligent to make choices that will affect your furture." I also dedicate this dissertation to my sister (Linda Edmond) and her deceased husband (George Edmond) for raising me after the death of our mother, paving the way to complete my high school graduation on time and helping me with my children.

One of my personal goals in life was completing this degree so that my three children, LaAviance, Gowon, and Kenya, and my eight grandchildren, Gowon Jr., Ta'Kenya, Kameron, JaCory, Jordan, Kenya Jr., DeAmbrial, and Mia, would always be encouraged to continue their education no matter what their age or circumstances may be. They will know it is not the age but the dedication, determination, and discipline that will carry them through. Most of all I would like to thank my lifelong friend, Frederick Wilson, for being there supporting me and encouraging me to finish my goal. I thank God for all of you and I love you all very much.

ACKNOWLEDGMENTS

I would like to acknowledge the following individuals for their role in helping me complete my dissertation. I would like to thank God and my church family for their prayers and blessings. I would like to thank my family, friends, and co-workers for having patience with me for not attending family events and social events. I cannot forget my first chairperson, Dr. Becker, for the countless hours spent during the sickness and death of my loved ones. Dr. Becker always encouraged me to continue to work hard, even when things seemed impossible. In addition, I would like to thank Dr. Allison Deegan, my Chair at Trident, and Dr. Heidi Gilligan, Dean at Trident, for their support and having patience with me when it seemed like I was between a rock and a hard place. Dr. Allison Deegan is the best!

TABLE OF CONTENTS

THE IMPACT OF PROFESSIONAL LEARNING COMMUNITIES ON STUDENT ACHIEVEMENT AT AN UNDERPERFORMING SCHOOL: TEACHERS' AND ADMINISTRATORS' PERCEPTIONS

Page

LIST OF APPENDICES

INTRODUCTION

When we think about the future growth and success of schools in preparing students for the demanding changes in our society, we rely heavily on educational leaders. We expect them to improve student achievement despite the challenges and constraints they may be facing, in their classrooms and in their districts. Educational leaders are placed in classrooms as role models and are given the responsibility of leading and managing improvements in school systems. According to the Mississippi Department of Education's Office of Education Accountability (2012), the expectations for educational leaders and students have changed over time due to the higher levels of accountability demanded by stakeholders, including parents, students, community leaders, staff, and teachers. They must work together toward enhancing classroom instruction and student performance. Among the tools employed to improve education is the Professional Learning Community (PLC).

The higher level of accountability required of the leadership at an underperforming school was the inspiration for this dissertation. Use of the PLC as the lens through which to study student achievement, employing multiple approaches, highlights the importance of local actors in meeting state-articulated standards.

Inspiration for this Topic

Throughout the past 24 years, I have been in regular education and special education settings, as a classroom teacher and later as an administrator. For the past few years I have had the opportunity of observing as the recorder of a newly-formed PLC created at an underperforming rural school. In that role, I also monitored student performance and had the opportunity of working with many highly-skilled educators who are committed to teaching

struggling students. With this collective knowledge, I have gained insights about the Federal and State laws, as well as district policies and procedures, which impact student achievement. For example, during the time I was an inclusion teacher, it was my responsibility to make sure the general education teachers were following all the guide lines according to Federal Regulations as mandated by Individuals with Disabilities Act (IDEA) (MDE, 2011).While working with all these amazing educators, I still questioned why students were underperforming.

PLCs have been suggested, and required in some cases, as solutions to student underperformance, with the thought that boosting educators' abilities to be successful will ultimately help students achieve. I researched PLCs and their impact on student achievement at an underperforming school by collaborating with the general education teachers, sharing ideas, strategies, and experiences, both in my role as a colleague and as a researcher.

DuFour (2006) defined a PLC as "a group of people working interdependently toward the same goal. Interdependence is an essential element because it provides equal access (equity, or universal access) to quality teaching by strengthening each teacher's practice through collaboration, coaching, and shared planning" (p. 1). My research found that PLCs do not always operate as defined.

In addition, DuFour (2004) espouses,

> The powerful collaboration that characterizes professional learning communities is a systematic process in which teachers work together to analyze and improve their classroom practice. Teachers work in teams, engaging in an ongoing cycle of questions that promote deep team learning. This process, in turn, leads to higher levels of instructional delivery (p.7).

Regarding whether PLCs' processes can lead to higher levels of instructional delivery and student performance, part of my duties at my present position is to observe teachers and provide different strategies needed to improve their lesson plans. In order to get a better understanding of how PLCs were being implemented in lesson plans and the classrooms, I began to attend some of the PLC meetings. These observations and interactions helped form the foundation of my research.

Three Article Dissertation

This dissertation is composed using the progressive format of a three article dissertation (Trident University International, 2015). This format is applicable for the purpose of gathering and analyzing the perceptions that teachers have of PLCs as a vehicle for improving instructional delivery and enhancing student achievement. Each of the three articles was designed to provide direct support for the study and its significance to the teaching profession at the elementary level.

Article I is an extensive review of the literature reflective of the purpose of PLCs and their implications in educational settings. The context of the review acknowledges the role of Constructivism as the theoretical basis for the participation of teachers in PLCs, aimed at bringing out the significance of the problem.

Article II presents a qualitative case study at an underperforming school, using teacher surveys and administrator interviews to examine the role of a new PLC that was mandated by state educational officials. A case study approach facilitates exploring the research question and its subcomponents. Also, the article includes the theoretical framework, which is Constructivism. Data was collected from teachers' surveys and administrators' interviews. In addition, this article provides an analysis of and findings about the data collected.

Article III presents a training to support PLCs as they develop and evolve, utilizing a PowerPoint presentation that is enhanced by both the literature review and the data findings. Through an analysis of current perceptions and the status of a school site's culture, a collaborative process for establishing goals for improving instructional delivery and student achievement can be developed utilizing this training. This process is expected to be implemented as a part of all teachers' orientations and professional development services provided in the district.

Conclusion

It is anticipated that the findings of this study may help teachers and administrators understand more about PLCs and how effective they can be to support and increase student achievement. The findings may also help to build a better team of knowledgeable teachers who can take leadership roles in the PLC. These findings may allow other researchers to conduct further research in areas they would like to expand concerning PLCs. While this research is difficult to generalize to any setting other than the research site, it may present a pathway for struggling schools to begin to form or reform their PLCs.

References

DuFour, R. (2004). What is a professional learning community? *Educational Leadership Association for Supervision & Curriculum Development, 61*(8) 6-11.

DuFour, R. (2006). What is a professional learning community? *Schools as Learning Communities. 61*(8), 6-11.

Mississippi Department of Education. (2012). Office of Education Accountability. Retrieved from http://www.mde.k12.ms.us/oea

Mississippi Department of Education. (2011). Student Assessment. Testing students with disabilities regulations. Retrieved from http://www.mde.k12.ms.us/student-assessment/student-assessment-special-populations/student-assessment-satp2-aa

O'Neill, J. (2000). SMART goals, SMART schools. *Educational Leadership, 57*(5), 46-50.

Sunflower County Consolidated School District. (2015). Retrieved from http://www.sunflower.k12.ms.us/

Trident University International. (2015). Three article dissertation: A handbook for the doctor of education program. Retrieved from https://www.trident.edu/wpcontent/uploads/2015/08/EdD-Dissertation-Handbook.pdf.

ARTICLE I:

THE ROLE OF PROFESSIONAL LEARNING COMMUNITIES IN STUDENT ACHIEVEMENT: A LITERATURE REVIEW

A synthesis of the literature related to the purpose of Professional Learning Communities (PLCs) and the implications in educational settings will be presented in this article. The context of the article will acknowledge the role of Constructivism as the theoretical base for the participation of teachers in PLCs. The theoretical framework (a major topic in the article) and reference sources will illustrate the challenge of educating struggling students, and provide best practices used as alternatives for understanding and solving this challenge.

The literature review for this article will address the work that is necessary to build PLCs and maintain them in schools with guidance from research exploring PLCs in the workplace (Horn & Little, 2010), and related features of effective PLCs (Attard, 2012; Leach, 2009). DuFour and Eaker (1998) stated "Professional learning community literature ubiquitously references the need for teachers to embrace constant change" (p. 2)**.** They defined the breadth of this expectation when they assert that PLCs require that "each member of the organization is engaged in continuous improvement 'forever'" (p. 2). Concepts of PLCs and the characteristics of model PLCs of are among major topics that will be included. These topics explore the various descriptions, elements, and uses of PLCs, whereas the main topic, the background for PLCs, traces the development of the practice.

The role the teacher and the principal are discussed to provide expectations and strategies inherent in PLCs in school settings. These topics are complimented through discussions of PLC

alongside data-driven instruction, instructional delivery improvement, instructional decision making, creating and environment, and transforming schools into PLCs.

Concepts of the Professional Learning Communities

DuFour (2004) found that PLCs are powerful collaborations, characterizing them as a systematic process in which teachers work together to analyze and improve their classroom practice. Teachers work in teams, engaging in an ongoing cycle of questions that promote deep team learning. This process, in turn, leads to higher levels of instructional delivery (DuFour, 2004). Not only is a PLC a powerful collaboration tool, but they allow teachers to see their strengths as well as weaknesses when working toward improving instructional delivery for student achievement.

Recent Research

During the past decade, PLCs have been shown to be an effective way to build upon the skills and knowledge of experienced teachers (Bausmith & Barry, 2011). Self-reports by practitioners have provided much of the evidence needed for improving instructional delivery for student achievement. "Although several generations of school reform (the standards movement, No Child Left Behind, and now the Common Core State Standards) have cited improving teacher effectiveness as key to improving student achievement, little change has occurred in the nature of professional development" (Bausmith & Barry, 2011, p. 1). In addition, PLCs involved in professional development would benefit from focusing on their understanding of the content being taught and how they understand students' ways of learning the content.

PLCs help teachers examine their best practices through collaborations, sharing ideas, lesson plans, and other proven strategies (Bausmith & Barry, 2011). Insight was given based on what teaching across disciplines would look like when done by expert teachers. The focus of the

PLCs was to draw attention to the importance of pedagogical content knowledge. Bausmith and Barry's (2011) findings supported that PLCs are beneficial for teachers and how well they understand the content being taught, as well as how students learn that content.

Likewise, Harris and Jones (2010) believed PLCs supported improvement and change across the education system. They found that the implementation of whole system reform in Wales, between and across schools in the district. A group of schools that piloted a model of PLCs in the whole system reform in Wales. The pilot phase involved six schools, two secondary, two primary and two special schools. Each school participated for one school year. The pilot phase was based on an action enquiry approach. The evidence for the pilot phase was collected in both quantitative and qualitative by the participating schools. The PLCs ensured that the opportunity was given for teachers to learn new practices and to generate new knowledge (Harris and Jones, 2010).

Harris and Jones (2010) suggested one way of generating changed professional practice that can positively contribute to system-wide improvement is through PLCs. Progress was made in the pilot phase of PLCs developed for a group of schools in Wales. For instance, PLCs allowed teachers the opportunity to engage, reflect and refine their practices. All pilot schools demonstrated evidence of changed professional practice. For example, one secondary school found many of the teaching activities were not engaging students, which focused on the learning experience of young people in year seven. This study discusses allowing teachers the opportunity to share best practices, ideas, and collaborate to improve instructional delivery and student achievement.

However, further research is needed to reveal if the Welsh study's approach has the potential to secure better outcomes for all young people in all settings based on a well-

constructed PLCs contributing to a system-wide improvement. The study supports building PLCs within schools and between schools in the district. The need for PLCs was to support improvement and change across the education system in the district. The key part of the reform process involved a group of schools that piloted a model of PLCs (Harris & Jones, 2010).

In the same way, Resnick (2010) noted that collaboration among teachers is an important component used in securing improved student learning outcomes. PLCs were being developed to support improvement as well as change across an education system. Descriptive and analytical statistics were used in this article, which drew on the international literature pertaining to the system-wide reform providing evidence concerning PLCs.

PLCs have been proposed since the mid-1990s. Since schools in China have a history of enhancing the professional competency of teachers through collaboration in school-based contexts, these strategies have improved teachers' professional growth (Wong, 2010). Literature reflecting strategies implemented to improve teachers' instructional delivery were part of Wong's (2010) study. The teachers interviewed were from two different subject area departments in a secondary school in Shanghai who had enhanced their knowledge and practice within the PLCs. The study found shared goals, a sense of collective accountability, socio-cultural factors, and influences of interpersonal relationship are crucial in the development of PLCs (Wong, 2010).

In another study, Schechter (2012) examined the perceptions of Israeli teachers, principals, and superintendents about the inhibiting and fostering factors of PLCs. Qualitative, face-to-face interviews were conducted with 15 teachers, 15 principals and 15 superintendents from elementary, middle and secondary schools. Findings from Schechter's (2012) study showed that teachers and principals indicated that overwork, a lack of resources, and top to

bottom command structure were factors inhibiting and fostering factors of the PLC. The superintendents were able to relate to the principals' leadership style via the PLC.

In another case, Williams's (2012) study determined if urban students' reading achievement increased as a result of weekly collaboration among teachers in a large, urban school district in Texas. Participants in this article consisted of teachers and administrators from 200 schools. There were sixteen categories and two subcategories consisting of joint lesson planning, reading, math, classroom practices, and strategies for teachers, principals, other educators, etc. These categories provided support from themes which emerged from responses from teacher's responses from focus-group interview questions. From these categories support was provided for themes emerging teachers' responses to their face-group interview questions. Data from students' reading and math were analyzed during the school year for increases after PLCs were created in each school. These PLCs were used as professional development for administrators and teachers. Qualitative data showed that teachers perceived professional learning communities as impacting their classroom practices and students' achievement in a positive way.

In another study, Leach (2009) adopted a grounded theory approach using qualitative data consisting of emails from 15 degree students and their work related experiences. Leach emphasized the impact psychological contracting had on teachers being valued as a person, leaders supporting them for personal, professional and career development. There is a need for this when implementing transformational changes. Leach (2009) stated "the theory of informal communities of practice is useful, not least because it highlights the importance of the relationship between social participation and learning with the workplace" (p. 314). Assistant teachers and high level teaching assistants worked with the most challenging children and

behaviors during this article and had a positive impact on student achievement. This article took place in the workplace with assistant teachers and data coaches. The study found implications for fostering workplace learning through more systematic support of PLCs.

On the other hand, Attard (2012) focused on how structured learning communities can promote reflective awareness and professional development through collaborative analysis of professional experiences. The Australian setting of the study was in mathematic classrooms. The author used recorded observations as well as individual participants' reflective writing as data. In addition, qualitative methods were used to characterize the ways in which teachers used wiki in classrooms for student assessment through PLCs (Kim, Miller, Herbert, Pedersen & Loving, 2011). There were seven participants used in this article. The learning communities allowed opportunities for teachers to learn from each other and collaborate sharing new ideas. Findings revealed improved teachers' practices, strengthened a climate of trust through PLCs. This study supports the idea that PLCs can strengthen a climate of trust.

Background of PLCs

In todays' era of teachers and principals seeking ways to become effective, the PLC has become a popular approach to improving student learning and teacher collaboration (Nash & Hopper 2011, p. 1). Generally, PLCs begin with a group of teachers meeting regularly, agreeing on key learning goals for students, developing common assessments, analyzing data on achievement for decision making, and finally planning some sort of action such as developing new or improved lessons. In the educational environment, this effort is often categorized as Action Research. An orientation to knowledge that requires researchers to work with practitioners and arises in a context of practice (often within their own classrooms) is known as Action Research (Huang, 2010). For example, Action Research studies that happened within the

parameters of an educational environment had different components which lead to success; they can be examined by leaders implementing PLCs within their schools (Huang, 2010). One of the key components in PLCs are the systematic collection and analysis of different types of teachers' evidence of student performance data (Nash & Hopper, 2011), which fits the Action Research paradigm.

Nash and Hopper (2011) noted data-driven "decision making should be treated as an innovation" (p. 1). The authors used the example when PLCs are implemented within school settings where leaders had the opportunity to examine different components of an innovation that would lead their school to success. In this article a sample of 200 public school teachers in the United States were participants. Survey research was used to examine the outcome when data-driven decision making was treated as an innovation by teachers. Findings from this article showed an increase in teachers' understanding of how their perception of data-driven decision making (DDDM) influenced behavior and helped school leaders understand how to strategically implement practices from teachers within PLCs, as well as attain "buy-in" [across] the school system (p. 1).

Strambler and McKown (2013) conducted a study leading them to conclude that promoting student engagement through evidence-based Action Research with teachers may protect students from negative outcomes linked to school failure. This article involved eighteen teachers from three elementary schools randomly assigned to 1 of 2 groups. The groups consisted of control teachers' self-study group, and a teacher intervention group. Reading evidence-based practices to promote student engagement consisted of control teachers in the self-study group. In addition, cultivating academic engagement and conducting an Action Research project to implement selected practices in classrooms used evidence-based instructional practices

studied by intervention teachers. The study revealed more group-based instruction was used in the Action Research group than the self-study teachers. In the Action Research classrooms, there was an increase in students with low engagement and low reading grades than in the self-study classrooms.

This article is unique to this researchers' study because of its focus on evidence-based approaches that enhanced engagement in an action research context. Another study with relevance to this researchers' study was Strambler and McKown (2013), whose collaboration with teachers demonstrated a positive impact on engagement and strategies guiding teachers to discuss concerns. The study findings revealed teachers in Action Research groups had positive feedback on engaging in a cooperative learning practice created desirable change in teachers' practices.

DuFour, DuFour, Eaker, and Many (2006) described three important elements of a successful PLCs. The elements described to be implemented by the staff are: focusing on learning, building collaborative culture, and focusing on results-oriented thinking. DuFour et al., (2006) explained the focus is no longer on the instruction itself, but on the instructional results. Focusing on learning consists of discussing issues as student efficacy, where support is needed, and instructional data. DuFour et al., (2006) based their premise on many studies collecting data from teachers working together or a social network of educators who shared stories, materials, best practices, and ideas.

In addition, DuFour et al., (2006) posited one of the most difficult aspects of PLCs is building and maintaining a collaborative culture. One example given noted times there may be events that cannot always be anticipated that become toxic to the process of maintaining a collaborative culture. These events are personnel issues, sudden illness, family transfers, and

divorces. Eriksson, Axelsson, and Axelsson (2012) described collaboration in the workplace allowing time and opportunities for teachers to develop trust in one another. The study analyzed and described a case of intersectional and interorganizational collaboration on workplace health. A total of nine municipalities were involved in the region. This was a holistic case study design chosen. Developing plans for collaboration in the target area of promoting leadership was the responsibility of the project group. Written project documents were analyzed by qualitative methods using observations and interviews with project members. Collaboration findings showed health promoting leadership as a strategic plan to reduce sickness rate among employees in the municipalities. It was noted as a critical condition to have resources and structural arrangements to continue this collaboration in the workplace.

Wood's (2007) study included a 3-year grant from the Lucent Technologies Foundation. The foundation level involved consisted of joining a professional development initiative to establish learning communities as the organizational structure for teacher learning. Five schools were selected to participate as the pilot in the district. Out of the five schools, one was a middle school in a poor neighborhood and the only comprehensive high school in the district. Teachers were placed in vignette number 1 and vignette number 2 to discuss roles and ongoing assessment of programs. Vignette number 1 lack collaboration and rotating facilitation as well as shared leadership. Vignette number 2, was given the opportunity to build knowledge as they questioned their practices, consulted outside expertise and reflected on what they had learned from experienced. Teachers were at will to freely discuss classroom struggles and asked colleagues for additional help. Therefore, Wood (2007) noted, since teachers need to be knowledgeable in all contexts, ongoing professional learning must be implemented into their work. The methodology used in this article was qualitative using research tools like interviews and

observations. It focused on gathering verbal data from Vignette number 1 and Vignette number 2 from the participants.

Hord (1997), McLaughlin and Talbert (2001), and Louis et al. (1996) agreed that the PLC is a group of professionals with a common goal, working toward belief bettering the educational environment. The authors studied the characteristics of PLCs. Leithwood and Louis (1998) concur that PLC members aim at improving praxis for the betterment of the student. Theoretical literature on similarities between collective learning and individual learning were examined by both authors. The PLC is also seen as contributing to the members' effectiveness.

Hord (1997) investigated studying and enhancing PLCs for school effectiveness in Iceland. The study was conducted in a Reykjavik school district with three high schools schools, 38 schools at compulsory level, and 15,500 students. All the schools in Iceland follow the tradition of Scandinavian education. Sigurðardóttir (2005) noted there were fewer differences in their schools and schools in the USA and U K. Classrooms in the Reykjavik school district consisted of 20-30 students each and one teacher in a closed setting. A purposive sampling strategy was used to choose the schools in the study. Multiple methods, both qualitative and quantitative, were used equally and analyzed separately.

The study was conducted in two phases. A Phase I questionnaire was administered in classrooms, staff lounges, and teachers' collaborative preparation work. Interviews were conducted with principals and vice principals. During Phase II, data was collected for 17 months consisting of four strands. Findings indicated a strong PLC had developed from collaborative learning and based on interdependency, where success depended on people working together.

Song (2012) commented that PLCs give teachers professional autonomy. Through implementing their own learning and development, teachers are given the opportunity to achieve

professional autonomy while improving their teaching abilities. Teachers often met and discussed ways to make improvements by self-evaluation of current performance. The study found through the teachers who were part of a PLC felt empowered, more receptive to new curriculum by promoting and managing the change at school. Song (2012) conducted a survey using thirty-two high schools in three cities in mainland China.

Wenger (1998) studied Communities of Practice (CoP) using a case study approach, focused on the concept of situated learning. The author outlined a number of dimensions he believed underpinned ways different members of PLCs interacted with one another. He identified the three dimensions being mutual engagement, joint enterprise, and shared repertoire. Through mutual engagement members established norms and built collaborative relationships. Joint enterprise allowed them to interact and create a shared understanding of what binds them together. Using shared repertoire allowed members of the community to select a set of communal resources. Qualitative methods such as interviews and observations were used to collect data.

Wenger (1998) posited that, through PLCs, teachers were able to express their own views to their colleagues by sharing their practices and experiences. Respect is gained along with recognition of colleagues in PLCs. Teachers participated in a collegial manner and feel they have approval of their professional status. Since teachers were given a high level of responsibility and pressure, the PLC emphasizes a collaborative culture within the community. PLCs were characterized through shared accountability and mutual support from teachers sharing the pressure and accountability that empowerment brings. Wenger's (1998) study focused on concepts of communities of practice and identity. These concepts were given center stage and used as the main points in a social theory of learning. Wenger (1998) noted

communities of practice are rarely focused on this kind of learning because they exist everywhere and are so informal and pervasive.

The advent of No Child Left Behind told teachers what and how to teach, especially teachers serving marginalized students. Stillman's (2011) study asserted that the teachers' role can be that of a mediator between policy and practice, even those generated by high-stakes accountability systems. Little is known about the preparation of teachers serving marginalized populations for accountability demands in underperforming school. The findings revealed the importance of teacher professionalism, learning, and agency. Teachers in that study were chosen from three underperforming upper-elementary schools. A qualitative case study was conducted consisting of interviews, observations, focus group interviews and data analysis was ongoing. The study has implications for supporting teachers being used as mediators between policies, practices, and accountability (Stillman, 2011).

Song's (2010) study of PLCs revealed PLCs make teachers feel more empowered, give them autonomy and status, as well as allowing them to guide the curriculum as an agent of reform. The study consisted of a survey with thirty-two high schools in three cities. His findings showed teachers were more receptive to the new curriculum through managing change at school, and teachers' perceptions of the value of the reforms help them feel more empowered in the PLCs. The results of the survey found teachers became more receptive and empowered to new curriculums promoting the change.

Teachers' Role in Professional Learning Communities

According to DuFour and Eaker (1998) teachers' role is to bring to life the principles of PLCs and ensure that all students are learning. Song (2012) posited that, during the PLCs, teachers can express their professional views through sharing their practices and experiences.

Through PLCs, teachers gain respect, acceptance, and recognition of their colleagues. Teachers as an individual must hold high levels of responsibility and pressure with empowerment meaning responsibility is diffused (Song, 2012).

Burgess, Newton and Riveros (2012) argued teachers' collaborating is not new in the education reform literature. Burgess et al., (2012) suggested researching the causes of past failures would give better insight of the impact of collaborative initiatives with school improvement. Burgess et al., (2012) suggested using a practice-based focus for PLCs in school "will improve our understanding of peer collaboration initiatives and educational reform in general" (p. 202). Studies were drawn from past reform initiatives of teachers' practices and characterized. The study provides a view of the methodology used, participants, and belief "that PLCs have the potential of making a difference in the landscape of school reform if priority is given to teachers' agency and teachers' learning" (Burgess et al., 2012, p. 203). In addition, using a practice-based focus for PLCs in school showed similarity with school improvement initiatives, like PLCs engaged in deep reflection about practices in schools and practices that pertain to professional learning and teacher agency.

In some studies, many educators revealed that they believe collaboration, teamwork, and allowing students to become a part of their learning is a start in the right direction. Horn and Little (2010) investigated a 2-year project centered on teacher learning and collegiality at two urban high schools on conversational routines, practices groups used to structure work-related talks, and functions in teacher professional communities to support learning and improvement. The focus was on teacher's work groups within the same school committed to improvement and shared common organizations context. Both groups provided different resources to be accessed, conceptualized, and to learn from problems of practice. The study did not have comparable data

allowing them to speak out about dimensions of subject field conception in the Algebra Group or Academic Literacy Group. Together the Algebra Group had nine math teachers working to track 9th grade Algebra classes and the Academic Literacy Group had 5 English teachers seeking to develop 9th grade English courses emphasizing reading comprehension for low achieving students. Horn and Little (2010) stated implications for fostering workplace learning using a more systematic support of PLCs. This article provides insights on how to track and support low-achieving students.

In another study by Thoonen, Sleegers, Oort, Peetsma, and Geijsel (2011) examined the impact of transformational leadership practices, teacher motivational factors, teacher learning on teaching practices, and school organizational conditions. The study consisted of 502 teachers from 32 elementary school in the Netherlands. Surveys were used to collect data from the participants. Results indicated the teachers engaged in the professional learning activities were powerful predictor for teaching practices. Teachers appeared to be the most important motivational factor in explaining teacher practices and teacher learning to their peers. Further research was suggested to examine the relative effects of transformational leadership behaviors in this article. The findings showed teachers participating in PLCs became a powerful predictor for good teaching practices.

Principals' Role in PLCs

DuFour et al. (2006) concurred that principals should meet with resource specialists and general education teachers to discuss issues such as pacing guides, instructional data, student efficacy, support needed, and observed instructions. In addition, the principal's role in the PLC was to fine tune skills, talents, and aspirations, for recognition and to showcase them. Principals building PLCs recognized the importance of all staff working together to achieve the same

purpose of learning for all. Therefore, to promote a collaborative culture, a firm structure was created in the PLCs.

DuFour (2010) suggested when PLCs are done correctly, they provided a combination of support and pressure that build capacity. This process helped to foster collective responsibility, collaboration, a culture of accountability, and a results orientation. Principals developed a stronger sense of self-efficacy making evidence of student learning transparent.

In addition, Lashway (2011) noted, a principal's role is seeing themselves as "learning leaders" (p. 2). They were responsible for helping schools develop the capacity to carry out their mission through PLCs. Finally, Lashway (2011) concurred the principal's role is to cultivate and maintain a shared vision providing focus and generating questions that apply to everyone in the organization.

In school settings that this researcher has studied, notably in southern rural elementary schools, there has been a high teacher turnover rate. The effects of this caused a deficit of quality teachers and instructions, commitment, and trust from teachers and principals. PLCs may be a hedge against this trend. Hord and Hirsh (2009) discussed approaches that principals found effective in supporting strong learning communities. Hord and Hirsh (2009) espoused that the principals' role is to make teachers aware that they know they can succeed together, they support and respect their expertise, make teachers aware of the expectations expected from them. Another role was to guide learning communities toward self-governance, arrange the meeting first and then allow teachers to assume their roles. Principals who shared authority and decision making from the beginning were able to gradually train other teachers to assume leadership positions. In addition, principals who made sure staff was trained to interpret data could enlist those teachers to develop skills needed for making decisions (Hord & Hirsch, 2009).

Finally, DuFour and Mattos (2013) opined that "if principals want to improve student achievement in their school, rather than focus on the individual inspection of *teaching*, they must focus on the collective analysis of evidence of student *learning*" (*p. 35).* Foremost, principals' focus was on data reports and teachers' perception of PLCs impact on instructional delivery to improve student achievement.

Huggins (2011) used a qualitative case-study design to explore the PLCs used as a reform to increase student achievement at a mid-sized urban high school, based on standards-based assessments. Principal leadership emerged in the PLC process as a factor in or increasing teacher and student learning. The study lasted a year with interaction from the PLC's math study consisting of 3 school leaders and 6 teachers.

DuFour and Mattos (2013) asserted that creating the collaborative culture and collective responsibility of a PLC was the most powerful strategy for improving both teaching and learning, as opposed to micromanaging instruction, which rarely broad similar results.

Student Achievement and Professional Learning Communities

Vescio, Ross, and Adams (2008) stated that, under the right conditions, PLCs actually can lead to better student performance. Their literature review on the impact of PLCs on teaching practices and student learning consisted of 10 American studies and an English study. Results revealed that PLCs did have a positive impact on student achievement and teaching practice when using well-developed PLCs.

In addition, Vescio et al., (2008) stated that Phillips's (2003) study examining the relationship between teachers' participation in PLCs and student achievement found that student learning improved. Phillips (2003) reported. over a 3-year period, that achievement scores dramatically increased. Interviews were conducted with teachers in a middle school about

funding that allowed them to collaborate in a variety of ways in the classroom. Teachers were able to observe each other in the classroom, engage in literature study circles, videotape and review lessons, and generate new ideas for practice. They reported that students in the middle school showed a 50% increase on the state-wide standardized test in the areas of reading, writing, math, science, and social studies for 1999-2000 school year. In addition, over 90% of students passed their subject area tests.

Another study by Berry, Johnson, and Montgomery (2005) conducted a survey and case study from 16 school sites about the impact participation in a PLCs had on teaching practice and school moral. Berry et al., (2005) survey data was examined from 393 schools beginning with early childhood, elementary and secondary including an interview based case study data collected from the 16 school sites. The results showed a PLC's positive impact on teaching practice, school morale, stronger linkages between student achievement and teachers' professional learning from collaborating and participating in PLCs. Documentation from the study showed progress over a 4-year period in a rural elementary school.

Struggling students tested in this study on grade level improved more than 50%, performing at or above grade level. Students meeting grade level standards improved more than 80%. All three studies (Berry et al., 2005; Bolam et al., 2005; and Phillips, 2003) examined the relationship between teachers' participation in PLCs and student achievement, and all three found that student learning improved (Vescio et al., 2008). The study has implications for fostering workplace learning through the use of PLCs and for providing support through teachers' participation, leading to improved school morale and improved student achievement.

Data Driven Instruction and Improved Delivery

Mandinach (2012) stated "data-driven decision making (DDDM) pertains to the systematic collection, analysis, examination, and interpretation of data to inform practice and policy in educational settings" (p. 1). DDDM can be applied in classrooms to improve instructions. It is a generic process and can be applied by teachers, principals, superintendents, data entry clerks and other administrators. Mandinach (2012) also believed the advantage of using data-driven decision making is to move districts, educators, schools and states from being "data rich but information poor to using data and transforming them into actionable knowledge" (p. 82). Using data-driven decision making throughout all levels of the educational system was helpful when decisions had to be made using the data. These levels include instructional, administrative, financial, demographic, perceptual, welfare, health, and behavioral as well as other kinds of data (Mandinach, 2012). In this study, DDDM was used to understand why a particular sub-set of students were struggling academically in a rural school district.

Using the data-driven decision making system, administrators and teachers were able to look for explanations in student performance data, attendance, medical records, less quantitative information, and behavioral data. Collaboration in PLCs in this rural elementary school allowed teachers to share data charts, data talks with students and administrators to increase student achievement and promote effective instructional delivery. The implications for proposed research study suggest further documentation needed on the impact of PLCs on teaching and learning.

The study found a connection with what seemed to be unrelated data, such as transportation data, finding a direct connection indicating students struggling academically had the longest bus commute. Based upon these findings, administrators modified the transportation

to shorten the time students spent on the bus providing more time for students to focus on their work. The PLCs at this rural elementary school provided training on instructional delivery using data results from student assessment and previous years. In addition, programs are in place allowing students extra time to practice interventions in the areas needed. For example, Response to Intervention (RTI) classes scheduled thirty minutes' sessions during each class period allowing the whole rural elementary students to work on his/her interventions.

Marsh, McCombs and Martorell's (2010) study examined the convergence of two popular school improvement policies. These policies were instructional coaching and data-driven decision making. The study took place in a Florida middle school using a mixed methods study of a statewide reading coach program. Findings revealed data support was among many coach activities used in helping teachers analyze student data to guide instructions and student teacher outcomes. Instructional coaching and data-driven decision making perceived improvements in teaching and higher student achievement. The study has implications for supporting this researchers' study using data-driven decision making for instructional delivery.

In a study, Jiaping, Cooley, Reeves, Burt, Ryan, Rainey, and Wenhui (2010) stated 16 principals in four urban school districts used data from student and community background in relation to teaching methodology and a profile to track students' achievement. In addition, principals used school process data to focus on students' attendance and discipline reports, which could be in conjunction with student achievement as well. Jiaping et al., (2010) asserted principals used student achievement data for three purposes. First, the data was used for accountability and school improvement, state assessment test, and annual yearly progress. Findings showed this data-driven to be effective in principals' making decision. The study has

implications for fostering the use of data in tracking student achievement and teachers' effectiveness using best practices from PLCs on instructional delivery.

Instructional Decision Making

Ikeda, Rahn-Blakeslee, Niebling, Gustafson, Allison, and Stumme (2007) believed instructional decision making is a systematic process using student achievement and other data to guide instructional decisions. Instructional decision making supported school wide and districtwide system of assessment, their curriculum, and address the needs of low and high performing learners. This study described two forms of response to intervention in the literature review known as Response to Intervention (RTI) problem-solving and Response to Intervention (RTI) standard treatment protocol. RTI problem-solving involved applying a problem-solving perspective to individual students whose performance different from expectations that have been set. RTI standard treatment protocol were used for all students with similar instructional needs, and progress was monitored frequently. The gap between what is observed and what is expected is used to determine the severity of the problem.

Demiraslan Cevik and Andre's (2014) study compared the impact of three types of instructional methods on pre-service teachers' decision-making performance. The three groups were case-based learning, work example groups and faded work example methods. The study compared the work group to the case-based learning and faded work groups on making reason-based decisions relating to classroom management. The work example group, compared to the case-based learning and faded work example groups revealed better performance on making reason-based decisions related to classroom management.

Characteristics of Professional Learning Model

Sigurðardóttir (2010) summarized characteristics from previous studies such as shared values and vision that focus on students' learning, high expectation of students' academic achievement, shared leadership that values teachers' participation in making decisions, a perception of mutual support among staff, collaborative learning among professional staff that addresses pupils' needs, organizational arrangement that supports teachers' collaboration, habits of work that encourage collaborative learning, a social climate that supports collaborative learning, and job satisfaction and commitment. The study took place in three schools in Iceland. It was conducted in two phases and was designed as a mixed method study. The population of the locality was 115,000 inhabitants, and was served by three schools with a total enrollment of 1,800 students and 157 professional staff members. The two phases consisted of a correlational study of survey data on schools as PLCs and an experimental study. Evidence was obtained from both phases between school's level of effectiveness and its level of PLC development.

Likewise, Bolam and Britain (2005) agreed with Sigurðardóttir's (2010) characteristics of PLCs tp include professional learning, collaboration with learning groups and individuals, implementing shared values and vision, being responsible for students' learning and using reflective professional inquiry play a major role in PLCs. In addition, Bolam and Britain (2005) believed inclusive membership, mutual trust, respect and support, openness, networks and partnerships were important as well. PLCs worth promoting were those achieving effectiveness based on outcomes, being the impact on the professional learning and moral of staff, school leaders, teachers, other workers and most of all the impact on students. This case study finding supported that PLCs fully expressing these characteristics had a positive impact on student

attendance, interest in learning, professional learning and the morals of teaching as well as support from staff.

Creating an Environment

DuFour and Eaker (as cited in Thompson, Gregg, and Niska, 2004) stated educators must create an environment in PLCs that foster mutual cooperation, emotional support, and personal growth as they work together to support student achievement.

Lomos, Hofman, and Bosker's (2011) study investigated the relationship of mathematics departments that were perceived as their own PLCs and student achievement. This article took place in Dutch secondary schools. Effective departments with collaborative teams have been associated with effective schools. Model used on a sample of 3000 students, 130 teachers, and 130 schools were cluster analysis and Hierarchical Linear Modeling (HLM). Findings showed departments focused on collaborative activity, shared vision, student achievement, and reflective dialogue are associated with higher student achievement and successful schools. The study has implications for fostering learning through PLCs sharing visions and student achievement in all the subject area classes.

PLCs in the Workplace

Horn and Little (2010) investigated the effectiveness of professional learning in teachers' workplace. The authors observed conversational routine and group work-related talk concerning learning and school improvement. In this article, Horn and Little (2010) argued "that focusing on selected group-level conversational routine provides an important and strategic means for conceptualizing and investigating opportunity to learn within workplace settings" (p. 184). This article has implications for fostering workplace learning through more systematic support of

PLCs. When conversational routine and group work-related talks take place, evidence can be gathered from student assessment on instructional delivery.

Shipley (2006) explained PLCs and their role in district and schools across the country. Shipley (2006) explained components of a PLC that are most essential to the success of beginning and maintaining one. This research provided implications for special education in the implementation and administration of PLCs.

In a study Attard (2012) focused on how structured learning communities can promote professional development and reflective awareness through collaborative analysis of professional experiences. Data was collected using recorded observations and individuals' reflective writing. Seven participants disagreed that they started and developed professionally into their profession within the five-month progression. The participants pointed out the motivation given to them with this type of professional development.

Transforming Schools into PLCs

At a site that the researcher has studied, the urgency of being a failing school prompted the principal to implement PLCs within each subject area class throughout the rural elementary school. Through these learning communities teachers were able to use the workplace as a systematic support of professional learning communities (Cunningham, 2017).

Stake (2010) discussed how Action Research and studying one's own place of work is interesting on a number of levels. He cautions readers about the pressures they may face and the risks associated with being seen as self-serving, self-protecting, self-promotional, advocating the home point of view (p. 163). However, Stake (2010) urged readers to consider the goals of the research, its sponsors, and how ultimately they influence the questions asked and methods used to answer them. In addition, Stake (2010) was critical of the corporate point of view, where

clients expect researchers to avoid questions that may prove embarrassing. Stake (2010) urges the reader to avoid prematurely changing directions, when it may be better to stay the course.

Schechter (2012) believed at all level in common working environment PLCs facilitates collaborative learning among colleagues. Besides, having principals and teachers meeting regularly and finding solutions to problems relating to teaching and learning is useful in schools with PLCs. PLCs are a means of improving student achievement and have received support from researchers and practitioners.

Recommendations

Although there are many articles and literature reviews pertaining to professional learning communities, this researcher has not been able to locate any literature focused specifically on teachers' perceptions of PLCs and their impact on instructional delivery and student improvement. There is a gap between research and practice. Further research, focusing on teachers' perceptions of PLCs, especially at low-performing schools where a PLC can be considered an intervention strategy, is needed to directly link PLCs to student achievement.

Conclusion

This article presented a review of the literature focused on PLCs, how they originated and the various forms they can take at a school site. The literature review for this article addresses the work that is necessary to build PLCs and maintain them in schools.

In addition, the literature review commented on research supporting the characteristics of the PLC model, the environment of the PLC, team collaboration needed by members, PLCs in the workplace, the steps needed to transform schools into PLCs, the role of the principal, teachers and students in the PLCs, use of data by the PLCs, and improved instructional design and delivery through PLCs involvement was reviewed. The article addressed the work necessary

in building PLCs and maintaining them in school. In addition, teacher perceptions of PLCs in their school was the focus of the literature review.

The five sections addressed the need for the research, the chosen methodology, background for the PLCs, including their historical beginnings, the role of stakeholders and the role PLCs play in data-driven instruction and improved instructional delivery impacting student achievement. While it is clear that PLCs have an impact on teachers' professional development and effectiveness, there remains a need for research linking PLCs and student achievement.

References

Attard, K. **(**2012). Public reflection within learning communities: An incessant type of professional development. *European Journal of Teacher Education, 35*(2), 199-211. doi: 10.1080/02619768.2011.643397

Bausmith, J. M., & Barry, C. (2011). Revisiting professional learning communities to increase college readiness the importance of pedagogical content knowledge, *Educational Researcher*, *40*(4), 175-178.

Berry, B., Johnson, D., & Montgomery, D. (2005). The power of teacher leadership. *Educational Leadership*, *62*(5), 56-60

Bolam, R., & Britain, G. (2005). *Creating and sustaining effective professional learning communities*. London: Department for Education and Skills.

Demiraslan Cevik, Y., & Andre, T. (2014). Studying the impact of three different instructional methods on preservice teachers' decision-making. *Research Papers in Education, 29*(1), 44-68. doi:10.1080/02671522.2012.742923

DuFour, R., & Eaker, R. (1998). *Professional learning communities at work: Best practices for enhancing instructional delivery.* Bloomington, IN: Solution Tree (formerly National Educational Service).

DuFour, R. & Eaker, R. (2004). What is a "professional learning community"? *Educational Leadership*, *61*(8), 6-11.

DuFour, R., DuFour R., Eaker, R. & Many, T. (2006). Learning by doing: A handbook for professional learning communities at work. Bloomington, IN: Solution Tree.

DuFour, R., Eaker, R., & Many, T. (2010). *Learning by doing: A handbook for professional learning communities at work*. Bloomington, IN: Solution Tree Press.

DuFour, R. & Mattos, M. (2013). How do principals really improve schools? 70(7), 34-40.

Eriksson, A., Axelsson, S. B., & Axelsson, R. (2012). Collaboration in workplace health promotion–a case study. *International Journal of Workplace Health Management, 5*(3), 181-193.

Harris, A., & Jones, M**.** (2010). Professional learning communities and system improvement. *Improving Schools*, *13*(2), 172-181.

Hord, S. M. (1997). Professional learning communities: Communities of continuous inquiry and improvement. Austin, TX: Southwest Educational Development Laboratory.

Hord, S. M., & Hirsh, S. A. (2009). The principal's role in supporting learning communities. *Educational Leadership*, *66*(5), 22-23.

Horn, I. S., & Little, J. W. (2010). Attending to problems of practice: Routines and resources for professional learning in teachers' workplace interactions. *American Educational Research Journal*, *47*(1), 181-217.

Huang, H. B. (2010). What is good action research? *Action Research*, *8*(1), 93-109.

Huggins, K., Scheurich, J., & Morgan, J. R. (2011). Professional learning communities as a leadership strategy to drive math success in an urban high school serving diverse, low-income students: A Case Study. *Journal of Education for Students Placed at Risk, 16*(2), 67-88. doi:10.1080/10824669.2011.560525

Ikeda, M. J., Rahn-Blakeslee, A., Niebling, B. C., Gustafson, J. K., Allison, R., & Stumme, J. (2007). The Heartland Area Education Agency 11 problem-solving approach: An overview and lessons learned. In *Handbook of response to intervention* (pp. 255-268). Springer US.

Jianping, S., Cooley, V. E., Reeves, P., Burt, W. L., Ryan, L., Rainey, J., & Wenhui, Y. (2010). Using data for decision-making: perspectives from 16 principals in Michigan, USA. *International Review of Education/Internationale Zeitschrift Für Erziehungswissenschaft*, *56*(4), 435-456. doi:10.1007/s11159-010-9172-x

Kim, H., Miller, H., Herbert, B., Pedersen, S., & Loving, C. (2012). Using a wiki in a scientist-teacher professional learning community: Impact on teacher perception changes. *Journal of Science Education & Technology, 21*(4), 440-452. doi: 10.1007/s10956-011-93

Lashway, L. (2011). Creating a learning organization. *Journal INSANIA*, *14*(3).

Leach, T. (2009). Maybe I can fly: Nurturing personal and collective learning in professional learning communities. *Pastoral Care in Education*, *27*(4), 313-323.

Leithwood, K., & Louis, K.S. (Eds.). (1998). Organizational learning in schools. Lisse, The Netherlands: Swetz & Zeitlinger.

Lomos, C., Hofman, R. H., & Bosker, R. J. (2011). The relationship between departments as professional communities and student achievement in secondary schools. *Teaching and Teacher Education*, *27*(4), 722-731.

Louis, K. S., Marks, H., & Kruse, S. (1996). Teachers' professional community in restructuring schools. American Educational Research Journal, 33, 757–798.

Mandinach, E. B. (2012). A perfect time for data use: Using data-driven decision making to inform practice. *Educational Psychologist*, *47*(2), 71-85. doi:10.1080/00461520.667064

Marsh, J. A., McCombs, S., J., & Martorell, F. (2010). How instructional coaches support data-driven decision making. *Educational Policy*, *24*(6), 872-907. doi:10.1177/0895904809341467

McLaughlin, M. W., & Talbert, J. E. (2001). *Professional communities and the work of high school teaching*. University of Chicago Press.

Nash, J., & Hopper, S. (2011). Data driven decision making as an innovation: Using diffusion theory to understand teacher professional learning communities. *EDULEARN11 Proceedings*, 102-110.

Resnick, L. B. (2010). Nested learning systems for the thinking curriculum. *Educational Researcher. 39*(3):183–197.

Riveros, A., Newton, P., and Burgess, D. (2012). A situated account of teacher agency and learning: Critical reflections on professional learning communities. *Canadian Journal of Education, 35*(1), 202-216.

Schechter, C. **(**2012). The professional learning community as perceived by Israeli school superintendents, principals and teachers. *International Review of Education/Internationale Zeitschrift Für Erziehungswissenschaft*, *58*(6), 717-734. doi:10.1007/s11159-012-9327-z

Shipley, J. B. (2006). Professional Learning Communities: Where does special education fit in? *Senior Honors Theses.* Paper 31.

Sigurðardóttir, A. K. (2005). Studying and enhancing the professional learning community for school effectiveness in Iceland. 3(1), 178-193.

Song, H. (2012). The role of teachers' professional learning communities in the context of curriculum reform in high schools. *Chinese Education & Society*, *45*(4), 81-95.

Stake, R. E. (2010). *Qualitative research: Studying how things work*. Thousand Oaks, CA: Sage Publications.

Stillman, J. (2011). Teacher learning in an era of high-stakes accountability: Productive tension and critical professional practice. *Teachers College Record*, *113*(1), 133-180.

Strambler, M. J., & McKown, C. (2013). Promoting student engagement through evidence-based action research with teachers. *Journal of Educational &Psychological Consultation, 23* (2), 87-114. doi:10.1080/10474412.2013.757153

Thoonen, E. E., Sleegers, P. J., Oort, F. J., Peetsma, T. T., & Geijsel, F. P. (2011). How to improve teaching practices, the role of teacher motivation, organizational factors, and leadership practices. *Educational Administration Quarterly*, *47*(3), 496-536.

Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education,* 24, 80–91.

Wenger, E. (1998). Communities of practice: Learning, meaning and identity. New York: Cambridge University Press.

Williams, D. J. (2012). Urban education and professional learning communities. *Delta Kappa Gamma Bulletin, 79*(2), 31-39.

Wong, J. N. (2010). Searching for good practice in teaching: a comparison of two subject-based professional learning communities in a secondary school in Shanghai. *Compare: A journal of comparative & international education*, *40*(5), 623-639. doi:10.1080/03057920903553308

ARTICLE II:

THE IMPACT OF PROFESSIONAL LEARNING COMMUNITIES ON STUDENT ACHIEVEMENT AT AN UNDERPERFORMING SCHOOL: TEACHERS' AND ADMINISTRATORS' PERCEPTIONS

This qualitative study used a case study approach to gather data from both teachers and administrators at a rural underperforming school. The focus was the school site's mandated Professional Learning Community (PLC), which was required by state administrators to boost student achievement. Teachers' and administrators' perceptions about their PLC, and how they contribute to it as a vehicle for improving instructional delivery and enhancing student achievement, was the topical focus of the study.

Statement of the Problem

The research problem to be investigated in this study is the link, if any, between participation in a PLC and impact on student achievement, specifically on the mandated educational exit test administered in the State of Mississippi (Mississippi Department of Education, 2012). This test measures student progress in reading, math, and language arts. In order to address a lack of achievement, the State of Mississippi instituted PLCs at sites that underperformed (MDE, 2012). This study will focus on teachers' and administrators' perceptions of how the PLC factors into improving instructional delivery and student achievement at Alpha Elementary School (a pseudonym), one such rural elementary school in the Southeastern United States, which was required to develop a PLC to address low student performance.

Positive student outcomes are influenced in part by quality teaching and the adequacy of resources used in the teaching and learning setting; these outcomes are most often measured by students' performance scores (The New Jersey Advisory Committee, 2010). Accountability for ensuring positive student outcomes is a shared responsibility, but the teacher is viewed as the most important stakeholder (The New Jersey Advisory Committee, 2010).

The problem of low scores on standardized tests impacts students, teachers, and school administrators (Sunflower County Consolidated School District (SCCSD), 2014). The problem also ultimately affects salaries for employees, teacher evaluation, and tenure. When students score low, sites find it difficult to attract highly qualified teachers. Thus they resort to hiring non-certificated teaching staff, and student achievement remains low (SCCSD, 2014). According to the school administrator at the study site, it is impossible to compete for candidates due to students' low performance and the school's location, in the Mississippi Delta area. In addition, states and school districts are forced to implement academic standards as a guide for instructional delivery and to base placement decisions as well as promotions for teachers on students' standardized test scores (Jimerson, Stein, Haddock, & Shahroozi, 2016).

In 2013, the Mississippi State Board of Education took conservatorship over the Alpha Elementary School, due to its compiling years of low test scores, as well as concerns about the overall performance of the Mississippi-Delta students educated at this site (SCCSD, 2014). As a result of this determination of persistent low performance on student test scores, the Alpha Elementary School was awarded an improvement grant and placed on an improvement plan (Mississippi Department of Education, 2014).

The school was able to implement innovative strategies to increase and improve instructional delivery through the grant and budget allocations. For example, the Alpha

Elementary School contracted work to consultants, tasking them to work with individual teachers in needed areas. In addition, free school supplies were given to students, and training was provided for all teachers in the rural elementary school. The creation of a PLC was among the improvement strategies included in the school improvement plan (SCCSD, 2014).

As an example, the school employs four teachers for its fourth grade students who are eligible to receive free lunch based on governmental poverty guidelines. Only one of these teachers meets the criteria of highly qualified. According to the school principal, it is very hard to convince certified teachers to work in the Mississippi Delta, a poverty-stricken region of the state (B. Akon, personal communication, January 14, 2016). For instance, the rural elementary school principal has experienced waiting for weeks for a certified teacher to show up or provide a call back once the location of the school is provided.

Therefore, the hiring of long-term substitute teachers and non-certified teachers is a default staffing strategy. The rural elementary school was forced to put a strategic plan in place for external and internal providers to assist in attracting certified teachers and improving student achievement. Ulrich (2013) added "Small districts might also choose to work together in order to increase efficiency and save costs by joining entities. Professional development is a great example of a service that, if shared among districts, has the potential to not only save costs but also to increase the quality of the programs" (p. 14). At the advent of this study, it was not clear if the implementation of a PLC would contribute to teacher quality and, ultimately, student achievement, but the need to boost both that quality and achievement were urgent.

Purpose of the Study

The purpose of this qualitative case study was to investigate the impact of a PLC on teacher effectiveness and, ultimately, student achievement, at an underperforming school.

During the 2013-2014 school year, the Alpha Elementary School received the label of "failing school," based on its students' lack of achievement on state tests. In the 2015-2016 school year, after significant efforts were made to employ different strategies, there was a demonstrated increase in students' academic success (SCCSD, 2016). Since scores have been going down over a period of 3 years, however, the school was placed on a school improvement plan (SCCSD, 2016). During this time, the State of Mississippi (MDE, 2014) mandated PLCs to be implemented as part of a resource grant to failing schools, aimed at addressing student performance at an underperforming school.

This study sought to examine this issue through the lens of teachers' and administrators' perceptions at one school site. Using the staff's experiences with their PLC was viewed as an effective manner to uncover the culture of the school and how teachers and administrators view their roles in student achievement. The intent was also to uncover differences, if any, between these two sets of stakeholders.

Finding ways to boost student achievement is a critical goal in the Mississippi Delta region, where the study site, the Alpha School, is located. Without robust educational accomplishments, students have few prospects for employment and success in life. The stakes for Alpha's students are even higher than in most places in the country and finding ways to get to the source of their academic deficits is an important purpose of this study.

Theoretical Framework

Constructivist Theory

Constructivism states that knowledge is an interpretation of the objective world, assumption or hypothesis, and it will be changed, sublimated and rewritten with the deepening of the degree of recognition, new interpretation and assumptions will spring up (Jing, 2015). In

concrete problem solving, a learner needs to reprocess and recreate the original knowledge for specific problems. The real understanding of knowledge can only be constructed by the learners themselves, based on their own background and experience (Jing, 2015, p. 8).

In researching the perceptions of teachers and administrators about the impact PLCs have on instructional delivery and student success, this study is based on constructivist theory. Fosnot (2013) indicated constructivism is a theory about "learning, and knowledge, it describes both what knowledge is and how one comes to know" (p. 1). It describes knowledge as not being "truths to be discovered or transmitted, but as an emergent explanation in which humans engaged themselves in meaning-making in cultural and social communities of discourse" (Fosnot, 2013, p. 1).

According to Fosnot (2013) constructivist theory, from this perspective, was not viewed as a theory of teaching, but as an approach whereby teachers give learners the opportunity to raise questions, defend their strategies and ideas, model and have concrete, contextually meaningful experiences, allowing them to search for patterns. Bruner (1966) stated one major theme in the constructivist framework is that learning is an active process where learners construct concepts and new ideas from prior and past knowledge. Information is selected and transformed, constructing hypothesis, relying on a cognitive structure, and making decisions. For example, active dialog should be engaged in by the student and the instructor as well as encouraging students to discover principles by themselves (Bruner, 1966).

Williams (2008) used a quantitative, post-test control group design based upon social constructivism in proposing instructional design. This study took a different approach, by using the proposed case study methods of qualitative data gathering differing from the Williams study.

To help educators understand the impact of PLCs on student achievement, teachers' and administrators' perceptions of the effectiveness of PLCs were investigated.

During the process of conducting the case study, questions rose that were difficult to answer. However, this researcher did not shy away from reporting teachers' and administrators' perceptions in order to avoid difficult questions that may bring answers to the research concerns (Todd & Agnello, 2006).

The determination of Constructivism as the foundation for this case study removes the study from purely applied research to a case where real life concerns may be investigated, but within an educational case study environment (Fosnot, 2013).

Methodology

This study utilizes a qualitative case study approach. According to Yin (2011), the qualitative case study is conducted in a real-world setting involving interactions with participants and the researcher serving in the role of observing participants. Yin (1984) defines the case study research method as an "empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used" (p. 23).

Qualitative studies have several characteristics: (a) the main instrument for collecting data is the researcher, (b) multiple subjective views are presented by participants, (c) a holistic view of the phenomenon is presented, and (d) the researcher is conducting research in a natural setting (Creswell, 2013a; Hatch, 2002; Marshall & Rossman, 2010). Case studies analyses events, individuals, policies, projects, decisions, and other systems that maybe studied by more than method (Thomas, 2011). This study employed data collection strategies such as surveys, interviews, observations, and review of documents (Yin, 2011).

A case study describes the behavior of the group as a whole and not the individual's behavior in the group. Case studies are about situations, groups, or a particular person researchers have studied over a period of time that becomes a published report likely to appear in a journal or professional conferences (Yin, 2014). Creswell (2013) added "qualitative research is an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem" (p. 4).

Gathering teachers' and administrators' perceptions of their PLC's impact on instructional delivery and student achievement, is the focus of the study. Surveys were administered to 35 teachers participating in the PLC. In addition, interviews were conducted with two administrators and one academic coach at the same site. Using a qualitative methodology for the teacher survey allowed the researcher the opportunity to identify common themes among study participants. The role of this researcher was to collaborate with both sides (teachers and administrators), be involved in the beginning and ending of the process, develop a plan of action and share the research findings. The researcher serves at the Alpha site and is a member of the PLC. Sharing these findings with administrators and local teachers will help implementing the information immediately (Creswell, 2012).

According to SCCSD (2014), students' test scores are an immediate problem for the Alpha Elementary School. Teachers have engaged in time-consuming planning and implementation of the PLC as a pilot intervention to address this problem (SCCSD, 2014). DuFour and Eaker (1998) stated "Professional learning community literature ubiquitously references the need for teachers to embrace constant change" (p. 1). DuFour and Eaker (1998) defined the breadth of this expectation when they assert that PLCs require that "each member of the organization is engaged in continuous improvement forever" (p. 2).

For the teachers at Alpha Elementary School who have participated in the PLC, their engagement in action research has permitted reflective thought on their practices. For example, at the Alpha Elementary School, the PLC engages in both best practices in learning and best practices in teaching students. They use their present practices and each student's level of achievement to raise questions about current data. They work together to arrive at a consensus on questions through shared knowledge and best ways to achieve goals while meeting the needs of students. Creswell (2012) indicated studying one's own workplace eliminates many obstacles in collecting data and it is convenient.

Therefore, conducting qualitative case study research is appropriate for this study because it provided teachers the opportunity to voice their reflections and find effective solutions to problems they encounter on a daily basis (Stinger, 2013; Yin, 2003). The engagement in action research about piloting a PLC serves as a foundation to the case study because as Stake (2010) suggested.

> Discussion of action research and studying one's own place of work is interesting on a number of levels. [It] cautions readers about the pressures they may face and the risks associated with being seen as "self-serving, self-protecting, self-promotional, advocating the home point of view (p. 163).

This study utilized qualitative methods because they are beneficial for investigating teachers' and administrators' perceptions of PLCs in their own workplace (Yin, 2003). Further, the appropriateness of the design for exploring the impact of PLCs on instructional delivery at an underperforming rural elementary school has been recognized by many researchers (Horn & Little, 2010; Lodico, 2010; Song 2012; Spaulding, & Voegtle, 2010; Stringer, 2013). The research design permits a rich discussion of results from multiple data sources (Yin, 2003, 2011).

Lodico et al. (2010) noted that, when a qualitative research approach is used to collect data through observations and interviews which are documented in the analysis, then the results are summarized primarily through narrative or verbal means.

Research Questions

The central research question posed to guide the study is the following: "What are the impacts of a PLC on student achievement at an underperforming school?" Three sub-questions are

1. How do teachers and administrators perceive the PLC's recommended teaching strategies?
2. How do teachers perceive the PLC's benefits to their professional growth?
3. How does the PLC impact student achievement?

Population and Sample

This study involved 35 teachers, two administrators, and one academic coach at the Alpha Elementary School, an underperforming school in the rural Mississippi Delta region. This study may constitute action research since the research questions are fielded within the protocol of PLC meetings and the researcher is an active member of the PLC. Action research involves close collaboration between researcher and practitioners, and places an emphasis on promoting change within organizations such as offices, hospitals, schools and prisons (Gray, 2013, p. 31).

The Alpha School has an enrollment of nearly 300 students in grades K-5, of whom 92% are African American, 4% Caucasian, 2% Hispanic, and 0% Native Americans. According to Mississippi State Standards, nearly 100% of the students qualify for free/reduced lunch and just over 30% of the students are considered proficient in math and reading.

There are a total of 35 general education teachers, two speech teachers, and two inclusion teachers (SCCSD, 2014). Currently two teachers and one long-term substitute have zero years of teaching experience, one long-term substitute and 11 teachers have one to five years, 14 teachers have five to 10 years, and six teachers have 10 years or more experience. The principal has 10 or more years' experience as an elementary principal, teacher, and basketball coach.

In this study, the method for gathering participants was purposeful sampling. The sample is large enough that divergent comments were anticipated. Purposeful sampling allowed the researcher to select participants with a particular purpose in mind (Neuman, 2003).

Participants were selected through purposive sampling using years of experience in the classroom, involvement in PLCs, and interest in the study as criteria (Creswell, 2009). The participants are employees of the rural elementary school and work with the students on a daily basis. The academic coach and the administrators were selected as participants based on their filling of those particular roles at the site. In order to get a broader perspective on how the PLC is operating and its impact, these administrators' perspectives will be included. Incorporating data from multiple stakeholder groups rounded out the case study approach.

Instrumentation

The instruments used in this case study were interview protocols for in-person interviews for the administrators and academic coach, and survey questionnaires administered using Survey Monkey for teachers. The survey and interview questions were developed based on the data received from Mississippi Department of Education, conducted in 2014 as part of its review of the school's academic achievement. The purpose of using the instruments and procedures was to elicit the data for the case study.

All potential participants were informed that there would be no penalty for not answering any questions, either on the survey or in the interviews. The same interview questions were given to both the academic coach and the two administrators. An interview protocol was used to guide the questioning process that was conducted in a conversational manner as recommended by (Creswell, 2013a, 2013b).The 35 teachers were given the same questions via a link to an online survey. The surveys were completed by teachers at their own discretion, on their own computers.

To help this researcher understand the entire process of conducting interviews, Seidman's (as cited in Collins, 2013) research was used as guidance. The research included studying notes, transcripts, interview etiquette, and organization of data into specific categories. Emails and field notes relating to the PLC were also provided for additional support to the research as well as a hand delivered sign in log verifying interviews dates, time, and place.

Data Collection

A qualitative approach was used, and the researcher employed two methods of collecting data. The first method was a survey with 35 teachers. The second method was face-to-face interviews with two administrators, and one academic coach. Observations also took place since the researcher is a member of the PLC that was studied. Documents related to the PLC were also analyzed.

The teachers and administrators were solicited to participate in the study. Everyone who responded and who executed an Informed Consent Form, was included, resulting in 35 teacher and three administrators. All had their names converted to pseudonyms in transcripts and study materials to maintain confidentiality. After teachers completed their surveys, results were emailed to the researcher from Survey Monkey.

For the administrator interviews, consent to audiorecord was secured from all participants. The researcher asked questions and used prompts as necessary. The interviews were transcribed by the researcher and pseudonyms were inserted for participants. The transcription were reviewed twice to assure accuracy.

There were 11 questions on the teacher survey, using a Likert scale, ranging from *strongly agree, agree, neither agree or disagree, disagree, and strongly disagree*, requiring each study participant to respond. The last question was open-ended and provided participants to add narrative content.

Interviews were conducted with two administrators and one academic coach. After agreeing to participate and completing an informed consent form, each interview participant was reminded of the scheduled interview date, time, and location through via email. A return email read receipt will be sent to the researcher indicating the date and time email was read by participants. All study interview participants were scheduled face-to-face interviews in the school site's conference room. The researcher also took field notes during each interview as evidence of data recorded.

Yin (2011) suggested using an interview protocol as a guidance when conducting interviews. In addition, Lodico, Spaulding and Voegtle (2010) guided this researcher into using semi-structured interview protocol for this research study. Using semi-structured interview allowed the researcher to change the order of questions in response to the organic flow of the interviews (Lodico et al., 2010). In order for the interview to look like a conversation rather than a set of questions, this researcher used the following protocol for each meeting: (1) the researcher sent an email listing the date, time, and place for the meeting, (2) the researcher met with the participants and explained the purpose of the study and how the results will be used, and (3) the

researcher began with a simple grand tour question (Lodico et al., 2010). For example, the researcher asked the administrators and the academic coach to explain a typical day at the Alpha Elementary School, from their perspectives. This allowed the interviewees to introduce their setting and experiences.

The interviews lasted about one hour each. In addition, interview questions were written to ensure the study sub questions were fully addressed. These questions are valid as they are based on the data collected from the Mississippi Department of Education, 2014. The researcher used a recorder to record the interviews and wrote field notes. The same procedures were followed with the one academic coach and two administrators' interviews.

Data Analysis

The data analysis may produce information useful to educators in gaining an understanding of teachers' perceptions of using PLCs to address student achievement. Elliott, Combs, and Boyce (2011) suggested using qualitative data analysis procedures to explore participants' perspectives. Data taken from 35 teacher surveys and interviews with the one academic coach and two administrators were analyzed to address the research questions. The researcher used a teacher cross-sectional survey as a statistical procedure, developing descriptive statistics of teachers' responses to the survey. Fink (2009) stated, "With this design, data are collected at a single point in time. Cross-sectional survey has important uses. They describe things as they are so that people can plan to change" (p. 67). This involves data being collected from a population, at a specific time, or a representative subset Fink (2009). The study was carried out over a short period of time. Descriptive statistical analysis was applied to the survey data.

Thematic code analysis was applied to the interview data, searching for patterns, outliers, and relational themes, as well as the identification of exemplars that highlight participants' beliefs and feelings about their work, their site and the impact of the PLC.

All data was stored on a secured computer, located off-site, that only the researcher has access to. All records will be erased and destroyed properly after a period of three years.

In order to "ensure that the files and organization are given sensible names that will aid your memory" the researcher used Microsoft Word tables to compile and prepare qualitative data, before importing it into Atlas.ti, an analysis application (Adams**,** Khan, Raeside & White, 2010, p. 113). Data was coded during the research study. Saldan (2009) suggested "For first-time or small-scale studies, code on hard-copy printouts first" (p. 22). Coding allowed this researcher the opportunity to thoroughly read all data looking for themes and patterns to develop the initial codes recorded.

According to Yin (2011) analyzing qualitative research "does not follow any cookbook, neither is it totally undisciplined" (p. 177). Yin (2011) provides a guide to the five phased cycle for analyzing data collected from questionnaires and interviews. These five phased cycles are compiling, disassembling, reassembling (and arraying), interpreting, and conclusion of data collected. In addition, Miles and Huberman (1994) explained six phases qualitative study fall into: (a) organizing the data; (b) generating categories; themes, and patterns; (e) searching for alternative explanations; and (f) writing the report.

Compiling data consisted of organizing and preparing transcriptions or typing interview notes, sorting and arranging data collected into different categories from ten questions to be constructed ranking on a Likert scale from highest to lowest on *strongly agree, agree, neither agree* or *disagree,* and *strongly disagree*. In addition, one question was e an open-ended

question, responses to which were coded for themes and key words. This open-ended question allowed the voices to be heard of teacher participants in the PLC.

Disassembling and reassembling involves reading and rereading all the data to ensure information is clear, detailed, and looking for patterns (Yin, 2011). It also involved an understanding of participants' language during the interviews and observations. Interpreting the data collected and drawing overall conclusions on teachers' and administrators' perceptions of the impact of PLC's on student achievement at the school were the final steps.

Results

Data for this study was collected through online surveys and in-person interviews. The sampling used in this study was purposive selecting participants using years of experience in the classroom, involvement in PLCs and interest in this study (Creswell, 2009). I made sure all precautions were followed to ensure participants' confidentiality. Survey Monkey provided real life feedback responses as raw data. The raw data were analyzed with Survey Monkey and manual coding. Each interview was scheduled for one hour and the surveys were anticipated to take forty-five minutes to complete.

The research findings for this study were based on 35 elementary teachers' perceptions of PLCs and three administrators' perceptions. The three central research questions guided the study and ten questions were constructed for the survey, using a Likert scale, with seven open-ended questions composed for the three administrator interviews.

Interview Data

The interviews were comprised of open-ended questions designed to elicit complex data from two administrators and the academic coach at the Alpha School. Each question touched on a particular aspect of how the PLC has influenced teachers, students and the school.

Challenges of PLCs

Interview Question 1: What challenges did you encounter the first year as the Principal/Grant Coordinator and as a member of the PLC team?

With this question I wanted to know what the challenges were and were there solutions. Both administrators and the academic coach agreed that it was difficult getting teachers to buy-in to PLCs. For example, one administrator stated "the problems I encountered during my first year … as a member of the PLC team consisted of the following: inconsistency in documentation; inconsistency in PLC team members meeting; falsifying documentation; resentment for having to meet and implement the standards of PLCs with fidelity."

On the other hand, another administrator stated, "First, it was extremely hard to get buy-in from all of the teachers. Most teachers served as keepers of knowledge and did not believe in sharing their expertise with their colleagues."

Another stated, "There was some resistance to change from veteran teachers, and lack of trust among team members".

However, one stated that, instead of teachers buying in, "teachers mostly tried to turn the PLC into a gripe session or a complaining session."

The administrators' voices expressed dissatisfaction with teacher participation and the way the PLC was working. This "lack of buy-in" was a consistent sentiment expressed.

Influence of PLCs on Student Achievement

Interview Question 2: How would you describe the influence of this school's PLC on student achievement? This question corresponds with survey question 4, which was asked of the teachers. In this question, I was expecting to hear if there was a positive or negative influence on student achievement. Administrators and teachers agreed there was a positive effect on teachers

and students. One stated, "I believe that the incorporation of PLCs has had a positive effect on the teachers as well as the students".

In addition, the one administrator affirmed,

> In my estimation, the school's PLCs had a great impact on student achievement. Teachers were required to meet together and discuss data and come up with SMART goals for improving student achievement and address areas of weakness and plans for improving such weaknesses.

Another administrator attested, "through Professional Learning Communities, our teachers realize the importance of providing quality instruction, assessing student learning, and sharing the results to improve instruction."

These data demonstrate that the administrators believe in the prospect of the PLC bringing change, whether or not the teachers believe in it.

Prior Collaboration

Interview Question 3: Prior to the implementation of the PLC, what was the level of collaboration among teachers and administrators?

"Not much, not even in grade level meetings. Teachers would sit and listen to the grade level chair redeliver commentary from the leadership team meetings," said one administrator. The other two administrators agreed that collaboration did not exist among teachers and administrators.

These data demonstrate the challenges of getting teachers to collaborate, related perhaps their lack of buy-in.

Achievements Linked to the PLC

Interview Question 4: What are some of the school's achievements since the implementation of the PLC?

In this question I was looking for descriptions of achievements accomplished since the implementation of the PLC. According to one administrator,

> Since we have begun the implementation of Professional Learning Communities, the most important achievement we have accomplished is teachers now know how to disaggregate student data, use that data to drive instruction, and effectively monitor student progress. Most of all, teams review student work, analyze data together and discuss student understanding of the standards. Teams implement planned lessons, record and discuss successes and challenges and gather evidence of student learning, based on observations done by the principal.

This observation was interesting to me, given that the administrators had articulated a lack of participation in the PLC on teachers' part. Disaggregating data to drive instruction is a sophisticated aspect of teaching. It may mean that the teachers have been more inspired, and better prepared, by the PLC process than administrators know.

PLC Strategies

Interview Question 5: How do you utilize strategies from the PLC in the classroom?

This question was posed to get a list or examples to help other educators. Based on observations offered by one administrator, "modeling lessons help teachers develop a full understanding of how to implement research strategies that are discussed in our [PLC] meetings." The information provides evidence that instructional practices are being

implemented as discussed in the PLC meeting, as well as making sure students understand what is expected of them.

In addition, another administrator offered that, "by having teachers implement the planned lesson, record successes and challenges and gather evidence of student learning," leadership can see how teachers are utilizing strategies from the PLC in the classroom.

Learning Through Collaboration

Interview Question 6: What have you learned from collaborating with teachers in the PLC?

One administrator opined, "This is a commitment, long term it appears to take longer than two years to fully incorporate PLCs into our school's routine practices."

Another offered,

> By collaborating with teachers in PLCs, I understand that teachers have many challenges that can prevent student academic and non-academic achievement. I have learned to appreciate teachers more because of the responsibility they have of ensuring student success with all of the challenges they face on a daily basis, such as SPED students, absent students, non-compliant students, non-supportive parents, students two or more grades behind, and students reading two or more grades below grade level, etc. From observations, I learned that teachers were in desperate need of someone to serve as their coach rather than a mere supervisor.

The insight that administrators have articulated about the challenges classroom teachers face indicates that not only are teachers learning through the PLC, but that administrators are learning more about teachers through the same process.

Final Comments

Interview Question 7: Is there anything else you would like to add?

This question was asked as a reference to further research or recommendations.

One administrator indicated nothing further to say, but the other two answered yes to the question. One felt that PLCs are effective in improving schools and student achievement when implemented with fidelity. The other offered that they thought the implementation of PLCs has made the process of teachers working together a lot less stressful. "It has afforded them the opportunity to see one another as a valuable resource," the administrator concluded.

These data are indicative that the PLC is perceived as an agent of positive change and value, whether or not it needs further refinement to fully realize its potential.

Survey Data

Survey questions were given to 35 teachers. The teachers completed ten questions ranking on a Likert scale from highest to lowest of *strongly agree*, *agree, neither agree* or *disagree,* and *strongly disagree,* including one open-ended question.

Demographic Questions

The first question was based on teachers' demographic information. This section was designed to provide a better insight of the staff age, gender and experience in the classroom.

Age. Question 1: What is your age? All 35 teachers responded to this question.

The results were as follows:

Eleven (31.43%) teachers ranged in age from 35 to 44 years old, 10 (28.57%) ranged from 45 to 54 years old, nine (25.71%) ranged in age from 25 to 34 years old, three (8.57%) ranged in age from 55 to 64 years old, one (2.86%) ranged in age from 65 to 74 years old, and one (2.86%) ranged in age from 18 to 24 years old.

The broad age range among the sampled teachers helps to convey veracity to the data as it covers an inclusive group of teachers.

Gender. Question 2: What is your gender?

The results were as follows:

Thirty-three of the teachers surveyed (94.29%) were female, and two were male (5.71%)

This is not unusual for this school site so the overwhelming female population did not impart any insights about teachers' sentiments.

Classroom experience. Question 3: How many years of experience do you have as a classroom teacher?

The results were as follows:

The largest group of response was 31.43% of teachers who reported 15 or more years' experience, followed by 20.00% of teachers who have 11 to 15 years' experience in the classroom.

That more than half of the teachers surveyed have extensive experience renders their perceptions valid. Had the larger percentage been novice teachers, it might be hard to relate their experiences to broader implications. While the opinions of new teachers are valuable, veteran teachers are better informants about what is happening in their classrooms.

Improvement through PLC. Question 4: The elementary school's PLC has improved teachers' instructional delivery in the classrooms.

The results were as follows:

Only 33 teachers answered this question and 57.58% of teachers agreed and 36.36% strongly agreed that PLCs have improved teachers' instructional delivery in the classroom.

This is a powerful finding given that administrators sometimes doubted teachers' attitudes about the PLC, but also commented on their recognition of improvement. This finding indicates that teachers see value in the PLC.

School morale. Question 5: Collaboration through PLCs has improved teachers' school morale.

The results were as follows:

Among the teachers surveyed, 54.55% agreed and 39.39% strongly agreed that collaboration has improved teachers' school morale.

Given the administrators' comments about lack of perceived buy-in to the PLC process, this data would seem to indicate that teachers do see the benefit of collaborating and that they perceive morale as improving. Higher morale sets the stage for greater buy-in.

Impact on student achievement. Question 6: Do you believe the PLC has had a positive impact on increasing student achievement?

The results were as follows:

Only 33 teachers answered this question but, interestingly, three (9.09%) were unsure, 15 (45.45%) agreed and 15 (45.45%) strongly agreed that PLC had a positive impact on increasing student achievement.

While nearly all perceived a connection between the PLC and improved student achievement, the fact that a few were still unsure demonstrates that this perception is very individual. The good news is that the stakeholders targeted for improvement, the teachers themselves, are clearly seeing the change and the resulting impact on their students.

Effective teaching practices. Question 7: Do you believe the teaching practices recommended by the PLC were effective?

The results were as follows:

Thirty-three out of 35 teachers answered this question. The survey revealed that 16 (48.48%) agreed and 15 (45.45%) strongly agreed that the teaching practices recommended by the PLC were effective. However, 2 (6.06%) were unsure.

Similar to the prior question, nearly all see the effectiveness but some remain unsure. The positive result is that the effective practices intended by the PLC are taking root.

Data-driven strategies. Question 8: Do you implement data-driven strategies?

The results were as follows:

Only 32 teachers responded to this question. Responses from 16 (50.00%) said they implement data-driven strategies and 15 (46.88%) they strongly implement data-driven strategies. While a small number, one, was unsure (3.13%), the vast majority use these strategies.

The embrace of the data-driven strategies learned and supported by the PLC can be viewed as a direct link to improved effectiveness and, ultimately, improved student achievement.

Professional growth. Question 9: Do you perceive that PLCs are beneficial to your professional growth?

The results were as follows:

This question was answered by 34 teachers. There was only one (2.94%) who was unsure, but 19 (55.88%) who agreed that PLCs were beneficial to their professional growth, and 14 (41.18%) who strongly agreed.

The power of this finding demonstrates that the leadership's commitment to the PLC is bearing fruit, and that though demonstrative signs of buy-in may not be evident all the time, the teachers are saying loudly that the PLC is changing their practice for the better.

Role of administrators. Question 10: Did administrators use data effectively from the PLC?

The results were as follows:

Thirteen teachers (39.39%) strongly agreed with this question, and 16 (48.48%) agreed. Four (12.12%) were unsure if administrators used data effectively from the PLC.

For those who are unsure, this finding may be more of a reflection of their relationship/contact with the administrators (or lack thereof). It is clear that nearly all teachers sense the partnership with administrators in terms of utilizing data.

Student progress. Question 11: Was there an increase in your students' progress due to PLC training and goals during the past year?

The results were as follows:

Six of the teachers surveyed (17.65%) were unsure whether there was an increase in their students' progress. However, 13 (38.24%) strongly agreed, and 15 (44.12%) agreed, that there was an increase in students' progress due to PLC training and goals during the past year.

Recommendations. Question 12: What recommendations do you have for improving the effectiveness of the PLC?

Half the participants did not respond to this question, and half of those who did responded with N/A (apparently indicating that they had nothing else to add).

Eight participants had comments on the study, their PLC and other issues at the site.

The qualitative responses were as follows:

1. I DO NOT WANT TO PARTICIPATE!!!!!!!

This is an interesting response given that this participant certainly did participate. It is not clear if they meant to express a lack of interest in the study or in the PLC.

2. Make sure teachers have classroom data (percentage of Adv., Prof., Basic, and Minimal) from weekly test.

This request to disseminate data is an important one that administrators should follow.

3. I believe that PLCs should be conducted based on subject area rather than grade level. This would allow the teachers of the same subject area to connect across grade levels to build skills students may lack for current grade.

This is another interesting take on how to approach a PLC. Administrators would be advised to pay attention to teacher requests – they can boost PLC effectiveness.

4. More intense training on how to conduct PLCs and what specific strategies are of the most importance for the goals that the schools are seeking to achieve.

This is another request for refinement that seems to speak to a lack of dialogue (or perceived lack) between administrators of the PLC and the teachers it is supposed to serve.

5. Start the PLC process/modeling/workshops at the beginning of the school year. Teachers should be provided with workshops in or out of the district to gather ideas from other teachers to use strategies in their classrooms throughout the school year.

This may be a plea for the kind of training that Article III intends to present.

6. Participation in professional learning communities must continue to involve all the stakeholders who are involved in educating children.

This is a great observation. At their most effective, PLCs do involve, and then impact, the whole school community.

7. The task we are asked to complete should not take longer than our planning time allows.

This comment injects practical reality into the prospect of implementing a PLC. In the study, the theme of time and not having enough of it was evident.

8. None. The activities are great as well as the follow through.

This kind of comment, indicating that all is going well, underscores the data that indicate that the PLC is working, and is boosting both teacher effectiveness and student achievement.

These findings reiterate the overwhelmingly positive attitude of teachers toward both the PLC's intention and its results, both for teachers and their practice as well as for their students.

Themes

During analysis of the data gathered, several recurring themes emerged. These themes help to understand the resonance among faculty, and between faculty and administrators, that the PLC is a positive force. The themes that emerged from the surveys and interview data were: collaboration, involvement, teacher learning, and time.

Collaboration

Collaboration was the first theme that emerged from the data. In question 5 of the survey, 54.55% agreed and 39.39% strongly agreed that collaboration through PLCs has improved their school morale. All administrators agreed with the teachers as well that collaboration was a major facet of the PLC. One stated that they observed the teachers take pride in sharing their strengths as well as their weakness with each other. Collaboration has motivated them to try new things they never thought they would do. It has given them the opportunity to put ideas and strategies in place that they can witness as a success in the presence of a colleague.

Involvement

Involvement was the second theme that emerged from the data. In Question 9 of the survey, 55.88% agreed and 41.18% strongly agreed that PLCs are beneficial to their professional

growth. At first, according to administrators, the teachers showed signs of resentment for having to meet and implement the standards of PLCs with fidelity. They mainly wanted to be keepers of their own knowledge and did not seem to believe in sharing their expertise with their colleagues. Instead, they made it a community of competition not collaboration, and a place to gripe, through blame, and complain. However, the teachers' responses to the survey question about professional growth contradicts the administrators' impressions. It may be that teacher involvement and professional growth are less obvious to administrators. Unlike students, teachers are not tested to document improvement. The revelation that the PLC is very important to them may help improve administrators' strategies to engage teachers.

Teacher Learning

Prior to taking the survey, teachers working with Pre-K through second grade students discussed how the PLCs strengthened a climate of trust and improved their practices. One Pre-K/Kindergarten teacher stated:

> Having PLCs in our school and being able to collaborate with the first grade teacher has given us a better understanding and [access to] best practices to use when teaching our students. We know from collaborating what is expected when entering the next grade. Plus, our students get the opportunity to meet their teachers for the upcoming year and a level of trust is built with the teachers and students, as well as with the parents.

Question 4 of the survey showed that 57.58% of teachers agreed and 36.36% strongly agreed that the PLC has improved teachers' instructional delivery in the classrooms. Teachers and administrators agreed that the PLC has had a positive impact on teacher learning and student achievement. Via the PLC, teachers came together and discussed data and set goals for improving student achievement. The gain that was seen in academic achievement and improved

classroom instructions can be attributed to the PLC. In addition, there was a positive impact on teacher and student attendance, disciplinary issues, as well as the school climate and culture, all of which contribute to both teacher effectiveness and student achievement.

According to one administrator:

> The results speak for themselves. Our 2015-2016 Mississippi Assessment Program (MAP) results revealed a 98.8% growth in the bottom 25% of our students in ELA [English-Language Arts] and a 75.8% growth in the bottom 25% of our students in math.

This is a powerful validation of the connection between teacher learning and effectiveness and students' improved academic achievement, especially as articulated by an administrator. Though they may not always see the attitudes they hope for from teachers regarding the PLC, clearly they see the results in terms of improved student outcomes.

Time

Time was the final theme that emerged from the data. Administrators expressed that the PLC is effective in improving student achievement and improving schools, but that they needed more time in order to implement the PLC with fidelity toward its goals and potential. In the process of distributing recruitment letters and gathering informed consent forms from potential participants, several fourth and fifth grade teachers told me that completing the survey would be challenging for them given the magnitude of constraints on their time. They seemed skeptical about the value of being surveyed about the PLC. However, the participants survey and interview data contradicted this reluctance, as most completed the process and nearly all expressed extremely positive impacts on their entire school based on the PLC.

Administrators interviewed also shared the concern that their time was limited for attending the PLC due other district level meetings, Individualized Educational Plan (IEP)

meetings, parent conference, and other unexpected situations. In the researcher's experience, lack of adequate time is a pervasive concern in most, if not all, educational settings. In the case of a new or emerging PLC, all stakeholders must allocate adequate time to participate.

Summary of Findings

Through a triangulation of data gathering and analysis, it is clear that, at least at the Alpha School site, the advent of a PLC has been a significantly positive thing, both in terms of teacher effectiveness/improvement and student achievement. However, one aspect that was also articulated is that administrators and teachers don't always understand or know that the other group is thinking. Teachers were perceived by administrators not to have adequate buy-in, yet administrators saw vast improvement. Teachers perceived that they did not have adequate time to participate in the PLC, yet they recognized the improvement to their own practice and the benefits to their student derived by their PLC-prompted collaboration and mutual learning.

This site has demonstrated some of the challenges, as well as many of the benefits, of utilizing a PLC to improve teachers' performance with a goal of boosting student achievement.

Trustworthiness and Credibility

Trochim (2006) found that reliability is consistent and repeatable in measures. Validity and reliability are related to each other, and multiple types of validity are used in research. For example, when data are reasonable, conclusion validity is achieved, also known as the degree to which conclusions were reached. When a researcher tests something, the results are valid if one is able to see if the measurement holds truth (Scriven, 1990). The researcher should asks the question: does the instrument test what it should test? If it does, then it is valid. In addition, the survey instrument should contain questions about the research questions.

The assessment has to be reliable as a means of providing truthful data. If the results are valid, the researcher can state that the data are reliable. Therefore, a valid research study takes into account all the important factors within the context of the study such as, the needs of the teachers, students, and the administration. Scriven (1990) defines reliability as consistency, meaning the data is the same each time the survey is given. This would be a reliable instrument.

The researcher developed by a survey questionnaire and an interview protocol aimed at gathering administrators' and teachers' perceptions of their PLC and how it impacts practice and student achievement. The data clearly reflected an understanding of the questions because that is the exact data that emerged. Thus, the instruments were valid and trustworthy.

Limitations of the Study

There may be several limitations of this study. For instance, it can be assumed that the participants volunteered to take the survey and/or sit for interviews, and that they answered the questions honestly. Situations and items beyond the researcher's control, such as time constraints, may have limited participation. Personnel changes may be another limitation to this study. For example, within the last year, the principal and some teachers have changed. Finally, results at the Alpha school may not be generalizable to other sites.

Also, it may be viewed that the researcher is not an objective observer since she is an active participant in the PLC. The researcher took specific steps to limit bias such as selecting participants for the study who hold different views relating to the topic, avoiding convenience sampling that produces a degree of unwanted bias, and defining the sample as carefully as possible to minimize unwanted bias (Yin, 2015). The size of the population of the study could pose as a possible limitation, but there were enough potential participants (among the teaching faculty) to do a thorough study. If the two administrators and one academic coach declined to

participate, it would have been difficult to duplicate their contributions to the data, and that critical aspect may have been missing, limiting the depth of the analysis. Fortunately, this limitation did not come to pass.

Conclusion

This researcher designed the qualitative case study to gather useful information that may help teachers and administrators understand more about PLCs and their impact on teacher effectiveness and, ultimately, student achievement. It utilized diverse perspectives to bring the full view of the case site into understanding. Based upon the participants' interviews and surveys, this qualitative study clearly demonstrates that, at the study site, the PLC is a powerful force of impact on student achievement.

The findings may also help to build a better team of knowledgeable teachers. These findings may allow other researchers to conduct further research in areas they would like to expand concerning PLCs. This research cannot be generalized to any setting other than the research site, but the study may be replicated in educational settings using PLCs that are trying to focus on educational improvement.

References

Adams, J., Khan, H. T. A., Raeside, R., & White, D. (2009). *Research methods for graduate business and social science students.* New Delhi, India and Thousand Oaks, CA: Response Books and Sage Publications.

Bruner, J. (1966). Toward a theory of instruction. Cambridge, MA: Harvard University Press.

Chang, Z., Valcke, M., & Schellens, T. (2010). A cross-cultural study of teacher perspectives on teacher roles and adoption of online collaborative learning in higher education. *European Journal of Teacher Education, 33*(2), 147-165. doi: 10.1080/02619761003631849

Collins, T. M. (2013). Teacher perceptions of effective reading strategies for below-level first Grade readers.

Creswell, J. W. (2009). Editorial: Mapping the field of mixed methods research. *Journal of Mixed Methods Research*, *3*(2), 95-108.

Creswell, J. W. (2012). *Qualitative inquiry and research design: Choosing among five approaches*. Sage.

Creswell, J. W. (2013a). *Qualitative inquiry & research design. Choosing among five approaches* (3rd ed.). Thousand Oaks, CA: Sage.

Creswell, J. W. (2013b). *Research design: Qualitative, quantitative, and mixed methods approaches*. (4th ed.). Thousand Oaks, CA: Sage.

DuFour, R. & Eaker, R. (1998). *Professional learning communities at bork: Best practices for enhancing student achievement.* Bloomington: National Educational Service.

Elliott, S., Combs, S., & Boyce, R. (2011). Recess physical activity packs in elementary schools: A qualitative investigation. *Physical Educator*, *68*(3), 150-162.

Fink, A. (2009). *How to conduct surveys: A step-by-step guide.* Thousand Oaks, CA: Sage.

Fosnot, C. T. (2013). *Constructivism: Theory, perspectives, and practice*. Teachers College Press.

Gray, D. E. (2013). *Doing research in the real world*. Sage.

Hatch, J. A. (2002). *Doing qualitative research in education settings*. Albany: State University of New York Press.

Horn, I. S., & Little, J. W. (2010). Attending to problems of practice: Routines and resources for professional learning in teachers' workplace interactions. *American Educational Research Journal*, *47*(1), 181-217.

Jimerson, S. R., Stein, R., Haddock, A., & Shahroozi, R. (2016). Common core state standards and response to intervention: The importance of assessment, intervention, and progress monitoring. In *Handbook of Response to Intervention* (pp. 165-184). Springer US.

Jing, L. I. (2015). English Teaching Design on the Basis of Constructivism. *English Language Teaching*, *3*(3), 22-26.

Lodico, M., Spaulding, D., & Voegtle, K. (2010). *Methods in educational research: From theory to practice.* San Francisco, CA: John Wiley & Sons.

Marshall, C., & Rossman, G. B. (2010). *Designing qualitative research* (5th ed.). Thousand Oaks, CA: Sage.

Miles, M. B., & Huberman, A. M. (1994). Qualitative data analysis: an expanded sourcebook (2nd ed.). Thousand Oaks, CA: Sage Publications.

Mississippi Department of Education. (2012). Office of student assessment. Retrieved from http://www.mde.k12.ms.us/OSA/PLR.

Mississippi Department of Education. (2014). Office of school improvement. Retrieved from http://www.mde.k12.ms.us/OSI.

Neuman, W.L. 2003. Social research methods: qualitative and quantitative approaches. Allyn and Bacon, Boston, MA.

Saldan, J. (2013). The coding manual for qualitative researchers. Thousand Oaks, CA: Sage Publications, Inc.

Scriven, M. (1990). *Evaluation thesaurus*. (4th ed.). Newbury Park, CA: Sage Publications, Inc.

Song, H. (2012). The role of teachers' professional learning communities in the context of curriculum reform in high schools. *Chinese Education & Society*, *45*(4), 81-95.

Stake, R. E. (2010). *Qualitative research: Studying how things work*. Thousand Oaks, CA: Sage.

Stringer, E. T. (2013). *Action research*. Sage.

Sunflower County Consolidated School District. (2014). Retrieved from www.sunflower.k12.ms.us.

The New Jersey State Advisory Committee to the U.S. Commission on Civil Rights. (2010). Teacher quality: A vital determinant of student achievement, Washington, DC: Eastern Regional Office, U.S. Commission on Civil Rights.

Thomas, Gary. (2011) *How to do your Case Study: A Guide for Students and Researchers*. Thousand Oaks, CA: Sage.

Todd, R. H., & Agnello, M. (2006). Looking at rural communities in teacher preparation: Insight into a p-12 schoolhouse. *Social Studies, 97*(4), 178-184.

Trident University International. (2015). Three article dissertation: A handbook for the doctor of education program. Retrieved from https://www.trident.edu/wp-content/uploads/2015/08/EdD-Dissertation-Handbook.pdf.

Trochim, W. M. (2006). *Sampling: Nonprobability sampling.* Retrieved from www.socialresearchmethods.net/kb/sampnon.php

Ulrich, B. (2013). School size matters: A look at school district consolidation. Center for American. Retrieved from https://www.americanprogress.org/wp-content/uploads/2013/08/SchoolDistrictSize.pdf

Williams, C. (2008). *Analysis of teacher perceptions of professional learning community dimensions in traditional schools.*

Yin, R. K. (1984). *Case study research: Design and methods*. Beverly Hills, Calif: Sage.

Yin, R. K. (2003). *Case study research.* (3rd ed.). Thousand Oaks, CA: Sage.

Yin, R. K. (2011). *Qualitative research from start to finish*. New York: The Guilford.

Yin, Robert. (2014) *Case Study Research: Design and Methods*. (5th Edition). Thousand Oaks, CA: Sage.

Yin, R. K. (2015). *Qualitative research from start to finish*. Guilford Publications.

ARTICLE III:

HOW TO LAUNCH PROFESSIONAL LEARNING COMMUNITIES:

A TRAINING FOR SCHOOL SITES

Table of Contents

HOW TO LAUNCH PROFESSIONAL LEARNING COMMUNITIES:

A TRAINING FOR SCHOOL SITES

The purpose of this training is to guide superintendents and principals in the formation of a Professional Learning Community (PLC) at their school sites, which can be launched at any grade level within a school district. In addition, this training will increase school leaders' knowledge about PLC effectiveness and how they can improve student achievement. Administrators will learn to use current data from state education departments in assessing the needs of their school, as well as how to incorporation the PLC in that process. PLCs give teachers the opportunity to engage, share ideas, collaborate, share experiences, as well as embrace other best-practices that boost their teaching effectiveness and increase student achievement.

Components of a PLC

The training manual (Appendix A) is intended to be a reference to explain the meaning of PLCs, their benefits, characteristics, objectives, and focus, along with how to effectively implement PLCs. In addition, there is a section on the need for Smart Goals, table talk, critical questions, setting norms, identifying role in PLCs, team assignments, and recent findings, all of which are important to take into consideration when forming a PLC.

In order for the staff to get a better understanding of what a PLC is, the handbook contains a brief definition. It should be provided and teachers solicited to give examples pertaining to the meaning given. Giving an example of the meaning can be a formative assessment used by the presenter indicating learning and understanding right away. Once staff

understand what is being presented, the better the training leader's chances are at holding their attention.

Getting started and sharing the benefits of professional learning communities should be as easy as baking a cake. Share with the staff about other school that you have knowledge of were mandated to have a PLC based on student achievement. While in the process of explaining to them about mandates, you can share the benefits such as PLCs being a good tool to promote the school's mission, vision, values and goals. Teachers can confront problems as a team, the school's culture can change through communicating as a team, and it allows staff to come together and find best practices.

The characteristics of PLCs should be explained as the whole staff have shared vision, mission, values, and the same goals. Next, high expectations of students' academic achievement should be discussed and shared leadership that values teachers' participation as other characteristics of PLCs. Mutual support among staff and collaborative learning among professional staff are included as well. As a whole, objectives must be discussed and agreed upon as well as keeping in mind the main focus should be the students learning.

Implementing PLCs requires answers to the following questions:

Mission- why do we exist?

Vision- what kind of school are we trying to create?

Values- what attitude, behaviors, and commitments must we demonstrate in order to create the school of our vision?

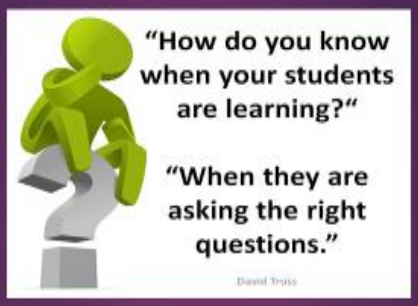
Goals- which steps should we take first? What is the timeline? Evidence showing progress.

Steps in making PLCs effective should be discussed along SMART GOALS: Why do we need them? During your table talk everyone should be involved in committing to student learning, sharing ideas about where do they want the school to go, and schedules for meeting each grade level. In addition, asking the four critical questions for evidence and setting norms. Table talk is the best time for individuals to share and disagree in a respectfully manner.

Immediately after the table talk topics the identity of the PLC team roles are presented for volunteers in the roles of the facilitator, recorder, time keeper, role of the principal, role of the teachers, and friend of the facilitator. Each role should be explained thoroughly. Once all of this has taken place the assignment teams begin to focus on grade-level teams, same-course teams, vertical teams, electronic tams, interdisciplinary teams, and logical links teams as need for their individual school.

Finally, recent research findings are discussed among teams sharing ideas, personal experiences, and collaborating on implementing strategies into planned lessons, how successes will be rewarded, alone with challenges and gathered evidence of student learning. In addition, to citing references.

How to Launch a PLC: Background and Best Practices



Introduction To Your Trainer

- Educational Background
- Professional Experience
- Current School Position

What is a Professional Learning Community

- Educators committed to working collaboratively in ongoing processes of collective inquiry and action research in order to achieve better results for the students they serve.

- PLC' s operate under the assumption that the key to improved learning for students is continuous job-embedded learning for educators.

DuFour, DuFour, Eaker & Many (2010)

Getting Started

Benefits of PLCs

- Mandated
- Good tool to promote the school's mission, vision, values and goals
- Teachers can confront problems as a team
- Change the school's culture through communicating as a team
- Allow staff to come together and find best practices

Sunflower County Consolidated School District. (2014). Retrieved from ww.sunflower.k12.ms.us

What are Characteristics of Professional Learning Community

- Shared vision, mission, values, and goals
- High expectation of students' academic achievement
- Shared leadership that values teachers' participation
- Mutual support among staff
- Collaborative learning among professional staff

Sigurðardóttir, A. K. (2005). Studying and enhancing the professional learning community for school effectiveness in Iceland. 3(1), 178-193.

Objectives for Professional Learning Communities

- Teachers will be able to define professional learning communities
- Teachers will be able to implement PLCs
- Teachers will define the Smart Goals
- Teachers will be able to identify ways to implement PLCs in their school

Where should your Focus be

- As always, your main Focus should be students learning
- Student achievement

Implementing PLCs

- Mission – Why do we exist?
- Vision - What kind of school are we trying to create?
- Values – What attitudes, behaviors, and commitments must we demonstrate in order to create the school of our vision?
- Goals- Which Steps should we take first?

  What is our timeline?

  What evidence will we present to demonstrate our progress?

DuFour, R., & Eaker, R. (2005). *Professional learning communities at work tm: best practices for enhancing students achievement*. Solution Tree Press.

Sunflower County Consolidated School District. (2014). Retrieved from ww.sunflower.k12.ms.us

Making PLCs Effective

- Everyone accept his/her responsibility
- Make purpose explicit
- Implement time during the school day
- Train school personnel
- Have teachers to buy in

DuFour, R., & Baker, R. (2006). Professional learning communities at work ®: best practices for enhancing students achievement. Solution Tree Press.

Sunflower County Consolidated School District. (2014). Retrieved from www.sunflower.k12.ms.us

SMART GOALS: Why do we need them?

S = Strategic (aligned with the organization's goals) and specific

M = Measurable (based on data)

A = Attainable

R = Results oriented

T = Time bound (specifying when the goal will be achieved)

O'Neill, J., & Conzemius, A. (2006). The power of smart goals. Using goals to improve student learning. Bloomington, IN: Solution Tree.

Table Talk

- Discuss the Mission Statement commitment ensuring student learning
- Discuss where do you want you school to go
- Discuss who is responsible for carrying out the Mission Statement
- Discuss scheduled meeting for each grade level

O'Neil, J.,, A& Conzemius. (2006). The power of smart goals. *Using goals to improve student learning.* Bloomington, IN: Solution Tree.

Sunflower County Consolidated School District. (2014). Retrieved from ww.sunflower.k12.ms.us

Ask the Four Critical Questions for Evidence

- What do students need to know and be able to do?
- How will we know when they have learned it?
- What will we do when they haven't learned it ?
- What will we do when they already know it?

DuFour, R., & DuFour, R. (2012). *The school leader's guide to professional a learning communities t work.* Solution Tree Press.

Set Norms

- Start and end on time
- Stay on the Agenda
- No Side Bars
- No Put Downs
- No Cell Phones
- Be brief and directive
- Include everyone in decision making
- Show Respect

Sunflower County Consolidated School District. (2014). Retrieved from www.sunflower.k12.ms.us

Identify PLC Team Roles

- Facilitator
- Recorder
- Time Keeper
- Friend of the Facilitator

Roles of the Principal

- Discuss issues such as pacing guides, instructional data, student efficacy, provide support, and observe
- Fine tune skills, talents, and aspirations for recognition
- Make teachers aware of expectations expected from them
- Respect teacher's expertise
- Make sure staff is trained
- Focus on data reports

Role of the Teacher

- To be a mediator between policy, practices, and accountability
- To bring to life principle of PLCs
- Share best practices
- Share experiences
- Build relationships
- To ensure that all students are learning

Assign Teams Focused on Learning

- Grade-level teams – Teacher teaching the same subject in the same grade level
- Same-course teams- Teachers teaching the same course such as math and English
- Vertical teams – Linking teachers teaching the same content above or below grade level or course
- Electronic teams – Uses available technology supporting email, twitter, google docs, skype, and iChat
- Interdisciplinary teams – teaching different subjects at the same grade level to identify overarching academic goals
- Logical links teams – resource teachers, support teachers and specialists working with grade-level, same-course, and vertical teams

DuFour, R., & DuFour, R. (2012). *The school leader's guide to professional learning communities at work*. Solution Tree Press.

Recent Research Findings

Four Identified Themes

Each participant in the survey and interviews in this study showed similarities as a team member of professional learning communities, four themes emerged from the surveys and interviews data: collaboration, involvement, teacher learning, and time.

Collaboration

Collaboration was the first theme that emerged from the data. In question 5 of the survey 54.55% agree and 39.39% strongly agree collaboration through PLCs has improved teacher's school morale.

Involvement

Involvement was the second theme that emerged from the data. Question 9 of the survey 55.88% agree and 41.18% strongly agree Professional Learning Communities are beneficial to their professional growth. At first, according to administrators' teachers showed signs of resentment for having to meet and implement the standards of PLCs with fidelity.

Recent Research Findings

Four Identified Themes Cont.

Each participant in the survey and interviews in this study showed similarities as a team member of professional learning communities, four themes emerged from the surveys and interviews data: collaboration, involvement, teacher learning, and time.

Teachers Learning

Positive impact and teachers learning was the third theme that evolved from the data. Question 4 of the survey showed 57.58% agree and 36.36% strongly agree Professional Learning Communities has improved teachers' instructional delivery in the classrooms. Teachers and administrators agree PLCs has a positive on teachers learning and student achievement. Our 2015-2016 Mississippi Assessment Program (MAP) results revealed a 98.8% growth in the bottom 25% of our students in ELA and a 75.8% growth in the bottom 25% of our students in math.

Time

Time was the final theme that transpired from the data. When responses were analyzed given by the participants, it was concluded that more time should be given to PLC meetings. The coordinator shared that PLCs are effective in improving student achievement and improving schools if they are implemented with fidelity.

References

DuFour, R. (2004). What is a "professional learning community"?. *Educational leadership*, *61*(8), 6-11.

DuFour, R., & Eaker, R. (2005). *Professional learning communities at work tm: best practices for enhancing students achievement*. Solution Tree Press.

DuFour, R., DuFour R., Eaker, R. & Many, T. (2006). Learning by doing: A handbook for professional learning communities at work. Bloomington, IN: Solution Tree.

DuFour, DuFour, Eaker & Many (2010). What is a professional learning community.

DuFour, R., & DuFour, R. (2012). *The school leader's guide to professional a learning communities t work*. Solution Tree Press.

Eaker, R., & DuFour, R. (2015). *Getting started: Reculturing schools to become professional learning communities*. Solution Tree Press.

Mississippi Department of Education. (2013). Office of school improvement. Retrieved from http://www.mde.k12.ms.us/OSI.

O'Neill, J., & Conzemius, A. (2006). The power of smart goals. *Using goals to improve student learning. Bloomington, IN: Solution Tree*.

Sigurdardottir, A. K. (2005). Studying and enhancing the professional learning community for school effectiveness in Iceland. 3(1), 178-193.

Sunflower County Consolidated School District. (2014). Retrieved from www.sunflower.k12.ms.us.

References

DuFour, R. (2004). What is a" professional learning community"? *Educational leadership, 61*(8), 6-11.

DuFour, R., & Eaker, R. (2005). *Professional learning communities at work tm: best practices for enhancing students achievement*. Solution Tree Press.

DuFour, R., DuFour R., Eaker, R. & Many, T. (2006). Learning by doing: A handbook for professional learning communities at work. Bloomington, IN: Solution Tree.

DuFour, DuFour, Eaker & Many (2010). What is a professional learning community?

DuFour, R., & DuFour, R. (2012). *The school leader's guide to professional a learning communities t work*. Solution Tree Press.

Eaker, R., & DuFour, R. (2015). *Getting started: Reculturing schools to become professional learning communities*. Solution Tree Press.

Mississippi Department of Education. (2013). Office of school improvement. Retrieved from http://www.mde.k12.ms.us/OSI

O'Neill, J., & Conzemius, A. (2006). The power of smart goals. *Using goals to improve student learning. Bloomington, IN: Solution Tree*.

Sigurðardóttir, A. K. (2005). Studying and enhancing the professional learning community for school effectiveness in Iceland. 3(1), 178-193.

Sunflower County Consolidated School District. (2014). Retrieved from www.sunflower.k12.ms.us

CONCLUSION

The purpose of this three article dissertation was to investigate the literature foundations, field implications and training necessities of integrating a Professional Learning Community (PLC) into an underperforming school site. Specifically, the impact of the PLC on student achievement was investigated, through the lens of teachers' and administrators' perceptions. In distilling literature and study findings, a training for teachers and administrators was developed that was fully informed by recent investigation.

In Article I, the literature review addressed the work needed to build PLCs and maintain them as functioning contributors to school culture and achievement (Horn & Little, 2010). In addition, the features of effective PLCs were explored (Attard, 2012; Leach, 2009). DuFour and Eaker (1998) stated that "Professional learning community literature ubiquitously references the need for teachers to embrace constant change" (p. 2). They defined the breadth of this expectation when they asserted that PLCs require that "each member of the organization" is engaged in continuous improvement 'forever'" (p. 2).

The literature supported the need for further research and supported how powerful the tools of collaboration and PLCs can be in improving student achievement. Resnick (2010) stated that collaboration among teachers was an important component used to secure improved student learning outcomes. The literature revealed a study done by Wong (2010), who found that sharing goals, socio-cultural factors, having a sense of collective accountability, and influences of interpersonal relationship were crucial in the development of PLCs. These findings support this study's goal and design of examining a PLC's impact on instructional delivery and student achievement.

The literature gave a background of PLCs, teachers' and principals' roles in PLC, and how student achievement may be impacted by a PLC at a school site. In addition, the literature reviewed characteristics of PLCs' mode, environment, PLCs in the workplace, team collaboration needed by members, the steps needed to transform schools into PLCs, and the use of data by PLCs, as well as how to improve instructional design and delivery through PLCs.

Article II described a qualitative case study about the impact of a new PLC on the site of an underperforming school. The study presented the statement of the problem, purpose statement, and the theoretical background of the design. The research design explained qualitative research and the how the research questions were addressed. Also, this article presented an explanation of data collection, setting and population, how participants were selected, data analysis procedures and limitations.

In addition, this qualitative case study gathered information to help teachers and administrators get a better understanding about PLCs and their impact on student achievement from both a teacher's perspective and an administrator's perspective.

Dufour (2004) espouses,

> The powerful collaboration that characterizes professional learning communities is a systematic process in which teachers work together to analyze and improve their classroom practice. Teachers work in teams, engaging in an ongoing cycle of questions that promote deep team learning. This process, in turn, leads to higher levels of instructional delivery (p. 7).

The findings presented in Article II certainly exhibited these facets of a PLC and how it works. Survey data from 35 teachers and interview data from three administrators provided evidence of the effectiveness of PLCs and how they impact student achievement. The findings gathered from

teachers and administrators revealed that the administrators agreed that it was difficult getting teachers to buy in to PLCs, but that ultimately they did observe the improvement in both teacher effectiveness and student achievement. They agreed that collaboration did not exist among teachers and administrators prior to the PLC and that the most important achievements accomplished by the PLC are that teachers now know how to disaggregate student data, use that data to drive instruction, and effectively monitor student progress. Most of all, teams review student work, analyze data together and discuss student understanding of the standards. Teams implement planned lessons, record and discuss successes and challenges and gather evidence of student learning, based on observations done by the principal. Finally, having teachers implement the planned lesson, record successes and challenges and gather evidence of student learning is how teachers are utilizing strategies from the PLC in the classroom from the principal's perspective.

Article III presented a training manual consisting of findings from the literature review in Article I and the case study in Article II, with the intent of revising and expanding a pilot model for PLC development and implementation in elementary schools. The article defined "What are Professional Learning Communities," and was informed by DuFour, DuFour, Eaker and Many (2010) as an insight for teachers and administrators. The training developed for Article III covered O'Neill's (2000) approach to SMART Goals, how SMART Schools use the process of forming PLCs, steps in creating PLCs, empowering PLC team members and defining their roles, and the four critical questions that PLCs need to use to gather useful evidence. These questions are:

1. What do we want students to learn based on data? (instructional focus)
2. What is our common assessment data telling us?

3. What will we do for those who did not achieve proficiency?
4. What will we do for those who did achieve proficiency?

The value of Article III is that school sites interested in exploring or implementing PLCs will have a training protocol to introduce them and their potential to faculty, staff and the whole school community.

Recommendations for Future Practice

Based on the data gathered and conclusions drawn from this study, the following recommendations for future practice are offered:

- When studying small schools that are developing PLCs, progress should be tracked over a three to five-year time span, documenting different stages of development.
- To help with teacher resentment, allow teachers to visit other schools implementing PLCs.
- District leaders should show more commitment to follow-up on the practices they require concerning data-driven decisions.
- Time should be built in from the district level to assist teachers wanting to meet as subject areas instead of grade levels in smaller schools.
- Teachers who are unsure about whether they are implementing data-driven decisions in lesson plans should have internal and external training.
- Further research should be conducted to find out if enrollment at the school would have an impact on the implementations of PLCs.

Through three articles and three types of offerings, this dissertation has demonstrated the background and effectiveness of PLCs, how to implement them and their impact on students.

References

Attard, K. **(**2012). Public reflection within learning communities: An incessant type of professional development. *European Journal of Teacher Education, 35*(2), 199-211. doi: 10.1080/02619768.2011.643397

Dufour, R. (2004). What is a professional learning community? *Educational Leadership Association for Supervision & Curriculum Development, 61*(8) 6-11.

DuFour, R., & Eaker, R. (1998). *Professional learning communities at work: Best practices for enhancing instructional delivery.* Bloomington, IN: Solution Tree (formerly National Educational Service).

Du Four, R., & DuFour, R. Eaker., R., & Many, T.(2010). *Learning by doing: A handbook for professional learning communities at work, 2.*

DuFour, R. (2006). What is a professional learning community? *Schools as Learning Communities. 61*(8), 6-11.

Horn, I. S. & Little, J. W. (2010). Attending to problems of practice: Routines and resources for professional learning in teachers' workplace interactions. *American Educational Research Journal, 47*(1), 181-217.

Resnick, L. B. (2010). Nested learning systems for the thinking curriculum. *Educational Researcher. 39*(3):183–197.

Appendix A

Permission to Conduct Research

Dear_____: [redacted]

My name is Cora Cunningham-Kincaide. I work as a Positive Behavior Specialist (PBIS) at The Alpha Elementary School [a pseudonym]. I am pursuing a Doctorate in Educational Leadership at Trident University International (TUI). As part of my doctoral studies, I am conducting research for my dissertation, titled: *The Impact on Professional Learning Communities on Student Achievement at an Underperforming Elementary School*. I would like permission to conduct this study at the school site.

This study will involve interviewing administrators and the academic coach at the elementary school site, as well as recruiting teachers to participate in an online survey. Participants will be asked to answer questionnaires about their PLC experiences, with a focus on instructional delivery.

For the survey, I am requesting that you facilitate the distribution of an invitation to participate in an online survey to all 35 teachers at the school who were participants in PLCs. I will provide the text of that invitation letter for you. The survey will consist of 11 questions, using a Likert scale methodology to reflect on their PLC experiences and a little about their backgrounds. The survey will also include one open-ended question. Teachers who agree to participate will be provided with an informed consent after they agree to take the survey, and then a link to the survey.

Once confirmed as participants, and after they return their informed consent, participants will be emailed a reminder if they do not complete the survey.

For the interviews, my plan is to conduct them with two administrators and one academic coach, all of whom also participated in PLCs.

Once scheduled, each participant will be reminded of the interview date, time, and location through school email. A return email read receipt will be sent to me indicating the date and time email was read by each participant. I would also like permission to conduct these interviews onsite, in the conference room.

As data is gathered from surveys and interviews, I will follow all of the protocols of TUI and keep it strictly confidential. Participation of all potential interviewees and survey takes is completely voluntary. They have the right not to be included in my study or analysis, and if any potential participant declines, or if a participant withdraws their consent after granting it, they will be excluded from the study without penalty.

The information collected will only be used for the dissertation and any related academic articles, and will be secured and ultimately destroyed according to TUI protocols. Any documentary information or items gathered from the school site will be returned after the dissertation process is completed.

During the research and publication process, participants' names and any specific identifiers will be kept confidential. The information will be stored on a secured computer located off campus. The results of this study will be made available to you and to the staff.

If you agree to these procedures, please sign one copy of this letter and return it to me. If concerns arise about this aspect of my work, please feel free to contact me via email at kincaide1@aol.com or (662) 614-3707, or you may contact my dissertation chair, Dr. Allison Deegan, at allison.deegan@trident.edu or (310) 801-1472.

Thank you for your assistance in this study. I look forward to working with you and site staff on this project.

Respectfully,

Cora Cunningham-Kincaide
Cora Cunningham-Kincaide

Appendix B

Recruitment Letter for Administrators Interview

You are invited to participate in a research study conducted by Cora E. K. Cunningham, an Educational Leadership doctoral candidate in the College of Education at Trident University International. The results of this study will contribute to a dissertation. You were selected as a possible participant in this study because you are academic coaches and administrators who participated in this school site's Professional Learning Community (PLC).

The purpose of this qualitative case study will be to investigate the impact of PLCs on teachers and student achievement at an underperforming school. It is my hope that my research will add relevance to the discussion about instructional delivery, student achievement and PLCs.

If you volunteer to participate in this study, you will do the following things:

1. Complete an informed consent form (which will be emailed to you once you agree to be a part of the study). The informed consent form will explain your rights and protections.

2. Complete an interview (for academic coaches and administrators only).

Participation in the interview will require one hour of your time and will be arranged at your convenience in a location on the school site.

Academic coaches and administrators who choose to participate in interviews will complete an informed consent form first, and then interviews will be arranged at their convenience in a location on the school site. Interviews will take approximately one hour and will focus on administrators' and coaches' perceptions of the impact of the PLC on the school site.

There are no known risks anticipated from participating in this study, and no compensation will be provided to participants. However, it is anticipated that the findings of this study may help the teachers and administrators understand more about PLCs and how effective they are from teachers' perspectives. The findings may also help to build a better team of knowledgeable teachers. Participation in this study is completely voluntary and there will be no penalty for choosing not to participate.

Please confirm your interest in participating in this study, by in-person interview for administrators or by replying to this email.

You will receive an informed consent form back via email. Once I receive that signed informed consent form, I will contact you via email to arrange an administrators' in-person interview.

If you have any concerns about this research or your participation, or if you need additional information, please contact me at Cora.ECunningham@my.trident.edu, Telephone: (662) 614-3707 or you may contact my Dissertation Chair and Faculty Sponsor, Dr. Allison Deegan, Telephone: (310) 801-1472, via email allison.deegan@trident.edu. or contact the Trident University International Institutional Review Board at 5757 Plaza Drive, Suite 100, Cypress, California 90630; Telephone: (714) 226-9840, email address irb@trident.edu.

Thank you for your interest in my research. I look forward to your participation.

Sincerely,

Cora Kincaid-Cunningham
Researcher and Doctoral Candidate
Trident University International

Appendix C

Recruitment Letter for Teachers' Survey

You are invited to participate in a research study conducted by Cora E. K. Cunningham, an Educational Leadership doctoral candidate in the College of Education at Trident University International. The results of this study will contribute to a dissertation. You were selected as a possible participant in this study because you are professional teachers who participated in this school site's Professional Learning Community (PLC).

The purpose of this qualitative case study will be to investigate the impact of PLCs on teachers and student achievement at an underperforming school. It is my hope that my research will add relevance to the discussion about instructional delivery, student achievement and PLCs.

If you volunteer to participate in this study, you will do the following things:

1. Complete an informed consent form (which will be emailed to you once you agree to be a part of the study). The informed consent form will explain your rights and protections.

2. Complete a survey using Survey Monkey (for teachers only).

Participation in the survey will require forty-five minutes of your time and can be taken wherever you have access to a computer connected to the internet.

There are no known risks anticipated from participating in this study, and no compensation will be provided to participants. However, it is anticipated that the findings of this study may help the teachers and administrators understand more about PLCs and how effective they are from teachers' perspectives. The findings may also help to build a better team of knowledgeable teachers. Participation in this study is completely voluntary and there will be no penalty for choosing not to participate.

Please confirm your interest in participating in this study, either by online survey for teachers or by replying to this email.

You will receive an informed consent form back via email. Once I receive the signed informed consent form, I will send you a teacher online survey.

If you have any concerns about this research or your participation, or if you need additional information, please contact me at Cora.ECunningham@my.trident.edu, Telephone: (662) 614-3707 or you may contact my Dissertation Chair and Faculty Sponsor, Dr. Allison Deegan, Telephone: (310) 801-1472, via email allison.deegan@trident.edu. or contact the Trident University International Institutional Review Board at 5757 Plaza Drive, Suite 100, Cypress, California 90630; Telephone: (714) 226-9840, email address irb@trident.edu.

Thank you for your interest in my research. I look forward to your participation.

Sincerely,

Cora Kincaid-Cunningham
Researcher and Doctoral Candidate
Trident University International

Appendix D

Consent to Participate in Research

(Administrator - Face to Face Interviews)

You are invited to participate in a research study conducted by Cora E. K. Cunningham, an Educational Leadership doctoral candidate in the College of Education at Trident University International. The results of this study will contribute to a dissertation. You were selected as a possible participant in this study because you are administrators who participated in this school site's Professional Learning Community (PLC).

PURPOSE OF THE STUDY

The purpose of this qualitative case study will be to investigate the impact of PLCs on student achievement at an underperforming school. This study aims to examine how the PLC has impacted the site, instructional delivery and student achievement.

PROCEDURES

If you volunteer to participate in this study, you will do the following things:

1. Complete an informed consent form, explaining your rights and protections.
2. Complete an interview (for academic coaches and administrators only).

The use of interviews will add relevance to the data collected during this study and provide information about administrators' and academic coaches' perceptions and the analysis of the impact of the PLC on student achievement.

Academic coaches and administrators who choose to participate in interviews will complete this informed consent form first, and then interviews will be arranged at their convenience in a location on the school site. Interviews will take approximately one hour and will focus on administrators' and coaches' perceptions of the impact of the PLC on the school site.

POTENTIAL RISKS AND DISCOMFORTS

There are no known risks anticipated from participating in this study.

POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

However, it is anticipated that the findings of this study may help the teachers and administrators understand more about PLCs and how effective they are from teachers' perspectives. The findings may also help to build a better team of knowledgeable teachers

PAYMENT FOR PARTICIPATION

Participants in this study will not receive any compensation or reimbursements. This is strictly voluntary.

CONFIDENTIALITY

This study will not identify any participant's data collected in this interview. Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. The data will be stored on a secured computer protected with the researcher's username and password. All records will be erased and destroyed properly after a period of three years, following university policy.

PARTICIPATION AND WITHDRAWAL

You can choose whether to participate in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. Participation or non-participation will not affect your employment status or any other personal consideration or right you usually expect. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this study if circumstances arise that in the opinion of the researcher warrant doing so.

IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact Cora Cunningham, Principal Investigator, via Cora.ECunningham@my.trident.edu, Telephone: (662) 614-3707 or Dr. Allison Deegan, Dissertation Chair and Faculty Sponsor, Telephone: (310) 801-1472 or via email allison.deegan@trident.edu. You may also contact the Trident University International Institutional Review Board at 5757 Plaza Drive, Suite 100, Cypress, California 90630; Telephone: (714) 226-9840, email address irb@trident.edu.

RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact the Institutional Review Board for the Protection of Human Subjects at Trident University International, 5757 Plaza Drive, Suite 100, Cypress, California 90630; Telephone: (714) 226-9840.

During this study, if the researcher discovers any new information that might cause you to change your mind about participating, the researcher will share this new information with you.

SIGNATURE OF RESEARCH SUBJECT

I understand the procedures and conditions of my participation described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

_____

Name of Subject

_____

Name of Legal Representative (if applicable)

_____

Signature of Subject or Legal Representative Date

_____

Name and signature of witness where appropriate

Appendix E

Consent to Participate in Research

Informed Consent – Teacher Surveys

You are invited to participate in a research study conducted by Cora E. K. Cunningham, an Educational Leadership doctoral candidate in the College of Education at Trident University International. The results of this study will contribute to a dissertation. You were selected as a possible participant in this study because you are a teacher who participated in this school site's Professional Learning Community (PLC).

PURPOSE OF THE STUDY

The purpose of this qualitative case study will be to investigate the impact of PLCs on student achievement at an underperforming school. This study aims to examine how the PLC has impacted the site, instructional delivery and student achievement.

PROCEDURES

If you volunteer to participate in this study, you will do the following things:

1. Complete an informed consent form, explaining your rights and protections.
2. Complete a survey using Survey Monkey (for teachers only).

The use of Survey Monkey questionnaires will add relevance to the data collected during this study and provide information about teachers' perceptions and the analysis of the impact of the PLC on student achievement.

The Survey Monkey survey will be accessed online via a link sent to all teacher participants who choose to be included in the study and who complete an informed consent form. At the beginning of the survey, information is requested about the participant's background. Then the remainder of the survey will consist of questions relating to each participant's perceptions of the impact of the PLC on student achievement at an underperforming school. Participation in the survey will require 45 minutes of your time and can be taken wherever you have access to a computer connected to the internet.

POTENTIAL RISKS AND DISCOMFORTS

There are no known risks anticipated from participating in this study.

POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

However, it is anticipated that the findings of this study may help the teachers and administrators understand more about PLCs and how effective they are from teachers' perspectives. The findings may also help to build a better team of knowledgeable teachers.

PAYMENT FOR PARTICIPATION

Participants in this study will not receive any compensation or reimbursements. This is strictly voluntary.

CONFIDENTIALITY

This study will not identify any participant's data collected in this survey. Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. The data will be stored on a secured computer protected with the researcher's username and password. All records will be erased and destroyed properly after a period of three years, following university policy.

PARTICIPATION AND WITHDRAWAL

You can choose whether to participate in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. Participation or non-participation will not affect your employment status or any other personal consideration or right you usually expect. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this study if circumstances arise that in the opinion of the researcher warrant doing so.

IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact Cora Cunningham, Principal Investigator, via email Cora.ECunningham@my.trident.edu, Telephone: (662) 614-3707 or Dr. Allison Deegan, Dissertation Chair and Faculty Sponsor, Telephone: (310) 801-1472 or via email allison.deegan@trident.edu. You may also contact the Trident University International Institutional Review Board at 5757 Plaza Drive, Suite 100, Cypress, California 90630; Telephone: (714) 226-9840, email address irb@trident.edu.

RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact the Board for the Protection of Human Subjects at Trident University International, 5757 Plaza Drive, Suite 100, Cypress, California 90630; Telephone: (714) 226-9840.

During this study, if the researcher discovers any new information that might cause you to change your mind about participating, the researcher will share this new information with you.

SIGNATURE OF RESEARCH SUBJECT

I understand the procedures and conditions of my participation described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

_____

Name of Subject

_____

Name of Legal Representative (if applicable)

_____

Signature of Subject or Legal Representative Date

_____

Name and signature of witness where appropriate

Appendix F

Permission to Use Survey Questions

Re: data [ref:_00D301HuKJ._50030dhV7W:ref]

support to you

Hi Cora,

Thanks for writing back in!

We're happy to help assist you with getting the approvals you need to perform your dissertation research. Here is a letter on Survey Monkey letterhead that you can provide to your IRB to evidence permission to use the Survey Monkey platform to conduct your research:http://help.surveymonkey.com/servlet/servlet.FileDownload?file=01530000002h0ny

I would also suggest checking out this page, which has more information about Survey Monkey and IRB Guidelines which can also help you with your dissertation: http://help.surveymonkey.com/articles/en_US/kb/How-does-SurveyMonkey-adhere-to-IRB-guidelines

I hope this helps! Please feel free to write back with any further questions!

Best wishes,

Bethani
Customer Engagement Representative

Appendix G

The Impact of Professional Learning Communities and

Student Achievement at an Underperforming School

Survey Questions

By completing this survey, you are giving consent to participate in the research.

Demographic Information

Complete the correct information about yourself

What is your age?
____ 25 or less than
____30-40
____40-50
____50-60
____60 or more than

What is your gender?
____Female
____Male
____Other

How many years of experience do you have as a classroom teacher?
_____0 to 1 year
_____1-2 years
_____3-5 years
_____6-10 years
_____11-15 years
_____15 or more years

Questions: Place an X by the answer of your choice.

1. The Elementary School's PLC has improved teachers' instructional delivery in the classrooms.
   ___Strongly agree
   ___Agree
   ___Unsure

___Disagree
___Strongly disagree

2. Collaboration through PLCs has improved teachers' school morale.
   ___Strongly agree
   ___Agree
   ___Unsure
   ___Disagree
   ___Strongly disagree

3. Do you believe the PLC has had a positive impact on increasing student achievement?
   ___Strongly agree
   ___Agree
   ___Unsure
   ___Disagree
   ___Strongly disagree

4. Do you believe the teaching practices recommended by the PLC were effective?
   ___Strongly agree
   ___Agree
   ___Unsure
   ___Disagree
   ___Strongly disagree

5. Do you implement data-driven strategies?
   ___Strongly agree
   ___Agree
   ___Unsure
   ___Disagree
   ___Strongly disagree

6. Do you perceive that PLCs are beneficial to your professional growth?
   ___Strongly agree
   ___Agree
   ___Unsure
   ___Disagree
   ___Strongly disagree

7. Did administrators use data effectively from the PLC?
   ___Strongly agree
   ___Agree
   ___Unsure
   ___Disagree
   ___Strongly disagree

8. Was there an increase in your students' progress due to PLC training and goals during the past year?
    ___Strongly agree
    ___Agree
    ___Unsure
    ___Disagree
    ___Strongly disagree

9. Did your personal teaching skill level increase to help all students learn at high levels during the past year's implementation of the PLC?
    ___Strongly agree
    ___Agree
    ___Unsure
    ___Disagree
    ___Strongly disagree

10. Did you see the PLC's influence on the quality of teaching during the year of its implementation at the school?
    ___Strongly agree
    ___Agree
    ___Unsure
    ___ Disagree
    ___Strongly disagree

11. Did you see the PLC's influence on the quality of parental involvement during the year of its implementation at the school?
    ___Strongly agree
    ___Agree
    ___Unsure
    ___ Disagree
    ___Strongly disagree

12. What recommendations do you have for improving the effectiveness of the PLC?
    _____

    _____

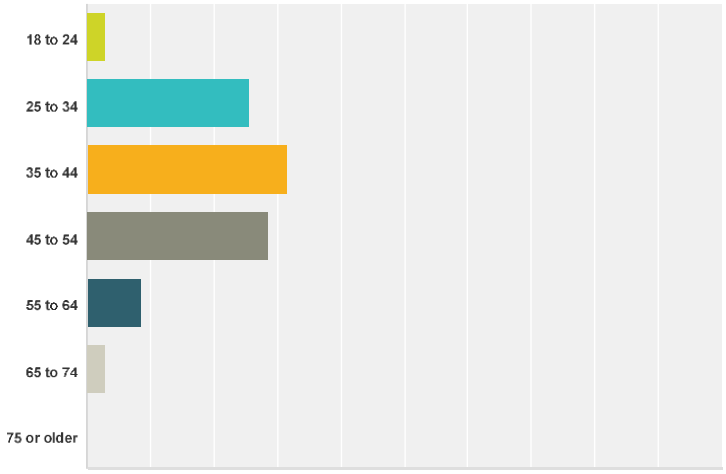
    _____

    _____

Appendix H

Survey Monkey Results

Q1 What is your age?

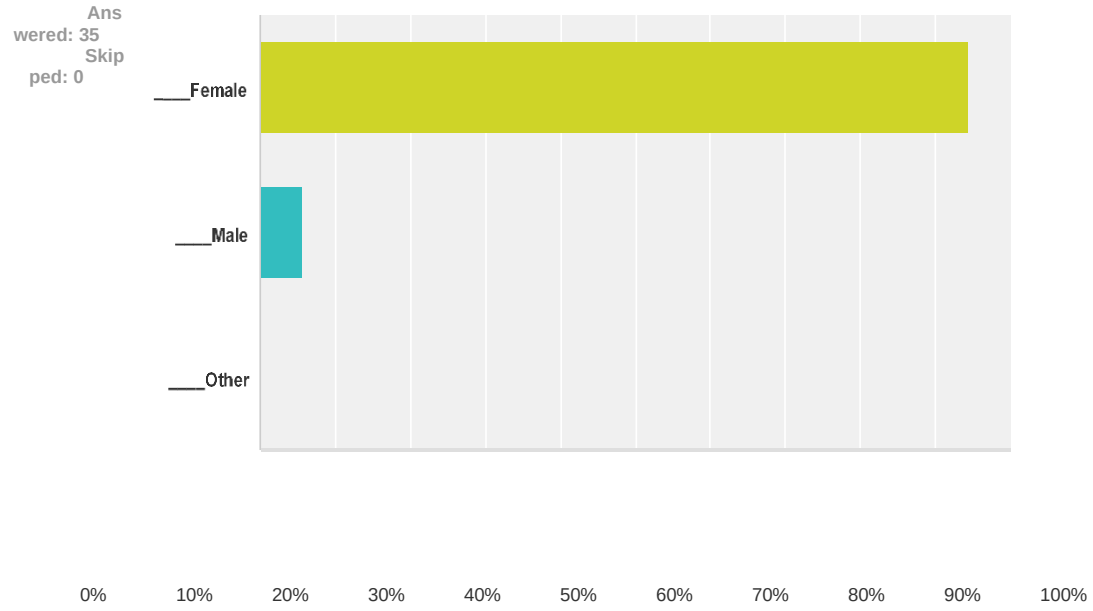


Answered: 35 Skipped: 0

Answer Choices	Responses	
18 to 24	**2.86%**	1
25 to 34	**25.71%**	9
35 to 44	**31.43%**	11
45 to 54	**28.57%**	10
55 to 64	**8.57%**	3
65 to 74	**2.86%**	1
75 or older	**0.00%**	0
Total		**35**

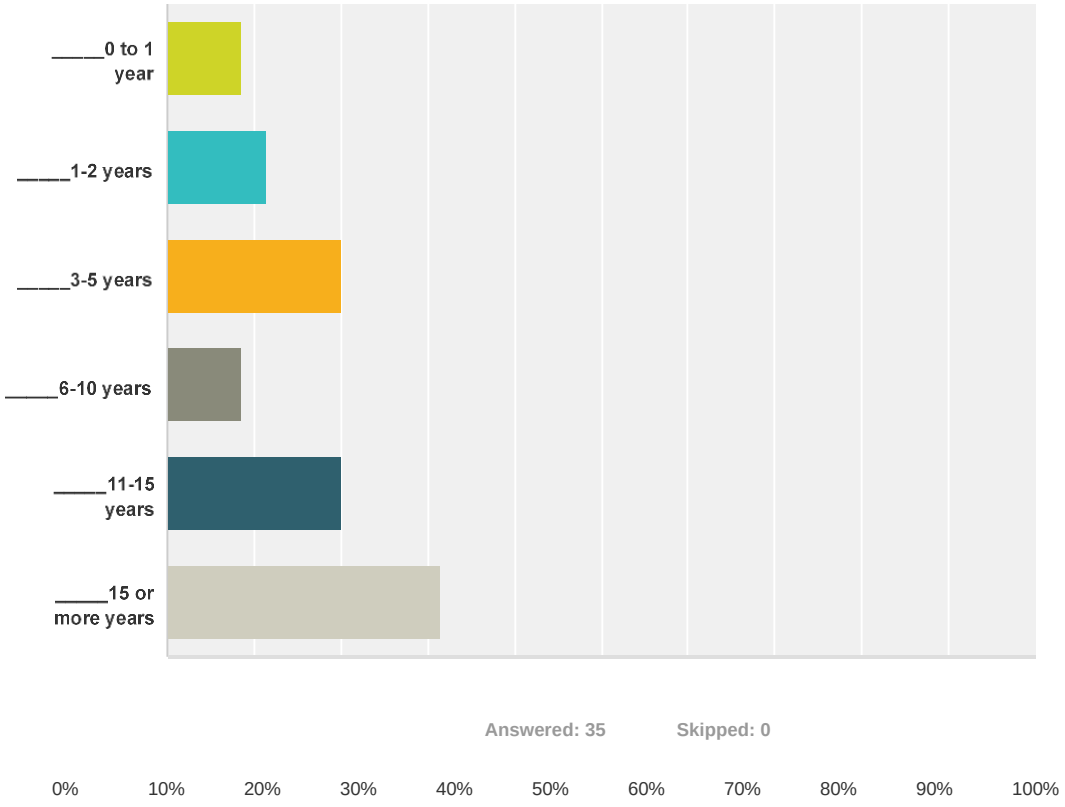
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Q2 What is your gender?



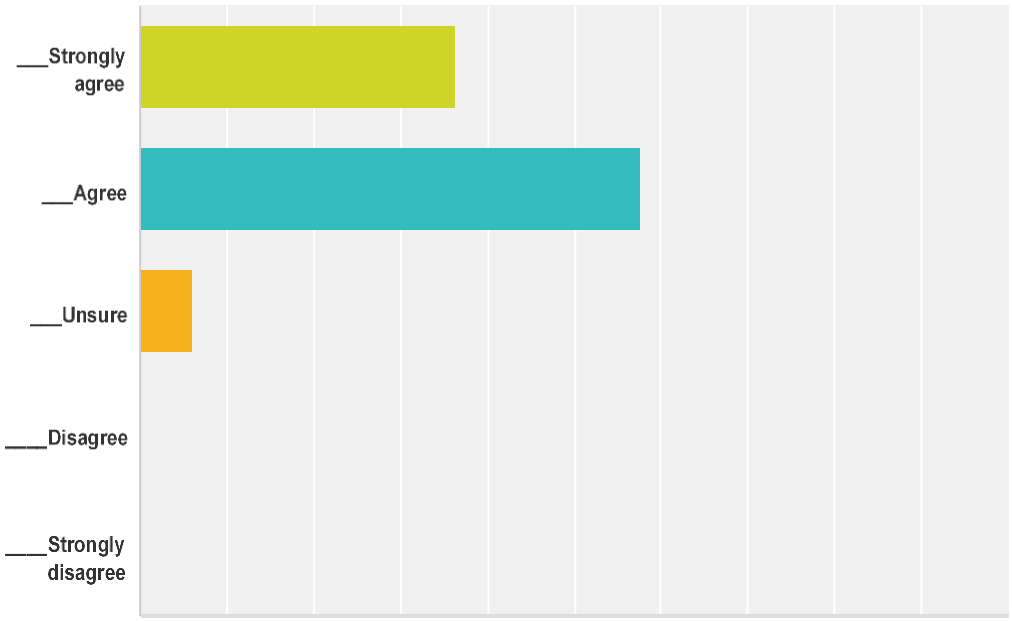
Answer Choices	Responses	
____Female	**94.29%**	33
____Male	**5.71%**	2
____Other	**0.00%**	0
Total		**35**

Q3 How many years of experience do you have in the classroom?



Answer Choices	Responses	
_____0 to 1 year	**8.57%**	3
_____1-2 years	**11.43%**	4
_____3-5 years	**20.00%**	7
_____6-10 years	**8.57%**	3
_____11-15 years	**20.00%**	7
_____15 or more years	**31.43%**	11
Total		**35**

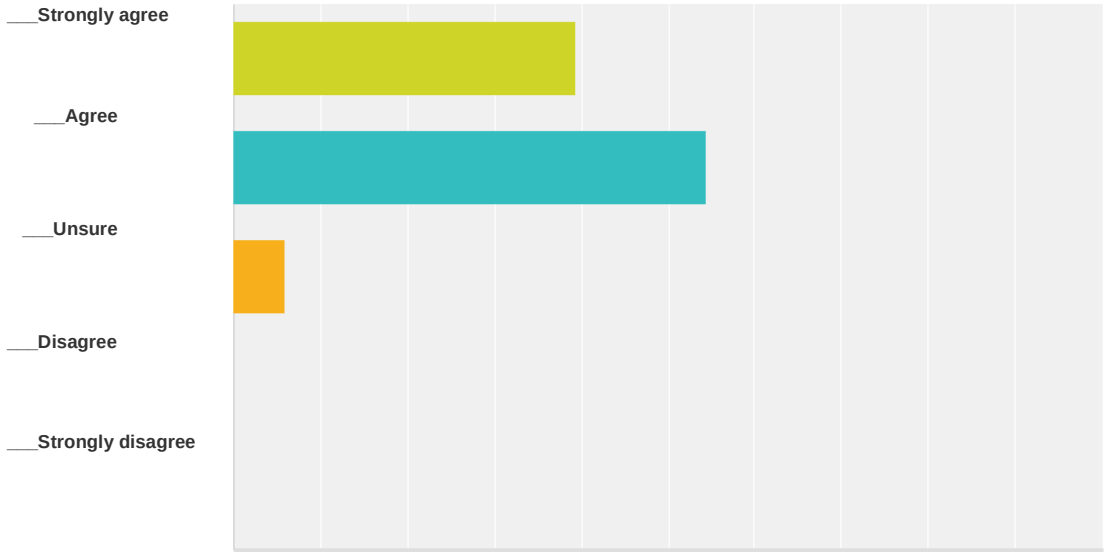
Q4 The Elementary School's PLC has improved teachers' instructional delivery in the classroom.



Answer Choices	Responses	
___Strongly agree	**36.36%**	12
___Agree	**57.58%**	19
___Unsure	**6.06%**	2
____Disagree	**0.00%**	0
____Strongly disagree	**0.00%**	0
Total		**33**

Answered: 33 Skipped: 2

Q5 Collaboration through PLCs has improved teachers' school morale.

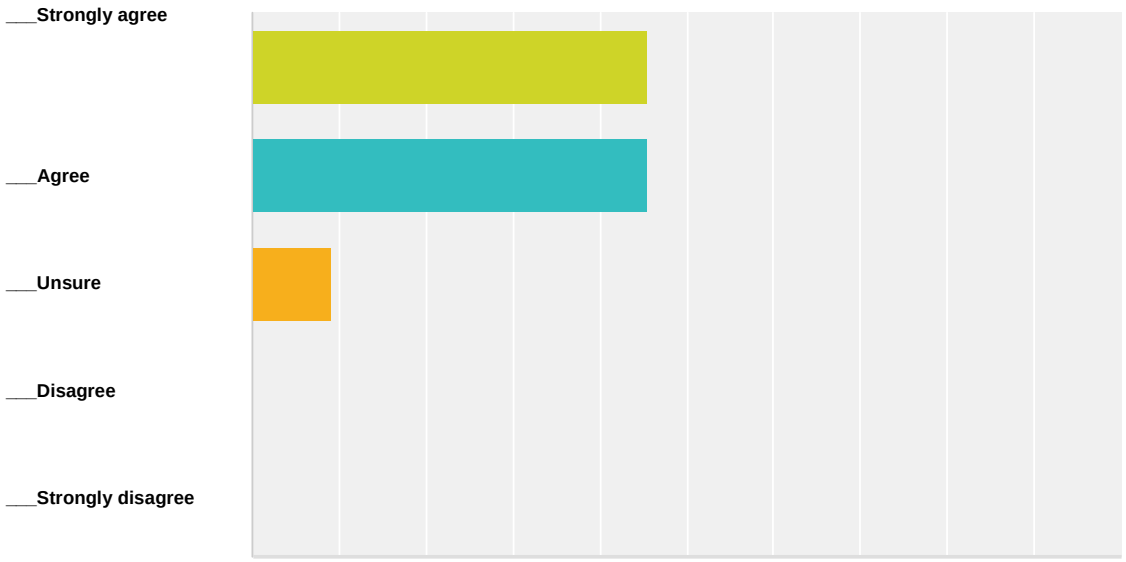


Answered: 33 Skipped: 2

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Answer Choices	Responses	
___Strongly agree	**39.39%**	13
___Agree	**54.55%**	18
___Unsure	**6.06%**	2
___Disagree	**0.00%**	0
___Strongly disagree	**0.00%**	0
Total		**33**

Q6 Do you believe the PLC has had a positive impact on increasing student achievement?

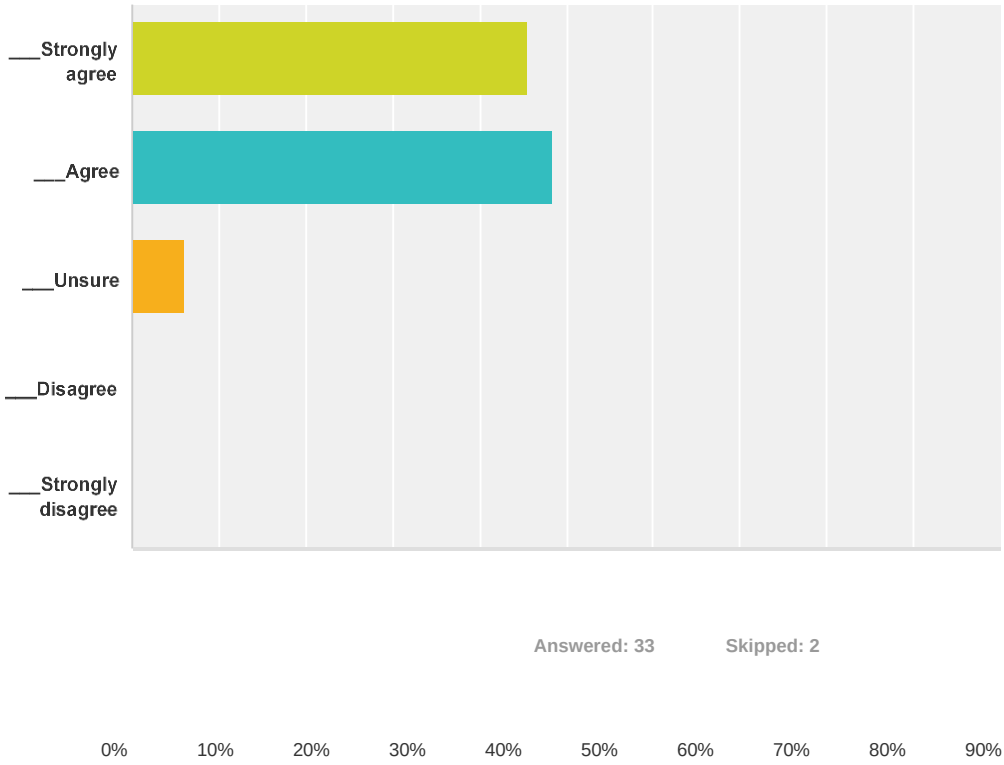


Answered: 33 Skipped: 2

Answer Choices	Responses	
___Strongly agree	**45.45%**	15
___Agree	**45.45%**	15
___Unsure	**9.09%**	3
___Disagree	**0.00%**	0
___Strongly disagree	**0.00%**	0
Total		**33**

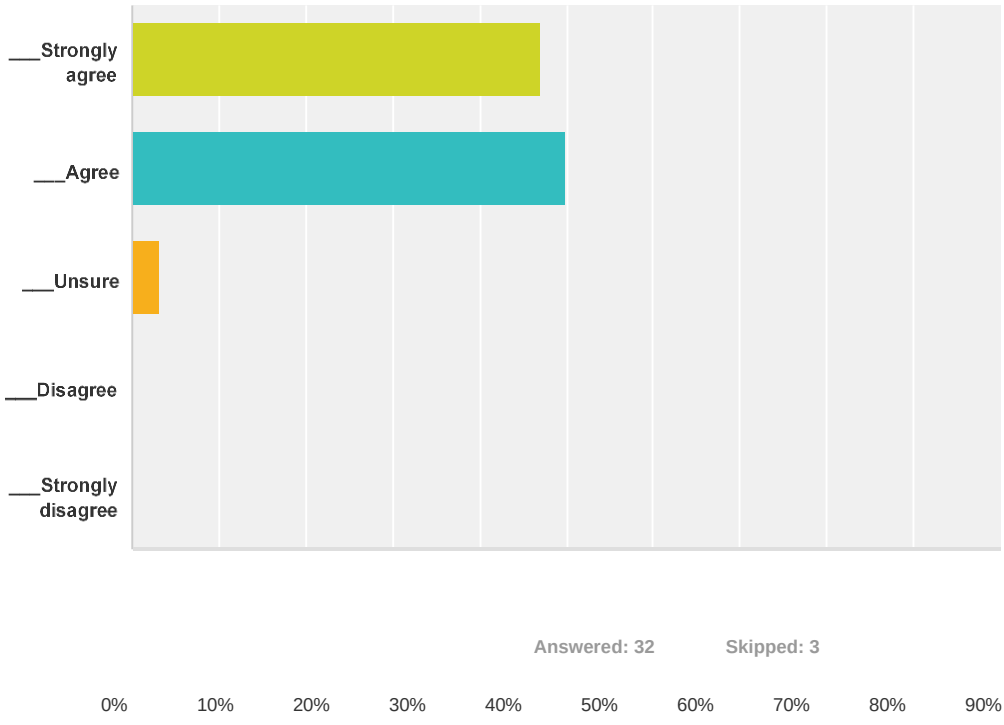
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Q7 Do you believe the teaching practices recommended by the PLC were effective?



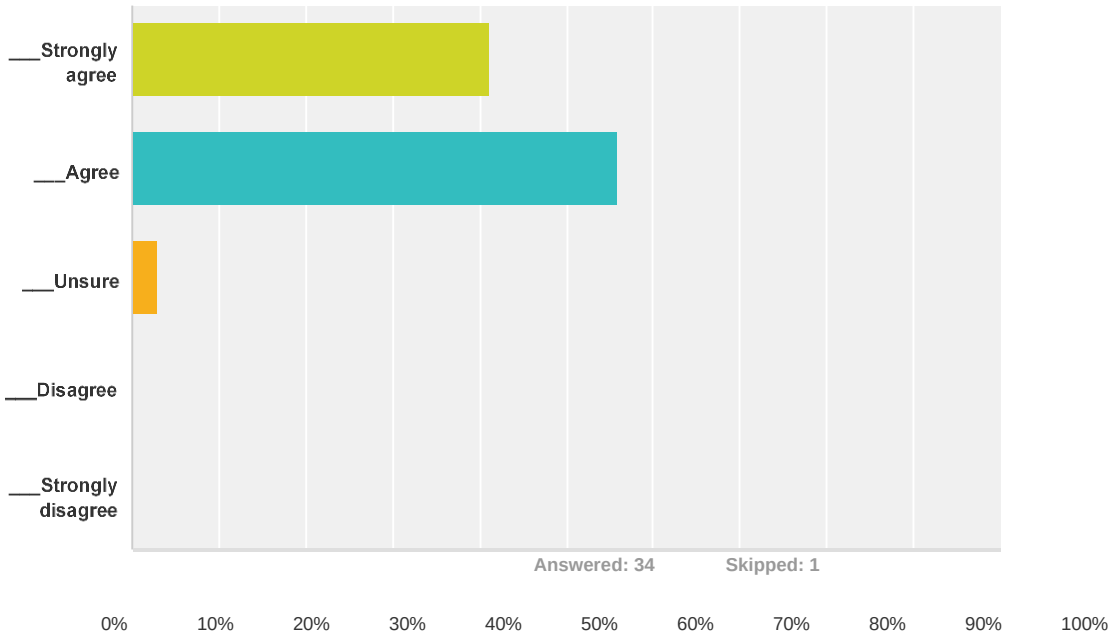
Answer Choices	Responses	
___Strongly agree	**45.45%**	15
___Agree	**48.48%**	16
___Unsure	**6.06%**	2
___Disagree	**0.00%**	0
___Strongly disagree	**0.00%**	0
Total		**33**

Q8 Do you implement data-driven strategies?



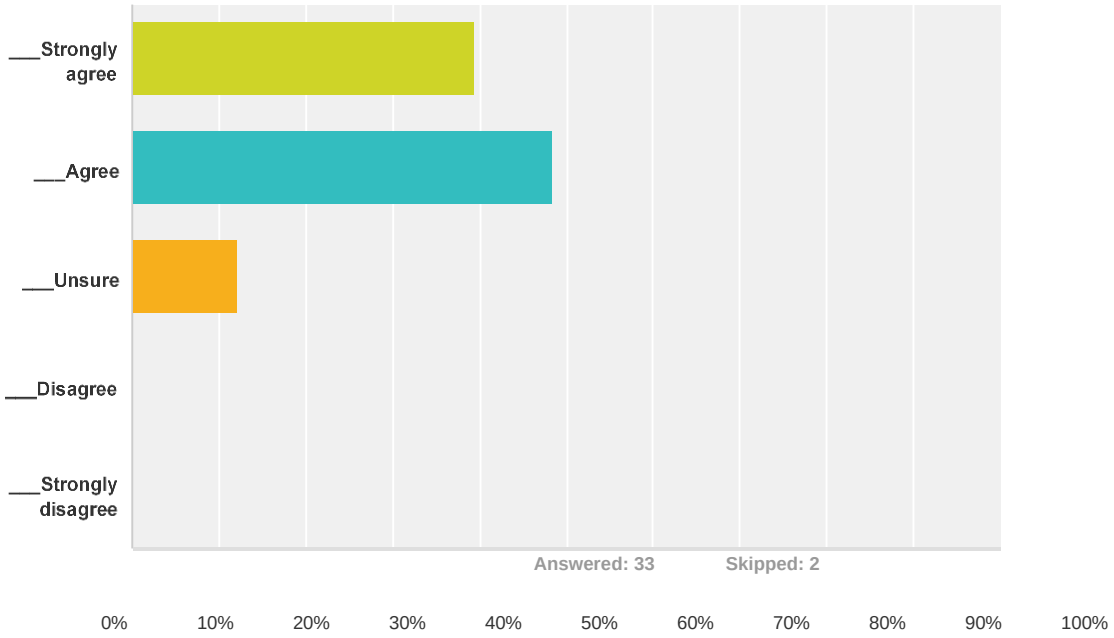
Answer Choices	Responses	
___Strongly agree	**46.88%**	15
___Agree	**50.00%**	16
___Unsure	**3.13%**	1
___Disagree	**0.00%**	0
___Strongly disagree	**0.00%**	0
Total		**32**

Q9 Do you perceive that PLCs are beneficial to your professional growth?



Answer Choices	Responses	
___Strongly agree	**41.18%**	14
___Agree	**55.88%**	19
___Unsure	**2.94%**	1
___Disagree	**0.00%**	0
___Strongly disagree	**0.00%**	0
Total		**34**

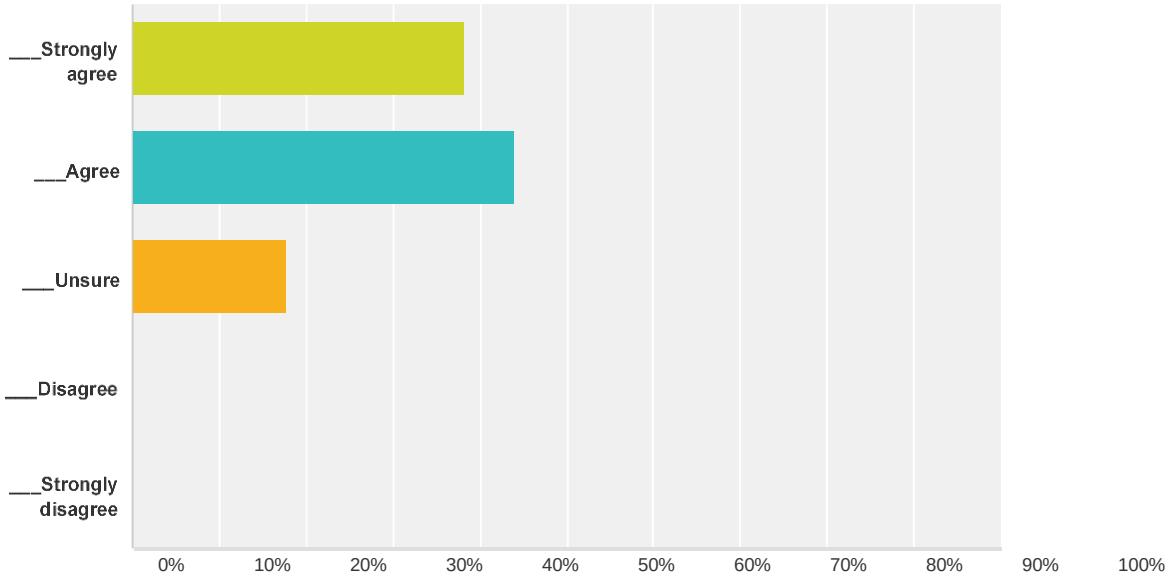
Q10 Did administrators use data effectively from the PLC?



Answer Choices	Responses	
___Strongly agree	**39.39%**	13
___Agree	**48.48%**	16
___Unsure	**12.12%**	4
___Disagree	**0.00%**	0
___Strongly disagree	**0.00%**	0
Total		**33**

Q11 Was there is an increase in your students' progress due to PLC training and goals during the past year?

Answered: 34 Skipped: 1



Answer Choices	Responses	
___Strongly agree	**38.24%**	13
___Agree	**44.12%**	15
___Unsure	**17.65%**	6
___Disagree	**0.00%**	0
___Strongly disagree	**0.00%**	0
Total		**34**

Q12 What recommendations do you have for improving the effectiveness of the PLC?

#	Responses	Date
1	n/a	5/18/2017 5:46 AM
2	N/A	5/18/2017 12:26 AM
3	I DO NOT WANT TO PARTICIPATE!!!!!!!	5/18/2017 12:12 AM
4	make sure teachers have classroom data (percentage of Adv., Prof., Basic, and Minimal) from weekly test	5/17/2017 8:09 AM
5	I believe that PLC's should be conducted based on subject area rather than grade level. This would allow the teachers of the same subject area to connect across grade levels to build skills students may lack for current grade.	5/17/2017 7:44 AM
6	No comment	5/17/2017 7:43 AM
7	More intense training on how to conduct PLCs and what specific strategies are of the most importance for the goals that the schools are seeking to achieve.	5/17/2017 7:41 AM
8	Start the PLC process/modeling/workshops at the beginning of the school year. Teachers should be provided with workshops in or out of the district to gather ideas from other teachers to use strategies in their classrooms throughout the school year.	5/17/2017 7:14 AM
9	Participation in professional learning communities must continue to involve all the stakeholders who are involved in educating children.	5/17/2017 7:08 AM
10	N/A	5/17/2017 7:03 AM
11	No at this time	5/17/2017 7:02 AM
12	N/A	5/17/2017 6:59 AM
13	The task we are asked to complete should not take longer than our planning time allows.	5/17/2017 6:55 AM
14	I have no recommendations at this time.	5/17/2017 6:53 AM
15	None. The activities are great as well as the follow through.	5/17/2017 6:32 AM
16	Na	5/17/2017 6:22 AM
17	N/A	5/17/2017 6:19 AM

Answered: 17 **Skipped: 18**

Appendix I

Administrator's Interview Protocol

I would like to thank you for volunteering to participate in this interview. The interview will take about one hour, or whenever you choose to stop. I am interested in learning about your job as an administrator, your vision for the school, and your relationship with colleagues, students, community, and your experiences. With your permission I would like to audiotape this session. Have you reviewed and signed the informed consent? Do you have any questions before we start? Once the interview is transcribed, you will have an opportunity to review the transcript to correct any errors.

1. What challenges did you encounter the first year as the Principal/Grant Coordinator and as a member of PLC team?
2. How would you describe the influence of this school's PLC on student achievement?
3. Prior to the implementation of the PLC, what was the level of collaboration among teachers and administrators?
4. What are some of the school's achievements since the implementation of the PLC?
5. How do you utilize strategies from the PLC in the classroom?
6. What have you learned from collaborating with teachers in the PLC?
7. Is there anything else you would like to add?