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Teachers' perceptions of professional learning communities in public schools on Saipan

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TEACHERS' PERCEPTIONS OF PROFESSIONAL LEARNING COMMUNITIES IN

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DEDICATION

This dissertation is dedicated to my family who have always loved and supported me unconditionally. I thank my father, Jesus, and mother, Yoneko, for instilling in me the value of education and the love of learning. Without you, I could not have come this far.

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ABSTRACT

School improvement in varying degrees and stages requires change. In order for schools to become successful, they must work toward building communities of learning and empowering teachers to lead this change.

One way schools can build communities of learning is through the model of the professional learning community (PLC). The only way schools will improve is through the collaboration that takes place in learning communities. One of the purposes of this study was to explore the connections between schools functioning as PLCs and increases in student achievement, as recommended in Grider's (2008) work. The participating schools worked together as PLCs since 2005. High school teachers have significantly lower mean perception scores than either elementary or junior high school teachers. Filipino teachers have significantly higher mean perception scores than either Caucasian or teachers from other ethnic-racial backgrounds. Pacific Islander teachers had significantly higher mean perception scores than Caucasian teachers. Years of teaching experience was only related to the teacher's level of agreement. Female teachers had significantly higher levels of agreement. Older teachers had significantly higher levels of agreement. Elementary teachers had significantly higher levels of agreement.

Future research should examine relationships among teachers' perceptions at the elementary, junior high, and high school levels. Continued professional development is recommended for elementary, junior high, and high schools in the areas that teachers responded to least favorably.

Further research should be conducted to examine the relationships among teachers' perceptions based on ethnicity, gender, and age. More professional

development is recommended to improve teacher relationships as they relate to ethnicity, gender, and age and to increase awareness and improve skills in cultural proficiency and sensitivity.

Future research can include a study to determine the impact of school leadership on PLCs, parent perceptions of PLCs in their schools, and to examine elementary and junior high schools' implementation of PLCs compared to high schools.

It is the hope that by improving upon the professional development activities and experiences for all teachers, teachers' perceptions about the degree to which their schools function as PLCs will be determined by improved practices in teaching and learning.

Chapter 1: Introduction

The Commonwealth of the Northern Mariana Islands (CNMI) is made up of a chain of 14 islands, of which three are inhabited. These islands are Saipan, Rota, and Tinian. The indigenous people are called Chamorros. Another indigenous group, mainly living on Saipan, is the Carolinians. Though there is an indigenous population in the CNMI, the islands are also inhabited by a variety of people from other parts of the world, which include Micronesia, Asia, and America. This mix of different peoples and cultures has created a diverse and colorful social makeup in the CNMI. This diversity is seen most especially in the public schools. As a result, the CNMI Public School System (PSS) is challenged to find ways to meet the needs of all its students.

The existence of learning communities in the CNMI has provided opportunities for teachers to come together and collaborate on a variety of issues related to education. Learning communities were first introduced in 2005. The purpose of the learning communities was to provide a setting for teachers in the various content areas to work together collaboratively. With the introduction of standards-based education in the late 1990s, learning communities were critical in empowering teachers not only to have input into the curriculum, but also to be involved in assessment and activities associated with raising student achievement. Improving curriculum, instruction, and student achievement in the CNMI PSS fueled the activities of learning communities.

Problem

Since the inception of learning communities, 5 years have passed and many changes and critical events have occurred. The standards-based education content area assessments were completed in the 2008–2009 school year and end-of-course

assessments were introduced in high schools in the areas of language arts, mathematics, and science. Scores, though not all are meeting target goals, stabilized and continued to rise incrementally since the inception of Professional Learning Communities (PLC) in the CNMI from 2005. For example, Stanford Achievement Test 10 national percentile rank numbers for complete battery increased steadily. For Grade 3, the national percentile rank number increased from 29 in 2005 to 40 in 2009; for Grade 5, the national percentile rank number increased from 34 in 2005 to 46 in 2009; for Grade 6, the national percentile rank number increased from 32 in 2005 to 46 in 2009; for Grade 8, the national percentile rank number increased from 34 in 2005 to 44 in 2009; for Grade 9, the national percentile rank number increased from 34 in 2005 to 45 in 2009; and for Grade 11, the national percentile rank number increased from 36 in 2005 to 47 in 2009 (CNMI PSS, 2009).

Though these increases may not all be attributable to learning communities, the amount of work that has been committed to making education better for students has increased during the past decade. More than ever, the CNMI PSS has been diligent about ensuring accountability and that research-based strategies and practices are at the forefront of school reform efforts.

DuFour and Eaker (1998) state, "The challenge for educators is to create a community of commitment—a professional learning community" (p. 15). Teachers play a critical role in student achievement. According to Whitaker (2004), in *What Great Teachers Do Differently: Fourteen Things that Matter Most*, it is people not programs that matter. If we want students to do well, it is critical that we have teachers who are committed to their profession. Student achievement is greatly affected by the types of teachers schools employ. According to Scavongelli (2003):

The research is clear that the quality of teaching has the biggest impact on student achievement.…If we want to raise student achievement and close gaps between groups of kids, the most important resource to focus on is qualified teachers. (p. 1)

Therefore, research needs to be conducted on the perceptions of CNMI teachers regarding the degree to which their schools function as PLCs. This study seeks to uncover teacher perceptions as they relate to characteristics of a PLC. The information gained from this study also has the potential to inform school leaders about the degree to which their schools serve as PLCs and to provide information about possible next steps to their school reform efforts.

Purpose Statement

The purpose of this study is to determine the perception of public school teachers on Saipan regarding the degree to which their schools function as PLCs. The concept of the PLC is a framework that the school system, as well as the CNMI community at-large, can embrace and utilize to facilitate positive change and use to begin to create school communities that truly help students become successful. The local island culture has always been a close-knit community, which may have attributes that complement those in a PLC. Therefore, another purpose of this study is to determine the degree to which public schools on Saipan function as PLCs.

Definition of Terms

The following terms are defined for purposes of this study:

CNMI—According to the book *History of the Northern Mariana Islands* (Farrell, 1991):

Geographically, the Marianas are an arc of islands that extends from Guam north to Farallon de Pajaros. They are located at about 145 degrees east longitude and between 13 and 21 degrees north latitude. Politically, the Marianas are divided. The Commonwealth of the Northern Mariana Islands includes all the islands from Rota north to Farallon de Pajaros, a distance of approximately 390 miles. Guam, 120 miles south of Saipan and 37 miles south of Rota, is a separate political entity. It is an unincorporated territory of the United States. (p. 27).

CNMI PSS—The CNMI PSS consists of 20 campuses for children ages 6 to 18. Of these 20 campuses, 12 are elementary schools, three are junior high schools, four are senior high schools, and one is a secondary school in Tinian for Grades 7–12. Kindergarten is offered at all the elementary schools.

No Child Left Behind Act of 2001—The No Child Left Behind Act of 2001 was a new federal law signed in January 2001 by President George W. Bush (Sunderman, Kim, & Orfield, 2005).

PLCs—DuFour, DuFour, Eaker, and Many (2006) state, "When a school district functions as a PLC, educators within the organization embrace high levels of learning for all students as both the reason the organization exists and the fundamental responsibility of those who work within it" (p. 3).

SPSS—Wiersma (2000) states that SPSS is "a commonly used statistical package for behavioral sciences research" (p. 337).

Standards-Based Assessment—The CNMI PSS (2007) states:

The [Standards-Based Assessment] tests are a series of criterion-referenced standards-based tests designed to measure CNMI PSS standards and benchmarks

in Reading, Writing, Math, Science, and Social Studies. These tests measure how

well students are learning related to local content and performance standards.

(p. 4)

Stanford Achievement Test—The CNMI PSS (2007) states:

The [Stanford Achievement Test] 10 is a standardized, norm-referenced test that

reflects the achievement of students in the CNMI Public School System compared

to a national sample of U.S. students. The [Stanford Achievement Test] 10 is

administered to students in grade levels 3, 5, 6, 8, 9, and 11 in the areas of

Reading, Language Arts, Spelling, Math, Science, and Social Studies. (p. 4)

Research Questions

The following research questions are used to address the problem and fulfill the

purpose of this study:

1. What are the perceptions of public school teachers on Saipan about the degree
   to which their schools function as PLCs?

2. Is there a difference among public elementary, junior high, and high school
   teachers' perceptions about the degree to which their schools function as
   PLCs?

3. Is there a difference in public school teachers' perceptions about the degree to
   which their schools function as PLCs based on teachers' ethnicity?

4. Is there a relationship between the public school teachers' perceptions about
   the degree to which their schools function as PLCs and number of years
   teaching?

5. Is there a difference in public school teachers' perceptions about the degree to which their schools function as PLCs based on teachers' gender?

6. Is there a relationship between the public school teachers' perceptions about the degree to which their schools function as PLCs and teachers' age?

Significance of the Study

Education in the CNMI lacks extensive research. This study provides much-needed data for determining how effective PLCs are in the CNMI. In addition, the data collected from this study will help the PSS make sound and data-driven decisions about improving student achievement in the CNMI.

This study provides the much-needed data and knowledge the CNMI PSS is seeking as it continues to invest millions of dollars into improving its schools.

Organization of the Study

This study is organized into five chapters, references, and appendixes in the following manner. Chapter 1 presents an introduction of the study. Chapter 2 presents a review of the related literature examining the concept of PLCs. Next, a discussion of the research design and methodology of the study is presented in Chapter 3. A discussion of the findings of this study is presented in Chapter 4. Chapter 5 contains the summary, conclusions, and recommendations of the study.

Chapter 2: Literature Review

This study's literature review presents DuFour and Eaker's (1998) concept of the PLC, its characteristics, and its members' roles. This chapter covers the work necessary not only to build, but also to maintain PLCs in schools.

Research in education during the past few decades has revealed various factors affecting student achievement. From external factors such as socioeconomic status and parental involvement to internal factors such as school culture and teacher quality, the nation continues its efforts to improve the education system. "Extensive research into the determinants of achievement consistently points to parental income, education, and socioeconomic status as the strongest predictors as to how well a student does in school (Hanushek & Lindseth, 2009, p. 14). Despite the high level of criticism, this work continues at the national level and at the school level.

In order for school improvement efforts to be successful, schools must believe that change must happen from within. According to DuFour and Eaker (1998), until students take more responsibility for their learning, many educators suggest that schools cannot be more productive. In some cases, this may be true, but for the most part, this argument takes the responsibility for student learning away from the school and places it in the hands of the student. DuFour and Eaker state that some theorists argue that the focus of school reform should shift toward improving the children sent to schools rather than on improving educators and schools. If those in the education community believe that the change must happen externally, then efforts to improve the education system are worthless. On the other hand, for those in education who believe that change is possible

and attainable, then the work to be done is achievable. Educators can create the effective schools they are seeking by transforming schools into PLCs (DuFour & Eaker, 1998).

It is nearly impossible to have successful school communities without strong and collaborative relationships. As Wheatley (2005a) writes, "If we deny people's great need for relationships, for systems of support, for work that connects to a larger purpose, they push back" (p. 29). Schools can exist on relationships alone, but for schools to be successful, they must have communities that encourage and support collaboration and have conversations on a regular basis. Schools that learn are necessary in order for the world to improve (Senge, 2000).

Schools alone are merely structures. People in schools make them successful. According to Whitaker (2004) the concept of school improvement is quite simple, but hard to accomplish. Schools can only change significantly by getting better teachers and by improving them in the schools. If we want our schools to improve significantly, then schools must have high quality teachers led by highly effective principals. Hess, Rotherham, and Walsh (2004) state, "Teachers are the key to making schools work" (p. 1).

High quality teachers are not born. They are made. The Educational Testing Service (2004) found that a teacher's most important job includes the contributions and enhancements they make to student learning and achievement. The professional growth of most teachers, who remain teaching, happens over time, which helps improve teachers. If teachers entered classrooms as finished products, they would not be able to become better in order to produce good students. Though not all schools have the luxury of having high quality teachers, the teachers they do have can be mentored and nurtured to

become quality teachers. Darling-Hammond (1999) believes that there is a growing body of research that indicates schools can have an impact on student learning. This impact is a result of teachers, even though it was thought traditionally that schools contributed very little to student learning.

The school has a great deal of influence when it comes not only to hiring quality teachers but to retaining them as well. According to Hanushek and Rivkin (2003), when we think about schools, it is difficult not to consider the importance of teachers. Teachers account for a large portion of a school's budget. Thus, teachers play a critical role in determining school quality. The quality of a school is not only dependent upon high student achievement, but also on the quality of teachers it has. It is not enough to say that a school is successful because of student test scores. Success also is dependent on the quality of instruction students receive as a result of their teachers. Darling-Hammond (1997) believes that to a lesser extent, generally positive influences of small schools and class sizes affect student achievement; studies continue to find that teacher expertise is critical in determining student achievement. When schools have teachers who are knowledgeable about teaching and learning and who work in environments that allow them to know their students, successful learning can take place. Despite all of the many influences and variables that affect student achievement and success, it is important to remain focused on the goal, which is to help all students learn. Hattie (2003) states, "The focus is to have a powerful effect on achievement, and this is where excellent teachers come to the fore—as such excellence in teaching is the single most powerful influence on achievement" (p. 4).

Though teachers have an impact on student achievement, Hanushek and Lindseth (2009) emphasize that even in schools with large amounts of resources, there is no evidence to show schools transforming low achieving students to high achieving students in a systematic manner. The allocation of resources and how school districts spend money is critical to the achievement of students. Hanushek and Lindseth (2009) also state that factors such as the child's ability, parents' education, parent involvement in the education of their child, resources at home, amount of time a child studies, amount of time a child watches TV, motivation of a child, child's health, and other circumstances all contribute to student achievement. There are a variety of factors that affect student achievement, and because school districts spend money on many resources, it is difficult to pinpoint what exactly impacts student achievement. It is unfortunate that throughout the decades, research has not shown a clear connection between student achievement and the amount of money schools spent on education. With the variety of factors that play a role in determining whether a student achieves success, it is important for schools to focus on resources that are at the frontline of student learning—teachers.

Teachers are only part of the big picture. Having a great school leader plays a critical role as well. As with an orchestra, a school needs a conductor of its own—the school leader. With great school leaders leading the best teachers, schools can and will be successful. When this happens, students also become successful. In PLCs, Eaker, DuFour, and DuFour (2002) state that school administrators are perceived as leaders of leaders whereas teachers are perceived as transformational leaders. Every person is a member of a number of many communities, both known and unknown, within society. Schools are also made up of communities. However, as with any community in which

relationships also exist, those relationships must be maintained and nurtured on a regular basis, and this requires a conscious and deliberate effort from those involved in the relationships. Wenger (1998) explains that much work is critical in transforming mutual engagement into a coherent community of practice. "Community maintenance" (p. 74) is an intrinsic element to any practice, but is more visible in more instrumental aspects of that practice. Thus, oftentimes is either undervalued or unrecognized. For educators to come together to work in learning communities, it will take more than just their physical presence in a room. The amount of work that is called for in learning communities does take time, hard work, and commitment. Moving toward creating communities of learning in schools will not only require commitment, but a change in perspective and attitudes. Wiggins and McTighe (2005) call attention to the fact that in order to work smarter, some underlying assumptions and misconceptions about work have to be uprooted. These misconceptions include that schools can accomplish their goals on their own; this work can only be accomplished during teaching time; and that hard work is not only difficult, but takes up too much time. It is time for educators to break down the walls of isolation that have been up for decades. With all the research that exists, it seems that if educators continue to choose not to work together, they will somehow be forced to do it, or eventually be singled out and eventually fade away. "The success or failure of efforts to improve student learning, in the end, resides with teachers" (Wood, 2007, p. 17).

Fortunately, teachers are resilient and continually evolving. Schools that provide support and empower teachers will eventually reap the benefits afforded from PLCs. Stoll et al. (2006b) wrote that support of PLCs comes from the collaboration and focus on teacher and student learning that results when teachers and other members of the PLC

come together to strengthen the system's capacity to raise standards, reach outcomes, and

continue to make improvements that are productive and sustainable. PLCs cannot work

without commitment and a sense of ownership from those involved. Many schools hear

about this new concept of a PLC, but fail to realize, according to Bolam et al. (2005), that

the sense of community is at the center of the idea of the PLC. The focus not only targets

individual learning, but learning as a community—the concept of learning collectively.

Schools must change their perceptions and attitudes about the way they are run.

According to Kozol (2005), new programs promise to transform schools. They come to

schools every year, usually with witty acronyms. Every few years, new and trendy

programs come around that seem to solve all the issues schools face, but like teachers

who refuse to change, many schools refuse to change as well. The National Center on

Education and the Economy (2007) explained that the heart of the problem is that schools

were built for another time when education was needed for workers at the very basic

level. There is no amount of money available at any government level to remedy this

problem. The only way this problem can be fixed is by changing the system entirely.

Change is not easy to embrace, but if schools want to see improvement, change has to

occur and the change must first begin from within.

Concept of the PLC

The concept of the PLC has evolved throughout the past several years. Senge

(2000); Louis, Kruse, and Associates (1995); Hord (1997); Wenger (1998); DuFour and

Eaker (1998); and Oxley (2004) have been instrumental in the development of the PLC

framework as it currently exists. From Senge's learning organizations to the more recent

culturally proficient learning community (D. B. Lindsey, Jungwirth, Pahl, & Lindsey, 2009), the learning community concept continues to evolve.

Senge (2000) states, "What do people need communities to be?"(p. 459). This is the deeper question we need to all ask ourselves. It may take a village to raise a child; however, our surroundings have expanded from this simple concept. Villages are made up of several communities. Within these communities we have those who acknowledge their responsibilities and those who do not. Transformation takes place "not from the top down but from the inside out" (p. 461).

When a community—a school community—can recognize its role among the other communities in a village, change can begin to occur. According to Senge (2000), possibilities can only materialize when schools can begin to see that other groups that have an impact on the lives of children are valuable and when these groups can begin to see the value and connections of schools. As the global landscape shrinks, it is important that we recognize that teachers cannot teach in isolation and schools cannot be run in isolation. Blankstein (2004) affirms this by stating that "Collaboration is not natural or common in the traditional school environment. For generations, teachers characteristically closed the classroom door behind them and acted as independent monarchs in their own domains, expecting neither oversight nor support from their colleagues" (p. 137).

Making connections and reaching out to other members of the community to be a part of this transformation is the first step in expanding the school community. The importance of making connections is critical in increasing the mental model disciplines and team learning, which can also ensure the institutionalization and expansion of those

disciplines. This occurs when schools moves beyond seeing communities, but also helping communities find that voice (Senge, 2000). PLCs can be the vehicles that make connections and reach out to other members of the school community. The involvement and participation of those not in the regular educational setting may be a challenge for some schools, but for PLCs to be effective, these challenges must be overcome.

For effectiveness to be sustained on a long term basis, intrinsic motivation must be activated as well as internal commitment from a majority of the members of the professional learning community (Fullan, 2001). Conversations, connections, and partnerships are an integral part of the PLC. Louis et al. (1995) discuss turning schools into learning organizations in their book *Professionalism and Community: Perspectives on Reforming Urban Schools*. The authors wrote that creating learning organizations in schools entails creating schools in which all teachers and colleagues learn together. It is not focused on finding teachers who have the energy and skills to teach schools in urban settings, on matching students and teachers, nor the improvement of teacher skills. It concentrates on creating learning organizations in schools. Because teaching can be quite an isolative profession, it is not always easy for schools to build strong collaborative cultures. It usually requires effort on the parts of the school leadership and its faculty to build collaborative relationships with one another.

The Alberta Education (2006) Web site states that although school and district leadership is important in establishing and maintaining PLCs, the conception of leadership is moving away from leader-centered to leadership capacity, and the discussions surrounding collaborative cultures as well as building capacity and the process of change is being connected with leadership capacity. Principals as instructional

leaders are moving toward the role of a participants within a community of learners and leaders. If this can be a challenge for schools, then one can imagine the challenge schools face when expanding this into the outside community. According to Louis et al. (1995) "Many urban settings display fragmented values concerning education and, in particular, are more likely to exhibit distance or even antagonism between the professional values of teachers and the concerns of parents and community members" (p. 7). Though there are often disconnections between schools and the outside community, connections can be created or even repaired with PLCs. Posnick-Goodwin (2007) confirms that when educators work toward creating a school setting that encourages cooperation, support emotional and professional growth through teamwork, and reaching goals together and not in isolation, PLCs can change how teaching and learning occurs. Successful PLCs in schools focus on a collective rather than an individual philosophy about student learning. In every area of education, collaboration and cooperation are critical to sustaining and maintaining those who make the biggest impact on student lives—teachers.

Engaging educators in common conversations about instruction and teaching is the network that lies at the center of PLC teams (Louis et al., 1995). The role of the school leader in a PLC does not change but is enhanced. For change to occur, there must be a driving force behind that change. The force can come from an individual teacher or a group of teachers, but in most cases, the force is the school leader. According to Louis et al. (1995), "'*Leading from the center means being at the center'*. In some cases this meant a physical presence, including a change of office; in others, being present in the classrooms and halls" (p. 212). The impact of a strong school leader can make the difference. The impact of a strong leader who leads from the center can be seen in the

actions of successful school leaders. Principals must put in place a clear vision for schools and communicate this vision with each teacher. Each teacher must be held responsible on a personal level for the enforcement of this vision. High expectations mean nothing if they are not enforced in the classroom (Carter, 2000). Leading from the center sets everything in motion. In addition, the principal then personally monitors the performance of each child on a regular basis. Once everything is set in motion, the principal has set the school on a path to success.

According to Hord (1997), change that takes place in schools relies heavily on the school leaders' role and influence, thus determining whether change occurs. Change at the school level can oftentimes be difficult to achieve. This is why it is vital for all stakeholders to be involved in the process of change. In learning communities, everyone is a learner. In order to achieve this, a community of teachers dedicated to a learning, caring, and inquiring environment must be created.

The work of the Center on Organization and Restructuring of Schools shows that schools can improve student learning by creating a design that is comprehensive and decentralized, and in which decision making is shared, school communities are within schools, teachers team teach, and/or faculty members are involved in PLCs (Hord, 1997). Schools are inherently their own communities. For schools to become communities of learning there must be a deliberate effort from everyone at the school site. Not only is this necessary, but the effort must be supported by practice. According to Wenger's (1998) *Communities of Practice: Learning, Meaning, and Identity*, "Even in a setting so historically and institutionally determined, communities must tune their practice constantly in their attempt to get the job done" (p. 94).

The field of education continually faces a never-ending challenge of constant change and improvement. This is why educators must constantly fine-tune their practice to meet the changes that occur in education on a regular basis. Not only are the practices in education changing, but the clientele is ever changing as well. When we participate in the practice, the very ways in which we participate contribute to the development of that practice (Wenger, 1998). If we want our schools to be better, our practices must improve as well.

Though there are several different concepts of the PLC, there are similar characteristics that exist in all of them such as: (a) something shared (i.e., values, vision, goals), (b) collaboration at different levels, (c) support, and (d) interaction. D. B. Lindsey et al. (2009) share that PLCs change the way we communicate, deliberate, act, and connect with a diverse group of people because PLCs help us personalize and deprivatize our practices and the way we act. By looking at the concept of the PLC, the engagement and interactions necessary for building strong communities become natural and will eventually become an inherent characteristic embedded in the culture of the school. According to Wenger (1998), communities of practice are part of the rest of the world and cannot work in isolation. Schools that work in isolation will eventually destroy themselves from the inside out.

Characteristics of the DuFour and Eaker PLC Model

DuFour (2004) writes:

The professional learning community model flows from the assumption that the core mission of formal education is not simply to ensure that students are taught

but to ensure that they learn. This simple shift—from a focus on teaching to a

focus on learning—has profound implications for schools. (p. 1)

It is important for schools to consider the ways students learn and to know how to go

about accommodating to the way students learn. When schools focus on learning rather

than teaching, they are truly fulfilling their responsibility to ensure that all children learn.

Educators create and support collaborative cultures when they can realize that they must

work as a team to learn as a PLC (DuFour, 2004).

The PLC model, as described by DuFour and Eaker (1998), consists of: (a) shared

mission, vision, and values; (b) collective inquiry; (c) collaborative teams; (d) action

orientation and experimentation; (e) continuous improvement; and (f) results orientation.

This model is similar to other conceptions of PLCs.

Shared mission, vision, and values. Wenger (1998) refers to learning as "social

participation" (p. 4). Participation, whether voluntary or acknowledged, is still

participation. If participation is neither voluntary nor acknowledged, then conflict can

arise. Conflict can be a result of a lack of understanding or communication among the

participants. Building a PLC requires a sense of community. The main role of principals

and other school leaders is to ensure that everyone is focused on the school vision and

that teachers have the resources they need on a daily basis to create successful PLCs

(Louis et al., 1995). Keeping a school community focused on the big picture calls for

schools to embrace a mission, vision, and values shared by everyone at the school site.

What sets a regular school and one with a PLC apart is the PLCs commitment to the

school's values that speak to the beliefs and the outcomes the school is working to

accomplishing (DuFour & Eaker, 1998). More important, when schools do not have a

vision that is compelling, it can be an obstacle in their quest for school improvement. Those who have the desire to build their capacity to create a PLC cannot disregard this critical piece of the foundation. Adopting a shared vision, mission, and values framework unites the school community, thus providing direction for all those involved in school improvement efforts.

Without a common vision, schools do not have signposts guiding them toward the same goals. Wheatley (1999) discusses the importance of shared beliefs in school communities. According to Wheatley (1999), people are motivated to connect with one another and build relationships when they have beliefs and desires that they share. What happens instead is people live within the same community but fail to build these relationships. They do this by creating boundaries, distancing themselves from one another, being protective of themselves, and utilizing power and politics to meet their needs. Without shared beliefs, school communities just coexist. Schools change because people change schools. Schools do not change by themselves (Maeroff, 1993). It takes people and not programs to change institutions. With changes, people come together to decide on what the changes will be and how they will reach desired results.

Collective inquiry. In addition to keeping a focus on vision, mission, and values, collective inquiry is critical to the success of PLCs. DuFour and Eaker (1998) defined collective inquiry as "The engine of improvement, growth, and renewal in a professional learning community" (p. 25). It is the process of inquiry that engages people in meaningful discussions about school improvement. New relationships and ideas emerge when both the school and its community not only understand the importance of this connection, but acknowledge each other as partners in the process of change and school

improvement. In such a community of learners, results are reflected as part of the practice through unyieldingly questioning the way things are run and continually searching for and testing innovative methods (DuFour & Eaker, 1998).

For schools to be communities of learning, a practice of lifelong learning must be encouraged and enforced on a regular basis. One such example includes teaching students to examine their own data and set learning goals based on this data. When teachers show students how to set realistic life goals, students will be able to make sound decisions based on the data they collect and the information around them. Leaders must engage people in solving problems that affect them. When leaders do not engage people in this process, the people do not appreciate the leaders for taking on this load. What they do instead is distance themselves, become very critical of the leader, worry, and talk behind the leaders' back. Because the leaders did not involve people, the people distrust their leaders or their leadership abilities (Wheatley, 2005b). Collective inquiry thus allows for teachers to collaborate and discuss issues they face. When school leaders build strong relationships with faculty members, trust is also developed. School leaders are constantly faced with decisions related to solving problems. They can choose to handle problems on their own or to enlist the help of their teachers. When teachers feel the trust bestowed on them from their principal, teachers become empowered. The relationships that exist among educators in a school reflect the relationships within the culture of the school. These relationships are telling and can determine how each person can either strengthen or weaken the lives of the others, thus having the same positive or negative effect on the school (Barth, 2006).

Collaborative teams. Collective inquiry is the means by which collaborative teams develop their skills and broaden their ability to seek new solutions to existing problems. Teams in PLCs are collaborators. To collaborate effectively, teachers need time. Time dedicated for teachers to solve problems or share strategies must be allotted during the work day and not during lunch breaks or on weekends (Symonds, 2004). Collaborative teams in PLCs share a common mission, vision, and values. Collaborative teams guarantee organizational growth will occur. The learning that occurs that engage people in the collaborative teams is what creates momentum and fuels the energy that drives improvement (DuFour & Eaker, 1998).

DuFour and Eaker (1998) also emphasize that when teachers engage in dialogue that is reflective, participate and provide feedback on each other's teaching practices, work as a team to create curriculum and assessment, work collaboratively in planning and implementing programs and strategies, collectively plan lessons and materials and solve problems, and participate in action research and participating in the school improvement process, the chances of effectively sustaining and transforming a school into a PLC are increased. It is the responsibility of the school leader to provide a framework and the opportunity for teachers to collaborate. Teacher participation is also a critical part of this process. If schools do not provide opportunities for teachers to collaborate, teacher participation will not increase. It is unfortunate that teachers still teach in isolation and schools continue to face the challenge of building a collaborative school culture because this isolative environment is still so ingrained in the school culture (DuFour & Eaker, 1998). Collaboration continues to be a challenge in many schools. Getting teachers to talk

in a professional and academic setting can be a challenge as well. Fortunately, through vehicles such as PLCs, the walls will eventually come down one block at a time.

Through the framework of learning communities, walls dismantle and conversations and collaboration between teachers are possible. For PLCs to be successful, they cannot be imposed or mandated by school administration. Teachers and community partners must buy into this concept. Anderson, Herr, and Nihlen (1994) believe that when educators can create their own knowledge and not buy into other people's knowledge, empowerment can truly begin. Educators must commit to ensure that they continue to empower themselves and their students. Special interest groups and other outside influences will continue to affect the decisions made on behalf of students if empowered educators do not take control over school improvement efforts. Those who are involved in their own action research will be supported by these efforts. PLCs are not programs—they involve people and relationships. Success in schools depends upon the strong leadership and the relationships that exist among the school faculty.

According to Barth (2006), being empowered, recognized, satisfied, and successful are not only a rare commodity in schools, but can only be achieved through active participation within a knowledgeable group of teachers—a group of professionals. One cannot be empowered, recognized, satisfied, or successful in one's work by being a master teacher, principal, or student, no matter how successful or smart the person is, this can only be accomplished among a group of people. School leaders cannot change schools on their own. By empowering others such as teacher leaders, change can happen at all levels. People who realize that they are not alone feel better and can motivate themselves to do better. Relationships can move from informal and relaxed interactions

to stronger interactions that are dedicated to accomplishing the same tasks. Individual needs begin also to include the motivation to include and help others to improve practices (Wheatley & Frieze, 2006). Once ignited, empowerment can spread like wildfire. People want change. Oftentimes, people need to know that they are not alone and that others want the same thing. Langer and Colton (2005) state that teachers are empowered when inquiry is part of their experience and this allows for them to be eager to make a difference and to be actively involved in school policy decisions as well as school improvement efforts.

Collaborative teams made up of eager and energized teacher leaders can make all the difference. Because teachers have direct and face-to-face contact with students on a daily basis, they can be empowered to conduct their own investigations to get some answers that may have surfaced through the collective inquiry processes in their learning communities. One way to empower teachers is to encourage them to conduct action research and share their results with the other teachers (Hall, 2005). Encouraging teachers to be their own researchers also allows them to collect data and make decisions with regard to instruction or other classroom-related issues that may arise.

Action orientation with experimentation. With vision come the actions that transform the vision into reality for people within PLCs. DuFour and Eaker (1998) believe that PLC members can transform dreams into action and a vision, thus transforming dreams into reality. Learning communities not only encourage conversations to take place, but they spur actions to occur as a result of these conversations. Teachers then begin to realize that taking action allows for learning to occur and their participation and involvement in the experience makes them the best

teachers. When teachers actively participate and engage in learning communities, changes can begin to occur at the school site and eventually in classrooms.

By making it a priority for schools to move towards implementing a PLC, this is the first step towards transforming a school into a PLC (Eaker et al., 2002). By focusing on first things first, school leaders will be able to build PLCs. When building PLCs, it is important to focus on four priorities: (a) Learning; (b) Collaborative culture; (c) Results; and (d) Provide timely, relevant information.

When principals focus on learning, some actions that begin to take place include developing systematic strategies with faculty members to ensure any student who is having difficulty learning is given more time and support during the school day. Another action that impacts student learning directly is creating a peer tutoring system that allows students to be paired up with a buddy at the school site to serve as a mentoring system. These strategies can only serve those who need it the most if they are not only embraced by the principal, but the faculty members as well. According to Keller (2007), schools must first put the right people in place. Once this is accomplished, successful systems can help them become first-rate teachers by providing opportunities for them to learn from one another, coach them to improve classroom practices, and develop leaders into effective and skilled instructional leaders. Change takes time and collaboration and conversations take time, but in the end, with everyone's commitment and effort, these changes will have an impact on student achievement and school success.

Continuous improvement. Change is a process and no change ever happens overnight. Just as with the examples above, these changes can only occur as a result of collaboration and conversations among school leaders and faculty members. For a school

to commit to change and school improvement, much patience and persistence is critical. DuFour and Eaker (1998) continue to emphasize that at the heart of the PLC is the continued dissatisfaction with the way things are and the never-ending search for something better. PLCs consist of the relationships among people who care about becoming better and being successful. Through these relationships, people grow, and with this growth comes change. According to DuFour and Eaker (1998), there are several key questions that surround this improvement process: (a) What is our fundamental purpose?; (b) What do we hope to achieve?; (c) What are our strategies for becoming better?; and (d) What criteria will we use to assess our improvement efforts? A PLC is not fixated on maintaining but more centered on sustaining—it is not concerned with maintaining the status quo, but rather has a continuous dedication to improving an important way of life.

Educators are required to meet a whole range of requirements in order to ensure student success and high student achievement. This may not come so easy for many educators. A large percentage of teachers feel that teaching is not just difficult, but impossible. If schools continue to run based on traditional practices, then for those who feel teaching is impossible this becomes a reality. Teachers who continue to teach in isolation will continue to feel inundated with the many needs student have and, at the same time, with trying to teach all content areas. In addition, with the limited allotted time to cover the curriculum, oftentimes, there is also a lack of outside support, which can provide more stress for teachers (DuFour et al., 2006). The education profession is an unending and untiring profession. The impact and influence teachers have on students is immeasurable in some sense of the word, but when it comes to measuring this in relation

to student achievement, the story then is a different one. According to Rothstein (1997), if personal stories and experiences are not reliable forms of evaluating schools, then the best way to determine if schools are better off than they once were is to develop tests that can measure student achievement accurately. Schools can use these tests to compare past student achievement with present student achievement. By looking at test scores, schools are able to create measurable goals and objectives to determine success. The use of data has become a daily part of the conversations and discussions in schools all across the nation. Because data have become so much a part of the school culture, teachers tend to focus on assessing student learning and thus tend to forget to assess what is taught and determine its worth (Giessman, 2009). Continuous school improvement efforts are important to improving student achievement, but it is also necessary for those who make these important decisions also to remember that in the end, we must fix what is broken and not mess with what works.

Schools that are successful in advancing the learning of students also have teachers who are knowledgeable and skilled in teaching (Sergiovanni, 2000). The data that schools use to determine success should be used in ways that will inform teachers so that they are able to make wise decisions that will directly affect the activities that occur in their classrooms. For example, Ivey and Fisher (2006) state, "If schools are going to make a difference with struggling readers, then they must make it possible for the best teachers to get up close and personal with those readers on an individual level" (p. 73). This can only happen if schools provide the data to teachers who need to know what intervention strategies are needed and what resources are available for this type of

involvement to take place at the school site. If teachers do not have the data to support instructional decision making, then the individual needs of students will not be met.

The role PLCs play in continuous improvement is only as effective as their participants. Stoll et al. (2006a) wrote:

Three ways to determine the effectiveness of a PLC: 1) Its ultimate impact on pupil learning and social development; 2) Its impact on staff morale and practice, and potential for developing leadership capacity; and 3) The characteristics are in place and processes are operating smoothly—part of "the way we do things." (Slide 6)

When PLCs work and are run efficiently by committed individuals, the amount of time and effort pays off through increases in student achievement and learning.

Results orientation. DuFour and Eaker (1998) ask, "How can we get the best results? The answer to that question lies in empowering teachers through collaborative processes that provide them with authority that is commensurate to their responsibility" (p. 153). Schools are built on relationships, but not all schools are learning communities. Most schools hardly resemble learning communities (Senge, 2000). In schools where PLCs are successful, every person in those schools is fully aware of how powerful data can be in making the critical decisions pertaining to student achievement and school improvement. According to DuFour and Eaker (1998), schools will continue to grope in the dark if their initiatives do not subject them to assessment that is ongoing and based on results that are tangible. School improvement initiatives must be purposeful.

Some ways in which schools can become more results oriented is by establishing a clear vision for school-wide data use, providing supports that foster a data-driven

culture within the school, and developing and maintaining a district-wide data system. DuFour and Eaker (1998) emphasize that continuous improvement must not focus on intentions but on results. Many schools have dreams and visions of how they want to be successful, but it is only through the use of hard facts and data that these dreams and visions become a reality.

For these dreams to become a reality, the vision must be realistic and attainable. According to R. B. Lindsey, Roberts, and CampbellJones (2005), the mission, vision, and core value statements should guide and provide a purpose to the school's or district's real work. Oftentimes, the mission, vision, and core value statements reflect the requirements of an outside influence. PLCs are driven by a vision. When those involved create a vision that is realistic to them, then decisions about anything and everything will be more focused and meaningful. In such instances, when schools focus on exactly what they want to do, the focus remains. By using the inquiry method, teachers become engaged problem solvers. Collaboratively, they work on designing lessons and improving their teaching performance. When student achievement rises steadily, they continue to set small goals incrementally, still focusing on results (McEwan, 2003). The term results-driven becomes real for teachers and the process becomes clear and the data become manageable. This is when teachers can begin to see incremental changes in the work that they do.

Transforming Schools Into PLCs

Schools are under extreme pressure to hold themselves and their teachers accountable for student achievement. Schools are expected to ensure learning and offer not just an education (Hord, 1997). It is not sufficient anymore for schools to educate

children. It is imperative that we not only educate children but that these children learn. D. B. Lindsey et al. (2009) continue to support the implementation of learning communities because PLCs can personalize schools and deprivatize the practices and actions that help change the way individuals communicate, deliberate, and work with a diverse group of people.

PLCs break down the walls that isolate teachers from other teachers. They allow for schools to have real conversations that impact student learning and allow for deeper and oftentimes difficult conversations to take place. What a tragedy it is for most that school does not provide opportunities to have a place to deepen their understanding of who they are and what their commitments are. What a lasting impact it would have if it were (Senge, 2000). Once teachers can wrap their heads around the importance of collaborating and working together toward the same goal, only then can change occur. DuFour and Eaker (1998) continue to emphasize that if educators want to create schools that are more effective, they must transform schools into PLCs. Professional development opportunities can aid in the transformation process. These events can be the springboard for this transformation. Because teacher quality is an area of concern for many schools, providing professional development to address this concern can sprout the beginnings of a PLC. Hunt and Kean (2008) wrote:

> A recent study by McKinsey & Co. of education in industrialized nations found that the top-performing countries put a premium on high-quality teachers: They select teachers carefully, pay them well, provide ongoing training and support, and give them time to work together. (p. 36)

Though professional development is critical, it is also important to have quality

professional development opportunities for all educators—from teachers to principals. Principals who are focused on the improvement of teacher knowledge, skills, learning community, program consistency, and resources are at the center of school capacity (Fullan, 2002). Learning is a lifelong process, and in the education profession, trends and practices change regularly. Educators must be on top of their game and always be equipped with the knowledge and tools that are current in order to meet the needs of all students. Maeroff (1993) believes that there is usually one of two paths that attempts to transform teachers into change agents: a teacher attends a workshop alone or the whole school faculty attend an in-service session together.

Inservice training and professional development for teachers is part of many school improvement processes. Unfortunately, not all professional development enhances teacher quality. By creating school environments that are conducive to not only student learning, but teacher learning, PLCs can improve how professional development is planned and executed. Transforming schools into PLCs requires a shift in the perceptions and attitudes about schooling. According to Eisner (2002), it is not the university, but the school that is the true center of teacher education. This statement is based on the belief that teachers are not final products of a university when they complete their education at 21 years of age.

Through the work in professional development events, teachers can begin to look at using the PLC model to address other concerns or activities such as sharing best practices and looking at student work. This is important for teachers to collaborate on because students who have more effective teachers succeed in school compared to those who do not. According to Izumi and Evers (2002), "When a student has experienced an

ineffective teacher or a series of ineffective teachers, there is little evidence of a

compensatory effect provided by experiencing more effective ones in later years" (p. 17).

In addition, ineffective teachers cause and compound negative learning consequences for

students when the frequency of ineffective teachers increases. Transforming schools into

PLCs may take some time and some facilitation on the part of the principal or teacher

leader, but it can happen. Principals play a critical role in the success of the

transformation.

      Role of the principal in a PLC. A weakened or negative impact on student

achievement is likely to occur as a result of changes such as leaders acting as if they are

effective leaders, but fail to guide their schools toward making the changes correctly

(Waters, Marzano, & McNulty, 2004). Just as teachers need to acquire skills and

knowledge to improve their craft, school leaders also need to acquire skills and

knowledge to improve their leadership capacity. PLCs are only as successful as their

leadership. The collaborative activities in PLCs are empowering and have the capability

to nurture teacher leaders as well. Wheatley and Kellner-Rogers (1998) state:

> If we engage with colleagues to share perceptions, if we expect and even seek out
>
> the great diversity of interpretations that exist, we learn and change.…We need
>
> each other's best thinking and most courageous experiments if we are to create a
>
> future worth wanting. (pp. 10, 16)

Sharing expertise, making decisions based on data, and exchanging best practices and tips

are all part of the activities that occur in PLCs. Principals who make it a priority also to

nurture these activities allow for teachers to be part of the school improvement process.

According to the Center for Comprehensive School Reform and Improvement (2005),

second to the strength of classroom instruction is the contribution of leadership. With the full support of the school principal, teachers are able to make decisions that affect their students and improve their instructional skills and practices.

According to the National Association of Secondary School Principals Bulletin (2001), in the comprehensive school improvement process, the school principal is the most important player The school principal's ability to facilitate change determines how successful a school is in implementing change. The models of behavior of PLCs are the leaders. They uphold the vision of the school culture and keep it alive and real (Hord, 1997). It is through this vision that school principals involve faculty members in making the vision become a reality. School leaders should lead and facilitate change successfully, but according to Eaker et al. (2002), schools do not improve on wishful thinking and good intentions. Schools can only improve if they can become schools that are results oriented and data driven. DuFour and Eaker (1998) state, "To have the greatest impact, principals must define their job as helping to create professional learning communities in which teachers can continually collaborate and learn how to become more effective" (p. 184).

The DuFour and Eaker (1998) PLC model outlines that school principals can be effective in building PLCs by: (a) leading through shared vision and values rather than through rules and procedures; (b) involving faculty members in the school's decision-making processes and empowering individuals to act; (c) providing staff with the information, training, and parameters they need to make good decisions; (d) establishing credibility by modeling behavior that is congruent with the vision and values of their school; and (e) being results oriented.

When principals have the ability to bring people together, the work of building a PLC is partially accomplished. The extent to which a school's image is a reflection of the needs and desires of its students, teachers, and parents is a strong indicator of a good school (Sergiovanni, 2000). The real work takes place when the members of the PLC collaborate and make decisions. According to Eisner (2002), it takes a lifetime to learn to teach well. Growth in understanding and skill in teaching only dies when we do. It is vital that school leaders and teachers come to the realization that ultimately the work to improve schools is in their hands. According to Bolman and Deal (2003):

> When managers cannot solve problems, they hire consultants…For all their sage advice and remarkable fees, consultants have yet to make a significant dent in pressing problems plaguing businesses, public agencies, military services, hospitals, or schools. Sometimes consultants are more hindrance than help. (p. 9)

In this day and age of consultants and overwhelming amounts of information available at our fingertips, it is not surprising that many schools hire pricey consultants to do much of the work that ultimately is their responsibility. In many instances, the goals and objectives of the work that needs to be done are left uncompleted or interrupted.

This is one of many reasons it is important for principals to be able to facilitate PLCs in a way that will be productive and worthwhile for its members. In order to avoid spending large sums of money and energy on school resources and initiatives aimed at school improvements that lead nowhere, this responsibility must be executed effectively (Marzano, Waters, and McNulty, 2005). The role of school leadership is critical and the right decisions and actions can make a world of a difference.

Role of teachers and paraprofessionals in a PLC. The role of teachers in a PLC is to ensure that students learn. Teachers must bring to life in their classrooms the principals of the PLC (DuFour & Eaker, 1998). The principles of the learning community must be conveyed seamlessly into the classroom as well. According to Oxley (2004), by devoting time to advising students, curriculum planning, and collaboration of teachers when solving problems and teacher preparation, small learning communities can be successful. Excuses of not having time to plan or work collaboratively should be a thing of the past. School leaders and teachers must not be part of the problem anymore, but rather leaders of change and transformation in schools and classrooms. Louis et al. (1995) state, "Teachers within professional communities practice their craft openly" (p. 31). In PLCs, information is shared and successful practices are shared—anything to improve student achievement is shared. From the beginning of implementing a PLC, teachers become aware of the inconsistencies that arise between their level of commitment to student learning and the level of strategies they have coordinated to ensure learning for those students who do not learn (DuFour, 2004). Teachers who work in PLCs collaborate not only to close achievement gaps, but to close gaps that exist within their own profession as well.

Teachers who are part of a PLC are part of a collaborative team that uses data to make decisions that impact student achievement. For example, a team of third grade science teachers can meet to discuss creating a rubric for their students to assess their proficiency in the skills they would need for fourth grade. As the students are assessed, the teachers are able to set appropriate goals for students to reach as they are assessed. This is just one of many ways teachers can work collaboratively in PLCs.

According to the Abell Foundation (2001), "The importance of good teaching to the academic success of students is intuitively obvious to any parent and is well substantiated by a body of sound research" (p. iii). When parents and teachers work together for students, student achievement increases. PLCs provide the opportunity for collaboration at this level to occur when it does not occur in the classroom. When teachers are provided many opportunities for collaboration and learning, their commitment to their students and sense of freedom continues to grow and develop (Blase & Kirby, 2000). Just as critical to the teacher role is the role of the paraprofessional. With the increasing demands placed on teachers, the role of the paraprofessional also becomes more demanding. The California Department of Education's (2007) Paraprofessional Teacher Training Program states that professional career ladders, which are meaningful and lead to more responsibilities for paraprofessionals, and the certification of teachers are valuable and should be established in every district. The collaboration between teachers and paraprofessionals is vital to the implementation of successful PLCs in schools.

The role teachers and paraprofessionals play in a PLC also involves professional growth—professional growth not only on a personal level, but on a collaborative level as well. According to the National Center for Education Statistics (1999), high quality teachers must be lifelong learners and relearn their trade if they want to meet the ever-changing demands of their profession. There are just too many requirements and demands that have resulted in recent school reform efforts. Teachers and paraprofessionals are, more than ever, being asked to play an increasing role in the classroom and at the school level. Farkas, Johnson, and Foleno (2000) state that as the

momentum to improve academic standards and student achievement grows, the focus on teachers becomes more apparent and unavoidable.

Role of parents and community partners in a PLC. As mentioned in this study's introduction, the communities in the CNMI are very close-knit. The issues the school communities face, most especially in the secondary schools, are like those across the nation—issues related to parent involvement as well as the involvement of community partners. According to DuFour and Eaker (1998), parent and community partner involvement are generally higher in the elementary schools and begin to dwindle at the junior high level and almost disappear at the high schools.

According to a Pacific Resources for Education and Learning study (as cited in Onikama, Hammond, & Koki, 1998)*:*

> Numerous barriers to family involvement are embedded within the process of schooling. In some islands, the responsibility to involve parents is assigned solely to the principal. If the principal has a positive relationship and communication rapport with parents, it is likely that there will be strong parent participation in school affairs. If the school administrator places a low priority on parent involvement or does not communicate well, parents and family members may be made to feel unwelcome and unwanted at the school. (p. 11)

Taking sole responsibility for involving parents can be quite a daunting, if not an impossible, task. In a community where everyone knows one another, it might be safe to assume that involving parents is easier compared to other school communities. Sadly, this is not the case. Onikama et al. wrote:

In general, teachers and school administrators do not know how to increase parent involvement and do not know how to capitalize on their own cultural backgrounds in classrooms and in dealings with families. As a result, families may become isolated and distanced from schools…Unfortunately, this type of training is usually not included in teacher training pre-service programs. (p. 11)

Learning how to involve parents in their children's lives in school has to be taught and part of professional development. It is not only building strong relationships with parents that is the key to increasing parent involvement in schools, but also providing the knowledge and tools so that parents can be empowered to be a part of their children's lives in schools. Onikama et al. (1998) wrote:

The highest level of involvement and empowerment is achieved when parents are able to set policies and influence decision making at their schools. The likelihood that parents will participate at this level increases when they have acquired the knowledge, confidence, and sense of belonging required for effective involvement. (p. 15)

PLCs also involve parents and community partners. Increasing student achievement and improving schools is everyone's responsibility. Onikama et al. (1998) states, "Because public school is not an inherent part of the traditional culture, parents may see themselves as outsiders rather than stakeholders in the school" (p. 10). Involving parents in PLCs empowers them to take ownership and responsibility for their children's education. Through collaborative inquiry, parents are able to work with other parents and educators on increasing student achievement. "The goal of empowerment is not to 'change' people, but to provide them with tools to better enable them to manage their lives" (p. 15). PLCs

also involve empowering—empowering teachers, parents, and community partners in a collaborative effort to improve schools—in the CNMI and in schools across the nation.

There is no doubt that parents play an integral part in the education of their children. It is only through the involvement and support of parents that anything can be successful in schools. According to Senge (2000), particularly in low-income communities where parents usually feel isolated from school, parents can play key roles in the implementation of learning initiatives. Relationships among schools and parents and teachers and parents are critical elements not only in student success, but success in PLCs. Because PLCs call for collaboration and inquiry, it is necessary for parents to be part of not only the collaboration, but in the conversations as well.

Teachers who are a part of PLCs discuss data and share information that can help others connect with parents and community members. The partnerships that develop from PLCs strengthen relationships and the communication that is vital between home and school. The more information that is shared, the better off everyone is. Schools with learning communities recognize the power of parent partnerships that are effective and will create strategies aimed at strengthening that partnership (DuFour & Eaker, 1998).

Professional staff development in PLCs. According to the Annenberg Institute of School Reform (2004), effective professional development "mirrors the kind of teaching and learning expected in classrooms" (p. 3). The way staff development is conducted is different in PLCs. Teachers are not sitting in rows listening to experts in their field. Teachers are the experts in their field sharing successful practices. Workshops are not where the best staff development occurs, but it is best in schools where teachers congregate to work, learn, and share with one another (Eaker et al., 2002). An example

can include when a group of teachers attends a conference. When the teachers return to their schools, they can provide professional development to their colleagues based on the information they received while attending the conference. When teachers are empowered with information to share with one another, learning takes place that is not only meaningful, but relevant as well.

It is through these types of interactions among teachers that real learning and growth takes place. D. B. Lindsey et al. (2009) state that merely existing as a PLC does not guarantee an improvement in student achievement. Collaboration and conversations among educators will definitely have an impact in classrooms. In order for staff development to be successful, the support needed for the change that is desired must come from the organization (Senge, 2000). As long as teachers are meeting with each other and having successful discussions about improving student achievement and ensuring that students learn, schools will be in a better place.

Improving student achievement through PLCs. The traditional school model will eventually be a thing of the past. The changes that have taken place in the last decade will force schools to reorganize and revisit the concept of school. Senge (2000) believes that schools have to prepare people for today's world and not the world that existed 20 years ago. Teachers who teach in isolation will teach in collaboration, and leaders who lead from power will lead to empower instead. PLCs will be the vehicle that will carry the load of the many changes that will have to take place for schools to transform into 21st century schools that truly teach 21st century skills to all students.

Teachers can also help empower students by using teaching strategies that directly impact the learning experiences of students. Silva (2008) states that for optimum learning

to occur, basic skills and complex thinking skills must be taught together. Teachers can also create learning activities that not only prepare students, but are relevant to their own experiences. When students learn how data impacts decision making, students will be empowered even more to utilize assessment measures throughout high school so that they are aware of the extent to which they are prepared for college or a career. This data will also assist students in overcoming any obstacles or areas of improvement as they are identified. It is not enough anymore for schools to provide merely information to students; it is critical that students are empowered to use this information effectively in order to make informed and wise decisions for themselves. According to DuFour (2004), in a PLC, teachers will be able to,

> …identify strengths and weaknesses in student learning and begin to discuss how they can build on the strengths and address the weakness. The entire team gains new insights into what is working and what is not, and members discuss new strategies that they can implement in their classrooms to raise student achievement. (p. 4)

This will result in teachers guiding students in a manner that will empower them to help themselves through the use of data. Collaborative conversations must occur at all levels for schools to improve. For schools to improve, they must ensure that everyone belongs to a team that focuses on student learning.

The Institute of Education Sciences produces the Institute of Education Sciences Practice Guide regularly. These practice guides cover a range of topics from intervention strategies to improving schools. The guides provide a framework for schools based on recommendations derived from an expert panel and research studies. According to the

Institute of Education Sciences: National Center for Education Evaluation and Regional

Assistance (2009a), the recommendations are action steps and can be used to address

obstacles schools may face in the process. Additionally, these recommendations should

be implemented as a whole and not individually when adopting a framework. Working

together in collaboration is the key to school success.

PLCs can facilitate improvement efforts in such critical areas as instructional

decision making and in empowering and helping all students succeed. Student

achievement relies on good instruction and student motivation. When instruction fails and

when students are not motivated, no learning can occur. Mendler (2000) states that it is

teachers' responsibility to educate all students and make every effort to motivate even

those who do not seem to care. Reaching all students and meeting their individual needs

is vital to increasing student achievement.

School communities must learn to evaluate themselves, make judgments, and

determine how to get education back on the right track if they want to improve (Maeroff,

1993). By looking within and finding ways to improve and being honest with the data

presented, schools can then begin to make the changes needed through the collaborations

that take place in PLCs. Building teams in education can be geared toward surmounting

the wall that separates teachers to encourage and support the efforts to change.

Schools that provide the support and needed resources in the effort to improve are

an important part of implementing PLCs. Resources are not necessarily financial, but

time and support from the school administration is critical in the implementation of

effective PLCs. Barth (2002) states that the purpose of schools is to promote all types of

learning for everyone. For teachers, principals, professors, or parents, the main

responsibility is to promote learning, both for themselves and for others. The support received from school leaders in building PLCs can make or break the process. Schools may have the most energetic and driven teachers, but may have a school leader who is not so supportive and encouraging. The opposite may also be the case in some schools. This is why encouraging collaboration is essential in the successes of PLCs. According to Harrison and Killion (2007), learning communities can provide opportunities for teachers to learn with and also from one another and sever the norms that promote isolation in many schools, thus allowing for schools to focus directly on student learning. The relationships that are created in PLCs are an important factor in a positive school climate. The interactions and discussions that occur in PLCs are vital to student success and achievement. Donaldson (2007) states that teachers who realize that the strength of their relationships is what strengthens their leadership find that, as a result, schools can grow to be great. Through the participation of many individuals, leadership grows and is strengthened, thus leading the way. Improving student achievement through PLCs takes time and resources that are inexpensive but priceless. Strong school leaders recognize the need for collaboration and how this need is met through PLCs. Fullan (2002) states, "Effective school leaders are key to large-scale, sustainable education reform" (p. 16).

Instructional decision making. According to Sergiovanni (2000), the value of individuals in schools is determined by a broader definition of effectiveness and achievement. The whole education community is focused on raising student scores. Though student achievement is critical to student success after high school, it is also important not to forget that numbers tell an incomplete story. Relationships matter. The whole child matters. Palmer (1998) states:

Our assumption that students are brain-dead leads to pedagogies that deaden their brains. When we teach by dripping information into their passive forms, students who arrive in the classroom alive and well become passive consumers of knowledge and are dead on departure when they graduate. But the power of this self-fulfilling prophecy seems to elude us: we rarely consider that our students may die in the classroom because we use methods that assume they are dead. (p. 42)

The instruction delivered to students is equally if not more important than the relationships that need to be nurtured in the classroom. Relationships also influence student success and high academic achievement. Freire (2005) wrote:

As teachers, we deal with people, with children, adolescents, and adults. We participate in their development. We may help them or set them back in their search. We are intrinsically connected to them in their process of discovery. Incompetence, poor preparation, and irresponsibility in our practice may contribute to their failure. But with responsibility, scientific preparation, and a taste for teaching, with seriousness and a testimony to the struggle against injustice, we can also contribute to the gradual transformation of learners into strong *presences* in the world. (p. 62)

As teachers plan instruction, they must also deliver instruction that is not only relevant to students, but relatable. The community is all around. The PLC is also a place where relationships matter.

When schools look at improving instruction, they look at data. More than ever, schools are not only required to turn in data, but also to look to data to improve teaching

and student achievement. In order to improve student achievement, teaching strategies also have to improve. It is necessary for teachers to use data to inform them about how their students are doing and make classroom-level decisions about improving instruction. Data-driven decision making should happen at all levels within a school. The Institute of Education Sciences: National Center for Education Evaluation and Regional Assistance (2009a) panel believes that data can be used more effectively in the classroom when it is supported by a school that is data-driven and has a culture based on data. It is critical that schools make data part of their cycle of instructional improvement.

Another part of data use in schools is not only for improvement, but for creating a shared vision of how schools should use data. According to DuFour (2004), through PLCs, schools can create this shared vision based on these three crucial questions:

1. What do we want each student to learn?

2. How will we know when each student has learned it?

3. How will we respond when a student experiences difficulty in learning? (p. 2)

By coming together as a school, another task that can be accomplished through a PLC that is crucial to school improvement is the support needed to foster a data-driven school culture. According to Schmoker (1999), a results-driven team calls for scientific eyes in order to be effective. Action research is collaboration that is effective—an experiment that is carried out carefully that involves new practices and an assessment of those practices. Support that may call for extra time for teachers to collaborate or even policies created that will support intervention strategies for struggling students can be created through a PLC.

DuFour (2004) states that teachers who work together to analyze data to improve their practices in the classroom make up the powerful characteristics of collaboration. Collaboration in PLCs does not occur haphazardly and without purpose. The coming together of education professionals is purposeful and systematic. "Schools that are truly committed to the concept of learning will stop subjecting struggling students to a haphazard education lottery" (p. 3).

Instructional decisions that affect students and the life decisions they make after high school can also be made through PLCs. Students in the ninth grade can begin to think about life after high school. By making course and curricula decisions, teachers can make instructional decisions that will prepare students for college-level work and also offer courses that will ensure that students understand the kind of rigor embedded in college-level work. To take this even further, teachers from the core content areas such as Language Arts, Math, Science, and Social Studies can collaborate with career and technical education teachers as well. These two groups of teachers may have never worked together in the traditional-model school, but in PLCs, they can work together to prepare all students who are either on a college or career pathway. DuFour (2004) states that in PLCs, "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 student achievement" (p. 3).

Helping struggling students is yet another challenge that needs to be met by effective instructional decision making in many schools across the nation. One possible solution that may alleviate this problem can be addressed thorough PLCs. There are a variety of instructional strategies or best practices teachers can share by content area or

by grade level to utilize in the classroom. Decisions in instructional interventions and strategies to reach these students can come out of PLCs. Instructional materials for students who are struggling should focus intensively on the academic or social areas with which these students struggle. Instructional strategies should be explicit and systematic, which requires the efforts of a team of dedicated teachers and professionals. Hargreaves (1995) wrote:

> Working together is not just a way of building relationships and collective resolve. It is also a source of learning. It helps people to see problems as things to be solved, not as occasions for blame; to value the different and even dissident voices of more marginal members of the organization; and to sort out the wheat from the chaff of policy demands. Collaborative cultures turn individual learning into shared learning. (p. 5)

Goals, strategies, resources, pacing, questions, concerns, and results that have been traditionally a private matter are now part of the conversations that occur in collaborative teams. These discussions are strictly structured and allow for each person, on an individual and collective level, to take turns talking about how to improve teacher classroom practices (DuFour, 2004). These critical components to helping struggling students can only be addressed effectively and efficiently through PLCs.

Summary

According to Johnson (2002), "There is sufficient evidence that schools can be transformed from lower-achieving to higher-achieving places of learning" (p. 32). It is imperative for schools to begin to look at what other high-achieving schools are doing. American College Testing (2007) reported, "A study of nearly 400 U.S. high schools

shows that core courses can be made rigorous and that rigorous content can be effectively taught and learned" (p. 26). If studies show that success and high achievement are attainable for some schools, why must schools that are not performing at optimum levels remain nonperforming? Zander and Zander (2000) emphasize that PLCs are "about restructuring meanings, creating visions, and establishing environments where possibility is spoken—where the buoyant force of possibility overcomes the pull of the *downward spiral*" (p. 163).

Too many students fall through the cracks every year and it is our responsibility to prevent more students from following that same path. According to Pawlenty (2009), "Our school finance system sends money to schools whether they're doing a good job or not. This isn't the way the world works anymore, and it's not in the best interests of student learning or greater accountability" (p. 19).

Setting high standards and expectations for all students is critical to raising student achievement. When schools establish high standards, schools must then be held accountable for achieving them (Chubb, 2005). PLCs can be the vehicle to effect change and school improvement. Teachers who embrace PLCs also embrace growth. Bolman and Deal (2002) remind us that, "In a classroom, a school, or any other group, people like to know where they're headed, who's in charge, what they're supposed to do, and how their efforts relate to others" (p. 84). Schools do not only deal with students who are struggling; schools are themselves also struggling.

Fortunately for us, the educational system we have can be what we want it to be. Though change is a process that takes time, it is still possible for many schools. DuFour (2004) continue to emphasize:

Even the grandest design eventually translates into hard work. The professional learning community model is a grand design—a powerful new way of working together that profoundly affects the practices of schooling. But initiating and sustaining the concept requires hard work. It requires the school staff to focus on learning rather than teaching, work collaboratively on matters related to learning, and hold itself accountable for the kind of results that fuel continual improvement.

When educators do the hard work necessary to implement these principles, their collective ability to help all students learn will rise. If they fail to demonstrate the discipline to initiate and sustain this work, then their school is unlikely to become more effective, even if those within it claim to be a professional learning community. The rise or fall of the professional learning community concept depends not on the merits of the concept itself, but on the most important element in the improvement of any school—the commitment and persistence of the educators within it. (p. 6)

It is time we take education more seriously than ever. Schools are crying out for it and our students deserve nothing less. Eisner (2002) succinctly states, "*The kind of schools we need* would treat the idea of 'public education' as meaning not only the education of the public inside schools, but also the education of the public outside schools" (p. 583).

Chapter 3: Methodology

Data analysis is important, as Johnson (2002) states, "Data begin to illustrate the gaps between words and actual behavior in many schools. They can also serve as an introduction to the power of data for educators" (p. 14). This study provides data needed to make decisions to improve public schools in the CNMI. More specifically, the purpose of this study is to determine the perception of public school teachers on Saipan regarding the degree to which their schools function as PLCs. The results of this study provide information for determining the kinds of support and resources needed to continue to improve PLCs in the CNMI PSS. In addition, the study provides information for PSS to determine the degree to which public schools on Saipan function as PLCs.

This chapter describes in detail the methodology used to gather and analyze data for this study, including: (a) research design and method, (b) population and sample, (c) survey instrument, (d) human subjects consideration, (e) data collection procedure, and (f) data analysis.

Research Design and Method

For the purposes of this study, the quantitative method was selected as the more appropriate method. In addressing the research questions, a quantitative method using survey research was conducted. According to Wiersma (2000), "The outcomes of quantitative research typically are to a large extent expressed in numbers, and research design is directed to enabling the researcher to make valid interpretations through comparisons and partitioning of those numbers" (p. 82). The survey used in this study provides a comparable measure of teachers' perceptions and the degree to which their schools function as PLCs. The consistency of a survey measure enables the researcher to

analyze distributions or patterns of association across many subjects. It is important for this study to have a consistent measure in order to make comparisons from one subject to another.

Population and Sample

This quantitative study consists of teachers from 10 elementary, two junior high, and three high schools on Saipan. There are approximately 438 public elementary, junior high, and high school teachers on Saipan. Table 1 provides the number of teachers and the names of their respective schools on Saipan.

Table 1

SY 2010–2011 CNMI Public Schools on Saipan and Number of Teachers

Elementary School		Junior High School		High School	
GTC	14	Chacha Oceanview	20	Kagman	41
Tanapag	13	Hopwood	47	Marianas	60
Garapan	38			Saipan Southern	31
Kagman	30				
San Vicente	32				
Dandan	21				
Oleai	23				
WSR	33				
San Antonio	15				
Koblerville	20				
Total	239		67		132

Teachers in the CNMI are a diverse ethnic population. The Chamorro group, which is the indigenous group, makes up 35.8% of the teacher population, followed by 27.9% Caucasian (or stateside) teachers, 22.9% Filipino, 3.6% Palauan, and 9.6% Others. Table 2 provides the number of teachers and their ethnic category.

Table 2

Teachers by Ethnicity

Ethnicity	Percentage
Chamorro	35.8
Caucasian (statesiders)	27.9
Filipinos	22.9
Palauan	3.6
Others	9.6
Total	100

The Saipan population was chosen as the sample for this study because the distribution of learning communities across grade levels and content areas are highly concentrated on the island of Saipan.

Upon gaining approval from Pepperdine University's Institutional Review Board (IRB; Appendix A) the researcher sent letters to the school administrators on Saipan (Appendix B) and shared with them the purpose of the study, the data collection procedures involved, and information on informed consent and confidentiality protocols. The researcher has been in the CNMI PSS for more than a decade. Because of this, the researcher has a collection of the contact information for the school principals. As a result, the researcher has possession of this information and was able to contact them. In addition, because of the professional relationships the researcher has with the school principals and a great number of teachers, the school principals and teachers had previous knowledge about the researcher's intent to conduct a study.

According to the Commonwealth Register, in order to conduct a study in the CNMI PSS (2005), permission must be granted to the researcher. The Commonwealth Register states, "The researcher must 'obtain approval by the Commissioner/designee'" (p. 025042). Once permission was granted to the researcher, the researcher was able to send

letters to the schools to request permission to conduct the study at their respective school sites and a copy of the Permission to Conduct Study letter (Appendix C) was attached to the letter. Approval from the school principals to conduct the study was documented. The school principals arranged for the date and time for the researcher to conduct the study at their school sites and the researcher conducted the study at the scheduled date and time.

Survey Instrument

The survey instrument used for this study is a modified version of Grider's (2008) *Professional Learning Community Survey* from his study titled *Elementary, Middle, and High School Teachers' Perceptions of Professional Learning Communities and Sense of Efficacy*. According to Grider's study (2008), the PLC survey instrument "was designed based on a framework developed by DuFour, DuFour, Eaker, and Many (2006)" (p. 61).

The modified survey instrument consists of five questions in the first section designed to identify the teachers' school, number of years teaching, ethnicity, gender, and age. The second section of the survey consists of statements designed to measure and identify the teachers' perceptions of PLCs in their school using a Likert scale ranging from a = Strongly Agree, b = Agree, c = Neither Agree nor Disagree, d = Disagree, and e = Strongly Disagree. The statements reflect the common characteristics and practices embedded in PLCs.

Use of Grider's (2008) survey instrument was considered to be most appropriate, as it was designed and validated by the DuFours: "A check on the content validity of the items was provided by DuFour and DuFour" (p. 61). The researcher obtained permission from Grider to modify and reproduce the instrument for the purposes of this study. Four questions asking about (a) number of years teaching, (b) ethnicity, (c) gender, and (d) age

were added to the first section of the survey (See Appendix D).

As shown in Appendix D, Grider (2008) approved the use of his survey instrument to be used to collect data for this study. Grider's two-part survey instrument consists of one question in the first section and 12 questions in the second section. The survey instrument was reviewed and tested for reliability and validity by Grider and the DuFours.

According to Grider's (2008) study, the statements of the PLC survey were derived from a continuum developed by the DuFours. "The statements were constructed in order to represent a single idea so the researcher could assess each discrete aspect of professional learning community" (p. 61). There were initially 52 items and as a result of a check on content validity of the items from the DuFours, changes were made and the number of items reduced. After a series of checks for content validity with the DuFours, the survey items eventually were finalized and the final version contained 12 items on a 5-point Likert Scale.

Human Subjects Consideration

This study involved human subjects and according to Hall & Feltner (2005), "All research involving human subjects must be conducted in accordance with accepted ethical and professional standards for research and that all such research (except as provided in Section II.B.) must be reviewed and approved by the appropriate Pepperdine IRB" (p. 7).

In accordance with IRB policy, human subjects cannot be identified directly or through identifiers linked to the subjects. Risk to participants is minimized in the following manner: (a) The participant's name and affiliation are not used in this study;

(b) Other specific identifying information is not used or reported in this study; and (c) Informed consent was sought to ensure that the participant knows that participation is voluntary and the participant has the right to withdraw at any part of the process. There are no known risks to the participant and confidentiality will be maintained throughout the process. The results of the study will be available for the participant's review upon completion of the study.

Data Collection

The researcher sought approval to conduct the study from Pepperdine University's IRB. The research allowed for approximately 8 weeks after submitting IRB documents to obtain approval to conduct the study. The researcher also obtained permission from the CNMI PSS's Commissioner of Education to conduct study (Appendix C).

After the researcher received approval from Pepperdine University's IRB, the researcher sent letters to all 15 school principals to explain the purpose of the study and to request permission to conduct the study. The researcher and school principal arranged a schedule of dates and times to visit the schools to conduct the study. Principals were assured that their school's results and their teachers' responses will remain confidential.

Soon after the researcher received IRB approval from Pepperdine University, the researcher contacted the 15 schools and invited them to participate in the study. A letter to the school principals explained the purpose of the study, assured confidentiality, and described the survey distribution and collection procedures. The permission to conduct study letter from the commissioner of education was attached to the letter. Individual school site permission was granted by the school principals by signing the permission to

conduct study at school site form (Appendix B). The letter provided by the commissioner of education further supported the researcher's request to conduct the study. As stated in the letter, if the schools had any question regarding the research study within the CNMI PSS, the letter should be shared with them.

In October 2010, the paper survey instrument (Appendix E) was distributed to the teaching staff of participating schools during their scheduled faculty meetings. The participants were given time to complete the surveys. The surveys were completed and returned to the researcher. Upon completion of the survey, the questionnaires and informed consent letters were sealed in separate envelopes to ensure that responses were not linked to their names. The date and time for faculty meetings were attained through prior communication and arrangements with the school principals. To encourage participation, teachers were each given a pen valued at less than $5 for their participation in the survey.

The survey instrument was in paper and pencil format. The researcher felt that by using a paper and pencil questionnaire, more teachers would respond to the survey rather than a web-based survey because of (a) a lack of Internet connectivity in some schools, and (b) not all teachers use computers on a regular basis. Wiersma (2000) states, "One of the persistent problems with questionnaire studies is the possibility of a high rate of nonresponse. The validity of survey research involving questionnaires depends on the response rate and the quality of response" (p. 175).

Because of the possibility of a high nonresponse rate from teachers, it was critical that all schools on Saipan participate in the study. Moreover, it was critical that the survey responses represent the group intended to be surveyed and that the survey

responses represented a consistent distribution of teachers' perceptions across the elementary, junior high, and high schools on Saipan. The data collection process and time line is detailed in Table 3.

Table 3

Data Collection Process and Time Line

Pre-February 2010	• Identify research problem and research questions • Identify population to be surveyed • Assemble questionnaire • Prepare cover letter
February-September 2010	• Seek approval from IRB • Seek approval from CNMI PSS Commissioner of Education • Seek approval from Dr. Andrew T. Grider to modify and utilize survey instrument
October 2010	• Contact schools involved in study • Prepare questionnaire package for distribution • Distribute questionnaires at scheduled school faculty meetings • Process returns

Security of Data

The data gathered was stored in a locked file cabinet to which only the researcher had access. Electronic data was stored in the researcher's computer, which is password protected. Backed up information was stored on an external hard drive, which was also password protected. The data will be maintained in a secure manner for 3 years, at which time the data will be destroyed.

Data Analysis

Upon completion of the surveys by teachers, data was entered into a database utilizing SPSS. Data was analyzed using both descriptive and inferential statistics. In order to address the first research question, descriptive statistics were used to compare responses for each of the survey questions within and across schools. Schools were

ranked based on the teachers' aggregated mean response on the PLC survey. Each of the

questions on the PLC survey was rank ordered by mean and cumulative teacher

responses, based on the Likert scale, combining statements that agree and strongly agree

and those that disagree and strongly disagree.

Research question 1 was analyzed using descriptive statistics and means to

determine the degree to which the teachers perceived their schools to function as PLCs.

Research questions 2, 3, and 5 were analyzed using descriptive statistics, means, standard

deviation, and Analysis of Variance (ANOVA) to determine significant differences

among the means on the 12 survey items. Research questions 4 and 6 were analyzed

using Pearson correlation to determine the relationship of the survey items. The following

data analyses in Table 4 were applied to answer each of the study's research questions:

Table 4

Statistical Analysis Tests

Research Question	Survey Instrument Item	Statistical Test
1. What are the perceptions of public school teachers on Saipan about the degree to which their schools function as PLCs?	Survey questions 1–12 (Second Section)	Descriptive Statistics Means
2. Is there a difference between public elementary, junior high, and high school teachers' perceptions about the degree to which their schools function as PLCs?	Survey Question 1 (First Portion) and Survey Question 1–12 (Second Section)	Descriptive Statistics Means Standard Deviation ANOVA
3. Is there a difference in public school teachers' perceptions about the degree to which their schools function as PLCs based on teachers' ethnicities?	Survey Question 3 (First Section) and Survey Questions 1–12 (Second Section)	Descriptive Statistics Means Standard Deviation ANOVA

(*table continues*)

Research Question	Survey Instrument Item	Statistical Test
4. Is there a relationship between the public school teachers' perceptions about the degree to which their schools function as PLCs and number of years teaching?	Survey Question 2 (First Section) and Survey Questions 1–12 (Second Section)	Pearson Correlation
5. Is there a difference in public school teachers' perceptions about the degree to which their schools function as PLCs based on teachers' gender?	Survey Question 4 (First Section) and Survey Questions 1–12 (Second Section)	Descriptive Statistics Means Standard Deviation ANOVA
6. Is there a relationship between the public school teachers' perceptions about the degree to which their schools function as PLCs and teachers' age?	Survey Question 5 (First Section) and Survey Questions 1–12 (Second Section)	Pearson Correlation

Summary of Methodology

Wiersma (2000) states, "Research is a process, and in order to enhance conducting research, it would seem reasonable to make it is as systematic as possible" (p. 3). Of the 20 public schools in the CNMI, 15 schools were participants of this study. Out of the 514 public school teachers in the CNMI, approximately 438 were part of this study. Public school teachers on Saipan were chosen as the sample of this study because the distribution of learning communities across grade levels and content areas are concentrated on the island of Saipan.

The research method for this study is quantitative and a survey questionnaire was used as the instrument for this study. The survey instrument was an instrument from another study titled *Elementary, Middle, and High School Teachers' Perceptions of Professional Learning Community and Sense of Efficacy* written by Grider (2008). The questionnaire was modified in order to meet the purposes of this study, and its research questions consisted of five questions in the first section designed to identify the teacher's

school, number of years teaching, ethnicity, gender, and age. In the second section, 12 statements were designed to measure and identify the teacher's perceptions of PLCs in their respective schools.

This study involved human subjects and required review and approval from Pepperdine University's IRB. After gaining approval from the IRB, the researcher proceeded with the steps necessary to conduct the study. These steps included contacting the school administrators and teachers at the participating schools, preparing the survey packets for distribution, distributing survey packets at scheduled faculty meetings, and collecting survey responses.

Upon completion of the data collection, results were entered into the SPSS computer software database. Data were analyzed using both descriptive and inferential statistical techniques. Question 1 was analyzed using descriptive statistics and means; research questions 2, 3, and 5 used descriptive statistics, means, standard deviation, and ANOVA; and research questions 4 and 6 used Pearson Correlation to analyze the results. Chapter 4 discusses the results of the survey questionnaire.

The data collected from this survey provided important information for the CNMI PSS to determine the degree to which its schools function as PLCs. These results will be useful in the decisions PSS will make, how it will support its PLCs, and in determining the kinds of professional development sessions needed in the future.

Chapter 4: Results

This study's purpose was to determine Saipan public school teachers' perceptions of the degree to which their schools function as PLCs. The study examined whether there were differences among elementary, middle, and high school teachers' perceptions of the degree to which their schools function as PLCs. Finally, the study examined if there were differences based on teacher ethnicity, number of years teaching, gender, and age.

This was a quantitative study using descriptive and inferential statistical tests to address six research questions. For the first question, descriptive statistics and means were used. For the second, third, and fifth questions, descriptive statistics, means, standard deviation, and ANOVA were used. For the third and sixth questions, Pearson correlation was used. SPSS for Windows was used for the statistical analysis procedures. This chapter is organized around the six research questions. Conclusions, implications, and suggestions for future research are presented in Chapter 5.

Conceptual Framework

The conceptual framework used in this study was the DuFour PLC model. The PLC model as described by DuFour and Eaker (1998), consists of: (a) shared mission, vision, and values; (b) collective inquiry; (c) collaborative teams; (d) action orientation and experimentation; (e) continuous improvement; and (f) results orientation. This model is similar to other conceptions of learning communities.

The research collected data on Saipan public school teachers perceptions based on questions related to DuFour's concept of the PLC. The survey used is a modified version of a PLC survey from Grider's (2008) study *Elementary, Middle, and High School Teachers' Perceptions of Professional Learning Community and Sense of Efficacy*.

Participants

This was a population study of teachers from elementary, middle, and high schools on Saipan. Of the three inhabited islands of the CNMI, Saipan was selected for this study because of its geographic proximity and the distribution of learning communities across grade levels and content areas. Letters inviting schools and teachers to participate in the study were delivered and permission was obtained from 15 schools on Saipan. Table 5 provides the number of schools on Saipan at each level, the range in staff size, and the mean number of teachers at each level.

Table 5

Number and Range of Schools on Saipan in Size by Level

Level	Number of Schools	Lowest Number of Teachers	Highest Number of Teachers	Mean Number of Teachers
Elementary	10	13	38	25.5
Middle	2	20	47	33.5
High	3	31	60	45.5

The elementary schools on Saipan showed the number of teachers ranged from a low of 13 to a high of 38 teachers. At the middle school level, the number of teachers ranged from a low of 20 to a high of 47. Finally, at the high school level, the number of teachers ranged from a low 31 to a high of 60.

A total of 438 paper surveys were distributed to teachers in all 15 schools. Throughout a period of 9 weeks, slightly more than 90% of teachers (399) completed and returned surveys. A total of 399 teachers participated in this study.

Results of the Survey

Table 6 displays the frequency counts for selected variables. The years of teaching experience ranged from 0 to 39 years ($M = 8.28$, $SD = 6.89$). Of the teachers,

44% were Pacific Islanders with another 27.6% reporting to be Filipino. Of the sample,

70% was female. Ages ranged from 21 to 67 years ($M = 36.76$, $SD = 10.18$). More than

half of the teachers (57.9%) taught in an elementary school and another quarter of the

sample (25.3%) taught in a high school setting.

Table 6

Frequency Counts for Selected Variables

Variable	Category	n	%
Years of Teaching Experience [a]			
	Less than 3 years	79	19.8
	3 to 5 years	82	20.6
	6 to 9 years	101	25.3
	10 to 19 years	107	26.8
	20 to 39 years	30	7.5
Race/Ethnicity			
	Pacific Islander	177	44.4
	Filipino	110	27.6
	Caucasian	63	15.8
	Other	49	12.3
Gender			
	Male	120	30.1
	Female	279	69.9
Age Group [b]			
	21 to 24 years	28	7.0
	25 to 29 years	82	20.6
	30 to 39 years	150	37.6
	40 to 49 years	81	20.3
	50 to 67 years	58	14.5
Grade Level Taught			
	Elementary	231	57.9
	Junior high	67	16.8
	High school	101	25.3

[a] Experience: $M = 8.28$, $SD = 6.89$.
[b] Age: $M = 36.76$, $SD = 10.18$.
Note. ($N = 399$)

Creation of the Total Perception Score

A total perception score was created by aggregating the responses to the 12

perception statements. These aggregated scores ranged in size from 1.50 to 5.00 ($M =$

3.99, $SD = 0.65$). The resulting Cronbach alpha reliability coefficient was $\alpha = .91$,

suggesting that the scale had an acceptable level of internal reliability.

Research question 1. Research question 1 asked: What are the perceptions of

public school teachers on Saipan about the degree to which their schools function as

PLCs? To address this question, Table 7 displays the descriptive statistics for the 12

perception statements sorted by the highest mean rating. These ratings were given based

on a 5-point scale (1 = *Strongly Disagree* to 5 = *Strongly Agree*). The highest rated

statements were Statement 1, "Team works collaboratively ($M = 4.22$)," and Statement 2,

"Team clarifies essential outcomes ($M = 4.17$)." The lowest rated statements were

Statement 7, "Struggling students are required to spend extra time ($M = 3.69$)," and

Statement 4, "Team clarifies criteria ($M = 3.78$)."

Table 7

Perceptions of Teachers Related to Their School Functioning as PLC Sorted by Highest Mean Rating

Perception	*M*	*SD*
1. Team works collaboratively	4.22	0.89
2. Team clarifies essential outcomes	4.17	0.83
8. Team uses data to improve practices	4.15	0.80
11. Success is celebrated	4.11	0.80
12. Shared vision influences policy and daily decisions	4.09	0.89
6. Struggling students get access to support services	4.04	0.91
3. Team establishes common pacing	4.03	0.93
9. Team has developed norms	3.90	0.88
5. Team monitors student learning	3.89	1.02

(*table continues*)

Perception	*M*	*SD*
10. Team establishes SMART goals	3.88	0.84
4. Team clarifies criteria	3.78	1.01
7. Struggling students are required to spend extra time	3.69	0.97

Note. Ratings based on a 5-point scale: 1 = *Strongly Disagree* to 5 = *Strongly Agree*. Perception statements were paraphrased from the original survey for conciseness. *Note*. (N = 399)

Data from this table are significant because they tell us that public school teachers on Saipan feel that they work collaboratively in their PLCs, essential outcomes are clarified in their PLCs, and data are used to improve practices. On the other hand, teachers did not feel that their PLCs established SMART goals, clarified criteria, or required struggling students to spend extra time. These data reveal areas in which schools on Saipan can continue to work with teachers not only to maintain the collaborative and outcome- and data-driven PLCs, but also to ensure that teachers are able to improve their PLC practices by learning how to develop SMART goals, develop and clarify criteria, and further discuss ways in which schools can support the needs of struggling students.

Research question 2. Research question 2 asked: Is there a difference between public elementary, junior high, and high school teachers' perceptions about the degree to which their schools function as PLCs? To answer this research question, Table 8 displays the one-way ANOVA test examining the teachers' total perception score based on their grade level. The overall *F* test was significant (p = .001). Scheffe post hoc tests found high school teachers (M = 3.65) to have significantly lower mean perception scores ($p <$ .05) than either elementary teachers (M = 4.14) or junior high school teachers (M = 4.02).

Table 8

One-Way ANOVA Tests for Total Perception Score With Grade Level Taught and Teacher's Racial-Ethnic Category

Variable	Category	n	M	SD	F	p
Grade Level Taught [a]					21.78	.001
	1. Elementary	231	4.14	0.59		
	2. Junior high	67	4.02	0.51		
	3. High school	101	3.65	0.73		
Race/Ethnicity [b]					19.39	.001
	1. Pacific Islander	177	4.05	0.59		
	2. Filipino	110	4.24	0.53		
	3. Caucasian	63	3.54	0.63		
	4. Other	49	3.85	0.78		

[a] Scheffe post hoc test: $3 < 1, 2$ ($p = .05$); no other pair was significantly different at the $p < .05$ level.
[b] Scheffe post hoc test: $2 > 3, 4$ ($p < .05$); $1 > 3$ ($p < .05$); no other pair was significantly different at the $p < .05$ level.
Note. ($N = 399$)

Data from this table is significant because it tells us that there is a difference between the perceptions of public elementary, junior high, and high school teachers on Saipan about the degree to which their schools function as PLCs. High school teachers were found to have lower perception scores compared to elementary and junior high school teachers. These data reveal that compared to elementary and junior high school teachers, high school teachers perceive their PLCs differently. High schools in particular, can use these data to work with their teachers to improve PLC practices and continue to address particular issues high school teachers face that may be different than elementary or junior high school teachers.

Research question 3. Research question 3 asked: Is there a difference in public school teachers' perceptions about the degree to which their schools function as PLCs based on teachers' ethnicities? To answer this research question, Table 8 displays the

one-way ANOVA test examining the teacher's total perception score based on their ethnic/racial background. The overall F test was significant ($p = .001$). Scheffe post hoc tests found Filipino teachers ($M = 4.24$) to have significantly higher mean perception scores ($p < .05$) than either Caucasian teachers ($M = 3.54$) or teachers from other ethnic/racial backgrounds ($M = 3.85$). In addition, Pacific Islander teachers ($M = 4.05$) had significantly higher mean perception scores ($p < .05$) than did the Caucasian teachers ($M = 3.54$).

Data from this table are significant because they tell us that there is a difference between the perceptions of public school teachers on Saipan about the degree to which their schools function as PLCs based on ethnicity. Caucasian teachers were found to have lower perception scores compared to Filipino and Pacific Islander teachers and teachers from other ethnic backgrounds. These data reveal that compared to Filipino, Pacific Islander, or teachers from other ethnic backgrounds, Caucasian teachers perceive their PLCs differently. Schools on Saipan can use these data to ensure that all their teachers, regardless of ethnicity, feel that they are part of the PLC and find ways to improve areas related to school culture and cultural proficiency.

Research question 4. Research question 4 asked: Is there a relationship between the public school teachers' perceptions about the degree to which their schools function as PLCs and number of years teaching? To answer this question, Table 9 displays the Pearson product-moment correlations for the teachers' years of teaching experience with their total perception score and their Likert ratings for each of the 12 individual perception statements. For the resulting 13 correlations, years of teaching experience

were only related to the teacher's level of agreement with Statement 8, "Team uses data to improve ($r = .12, p < .05$)."

Table 9

Correlations for Teacher Perception Scores With Selected Variables

Perception	Variables [a] 1	2		3		4	
Total Score	.06	.17	****	.13	**	-.31	****
1. Team works collaboratively	-.06	.15	***	.04		-.31	****
2. Team clarifies essential outcomes	.03	.15	***	.04		-.32	****
3. Team establishes common pacing	.02	.17	****	.07		-.32	****
4. Team clarifies criteria	.08	.09		.17	****	-.19	****
5. Team monitors student learning	.05	.15	***	.10	*	-.31	****
6. Struggling students get support	.07	.04		.09		-.10	*
7. Struggling students spend extra time	.09	.15	***	.19	****	-.21	****
8. Team uses data to improve	.12 *	.12	*	.12	*	-.25	****
9. Team has developed norms	.03	.11	*	.09		-.19	****
10. Team establishes SMART goals	.03	.07		.14	**	-.06	
11. Success is celebrated	-.03	.21	****	-.01		-.21	****
12. Shared vision influences policy and daily decisions.	.04	.08		.07		-.16	***

$* p < .05. ** p < .01. *** p < .005. **** p < .001.$
[a] Variables: 1 = Years of Experience; 2 = Gender (1 = *Male*, 2 = *Female*); 3 = Age; 4 = Grade Level (1 = *Elementary*, 2 = *Junior High*, 3 = *Senior High*).
Note. ($N = 399$)

Other than the significance found in Statement 8 and number of years teaching, there were no data to show significant relationships between teacher perceptions and number of years teaching.

Research question 5. Research question 5 asked: Is there a difference in public school teachers' perceptions about the degree to which their schools function as PLCs based on teachers' gender? To answer this question, Table 9 displays the Pearson product-moment correlations for the teachers' gender with their total perception score and their Likert ratings for each of the 12 individual perception statements. For the

resulting 13 correlations, female teachers had significantly higher levels of agreement for nine of 13 statements.

Data from this table are significant because they tell us that there is a difference between the perceptions of public school teachers on Saipan about the degree to which their schools function as PLCs based on gender. Male teachers were found to have lower perception scores compared to female teachers. These data reveal that compared to female teachers, male teachers perceive their PLCs differently. Schools on Saipan can use these data to ensure that all their teachers, regardless of gender, feel that they are part of the PLC and find ways to ensure that the needs of all teachers are met in the practices of their PLCs.

Research question 6. Research question 6 asked: Is there a relationship between the public school teachers' perceptions about the degree to which their schools function as PLCs and teachers' age? To answer this question, Table 9 displays the Pearson product-moment correlations for the teacher's age with their total perception score and their Likert ratings for each of the 12 individual perception statements. For the resulting 13 correlations, older teachers had significantly higher levels of agreement for six of 13 statements.

Data from this table are significant because they tell us that there is a difference between the perceptions of public school teachers on Saipan about the degree to which their schools function as PLCs based on age. Older teachers were found to have lower perception scores compared to younger teachers. These data reveal that compared to younger teachers, older teachers perceive their PLCs differently. Schools on Saipan can use this data to ensure that all their teachers, regardless of age, feel that they are part of

the PLC and find ways to ensure that the needs all teachers are met in the practices of their PLCs.

Additional Findings

Table 9 also contains the Pearson product-moment correlations for the grade level that the teacher taught (1 = *elementary*, 2 = *junior high*, and 3 = *high school*) with their total perception scores and their Likert ratings for each of the 12 individual perception statements. For the resulting 13 correlations, elementary teachers had significantly higher levels of agreement for 12 of 13 statements.

Data from this table are significant because they tell us that public elementary school teachers on Saipan feel very strongly about the degree to which their schools function as PLCs. They had significantly higher levels of agreement compared to junior high and high school teachers. These data reveal areas in which elementary schools can work to continue to maintain areas of strength and to strengthen areas that need improvement. On a different level, when schools come together and meet at the state level, PLC practices can continue to improve and be strengthened with the continued collaboration and work among elementary, junior high, and high school teachers.

Table 10 displays the results of the Pearson product-moment correlations for the total perception score with a series of demographic characteristics. The teachers' total perception score was higher for: (a) non-high school teachers ($r = -.31, p < .001$); (b) Filipino teachers ($r = .24, p < .001$); (c) non-Caucasian teachers ($r = -.31, p < .001$); (d) female teachers ($r = .17, p < .001$); and (e) older teachers ($r = .13, p < .01$).

Table 10

Correlations for Total Perception Score With Selected Variables

Variable	Total Score	
Teaches High School [a]	-.31	****
Pacific Islander [a]	.07	
Filipino [a]	.24	****
Caucasian [a]	-.31	****
Years of Teaching Experience	.06	
Gender [b]	.17	****
Age	.13	**

* $p < .05$. ** $p < .01$. *** $p < .005$. **** $p < .001$.
[a] Coding: 0 = *No* 1 = *Yes*.
[b] Gender: 1 = *Male* 2 = *Female*.
Note. ($N = 399$)

Data from this table are significant because they tell us that non-high school, Filipino, non-Caucasian, female, and older public school teachers on Saipan feel very strongly about the degree to which their schools function as PLCs. They had significantly higher levels of agreement compared to other teachers. These data reveal areas in which schools can work to continue to maintain areas of strength and to strengthen areas that need improvement. On a different level, when schools come together and meet at the state level, PLC practices can continue to improve and be strengthened with the continued collaboration and work among all elementary, junior high, and high school teachers.

Table 11 displays the results of the multiple regression model predicting the teachers' total perception score based on seven demographic variables. The overall model was significant ($p = .001$) and accounted for 19.6% of the variance in the dependent variable. A higher total perception score was found for: (a) Pacific Islander teachers ($\beta = .15$, $p = .04$); (b) Filipino teachers ($\beta = .24$, $p = .001$); (c) non-high school teachers ($\beta = -$

.23, p = .001); and (d) older teachers (β = .14, p = .01). In addition, non-Caucasian

teachers tended (p = .08) to have higher scores (β = -.11).

Table 11

Prediction of Total Perception Score Based on Selected Variables

Variable	B	SE	β	p
Intercept	3.54	0.19		.001
Pacific Islander	0.19	0.10	.15	.04
Filipino	0.35	0.10	.24	.001
Caucasian	-0.20	0.11	-.11	.08
Teaches High School	-0.34	0.07	-.23	.001
Years of Teaching Experience	0.00	0.01	-.02	.75
Gender	0.04	0.07	.03	.53
Age	0.01	0.00	.14	.01

Full Model: F (7, 391) = 13.61, p = .001. R^2 = .196.
[a] Coding: 0 = *No* 1 = *Yes*.
[b] Gender: 1 = *Male* 2 = *Female*.
Note. (N = 399)

Data from this table are significant because they tell us that Pacific Islander,

Filipino, non-high school, older, and non-Caucasian public school teachers on Saipan feel

very strongly about the degree to which their schools function as PLCs. They had

significantly higher levels of agreement compared to other teachers. These data reveal

areas in which schools can work to continue to maintain areas of strength and to

strengthen areas that need improvement. On a different level, when schools come

together and meet at the state level, PLC practices can continue to improve and be

strengthened with the continued collaboration and work among all elementary, junior

high, and high school teachers.

Summary

Chapter 4 provided an analysis of the data from this quantitative study that

surveyed teachers from 10 elementary, two junior high, and three high schools on Saipan

regarding their perceptions of the degree to which their schools function as PLCs. Out of 438 teachers on Saipan, 399, or approximately 90% of the teachers, returned surveys that were usable.

The years of teaching experience ranged from 0 to 39 years and the average number years of teaching experience was about 8 years. Of the teachers, 44% were Pacific Islanders and 27.6% were Filipino. Of the sample, 70% was female. Ages ranged from 21 to 67 years and the average age was about 36 years. More than half of the teachers (57.9%) taught in elementary school and another quarter of the sample (25.3%) taught in a high school setting.

The survey questionnaire had 12 perception statements. The highest rated statements were Statement 1, "Team works collaboratively" and Statement 2, "Team clarifies essential outcomes." The lowest rated statements were Statement 7, "Struggling students are required to spend extra time" and Statement 4, "Team clarifies criteria."

High school teachers ($M = 3.65$) have significantly lower mean perception scores than either elementary ($M = 4.14$) or junior high school teachers ($M = 4.02$). Filipino teachers ($M = 4.24$) have significantly higher mean perception scores than either Caucasian ($M = 3.54$) or teachers from other ethnic/racial backgrounds ($M = 3.85$). Pacific Islander teachers ($M = 4.05$) had significantly higher mean perception scores than did the Caucasian teachers ($M = 3.54$). Years of teaching experience was only related to the teacher's level of agreement with Statement 8, "Team uses data to improve." Female teachers had significantly higher levels of agreement for nine of 13 statements. Older teachers had significantly higher levels of agreement for six of 13 statements. Elementary teachers had significantly higher levels of agreement for 12 of 13 statements.

The total teacher's perception score was higher for: (a) non-high school teachers, (b) Filipino teachers, (c) non-Caucasian teachers, (d) female teachers, and (e) older teachers. The overall model was significant ($p = .001$) and accounted for 19.6% of the variance in the dependent variable. Chapter 5 begins with a summary of the study and provides a summary of the findings for each of the research questions.

Chapter 5: Discussion

Summary of the Study

  Background. According to Schmoker (1999), "Incremental, even dramatic, improvement is not only possible but probable under the right conditions" (p. 1). School improvement in varying degrees and stages requires change. For many, change is a slow and difficult process. According to Texas State University (n.d.), "The creation and implementation of learning communities is crucial to the future success of organizations facing the problem of change" (p. 1). In order for our schools to become successful, they must work toward building communities of learning and empowering teachers to lead this change.

  One way schools can build communities of learning is through the model of the PLC. According to All Things PLC (n.d.), in a PLC, educators are "committed to working collaboratively in ongoing processes of collective inquiry and action research" (p. 1) on a regular basis in order to "achieve better results for the students they serve" (p. 1). Though teachers often teach in isolation, the only way schools are ever going to improve is through the collaboration that takes place in learning communities. DuFour (2009) states, "After synthesizing over 800 meta-analyses on the factors that impact student achievement, John Hattie concluded that the best way to improve schools was to organize teachers into collaborative teams" (p. 1).

  Other than collaboration, there are other qualities of the PLC that also contribute to its positive impact on student achievement. According to All Things PLC (n.d.), the three big ideas that envelope the PLC model include: (a) Focus on Learning, (b) Build a Collaborative Culture, and (c) Focus on Results. These three elements make up the

foundation of the PLC. In addition to these elements, All Things PLC states there are six essential characteristics of the model. These characteristics are: (a) Shared mission, vision, values, and goals; (b) Collaborative teams focused on goals; (c) Collective inquiry; (d) Action orientation and experimentation; (e) Commitment to continuous improvement; and (f) Results orientation.

Grider's (2008) study reveals that despite the research that reveal areas in education that have a direct and positive relationship with student achievement, evidence does not currently exist that shows a direct and positive impact on student achievement with the PLC model. One of the main purposes of this study was to explore further the connections between schools functioning as PLCs and ultimately increased student achievement as recommended by Grider's work *Elementary, Middle, and High School Teachers' Perceptions of Professional Learning Community and Sense of Efficacy*.

Purpose. Since its inception into the CNMI PSS in 2005, PLCs were very instrumental in the reform efforts by the school system toward standards-based education. One of the purposes of this study was to determine the perception of public school teachers on Saipan regarding the degree to which their schools function as PLCs. The study was guided by these six questions:

1. What are the perceptions of public school teachers on Saipan about the degree to which their schools function as PLCs?

2. Is there a difference between public elementary, junior high, and high school teachers' perceptions about the degree to which their schools function as PLCs?

3. Is there a difference in public school teachers' perceptions about the degree to which their schools function as PLCs based on teachers' ethnicity?

4. Is there a relationship between the public school teachers' perceptions about the degree to which their schools function as PLCs and number of years teaching?

5. Is there a difference in public school teachers' perceptions about the degree to which their schools function as PLCs based on teachers' gender?

6. Is there a relationship between the public school teachers' perceptions about the degree to which their schools function as PLCs and teachers' age?

Methodology. The study sought to answer the research questions through a quantitative survey research methodology. Saipan was the island chosen because of its geographic proximity and distribution of PLC across the school system. This was a population study of all teachers in the 15 elementary, middle, and high schools on Saipan. Paper-pencil survey questionnaires were used to collect data. The questionnaire included 12 items and was replicated from a previous study conducted by Grider. The survey instrument was developed by Grider and the questions validated by the DuFours. The questions were derived out of the PLC framework developed by the DuFours.

Descriptive statistics, means, standard deviation, ANOVA, and Pearson correlations were statistical tests used to analyze the data in order to answer the research questions. Descriptive statistics and means were used for question 1. Descriptive statistics, means, standard deviation, and ANOVA were used for questions 2, 3, and 5. Pearson correlation was used for questions 4 and 6.

Summary of the Findings

  Research question 1. The first research question sought to determine the perceptions of public school teachers on Saipan about the degree to which theirs schools functioned as PLCs. Of 438 public elementary, junior high, and high school teachers on Saipan, 399 participated in the study. In a rank order of 12 questions from highest to lowest mean responses from the survey questionnaire, the Saipan teachers agreed that their PLC teams: (a) work collaboratively, (b) clarify essential outcomes, and (c) use data to improve practices. With a mean score of 4.2155, survey question 1 ranked first on the survey questionnaire responses. With a mean score of 4.1654, survey question 2 ranked second on the survey questionnaire responses. With a mean score of 4.1504, survey question 8 ranked third on the survey questionnaire responses.

  The lowest three in the rank order of survey question responses, Saipan teachers found less agreement that their PLC teams: (a) establish SMART goals, (b) clarify criteria, and (c) require struggling students to spend extra time. With a mean score of 3.8897, survey question 10 ranked 10th on the survey questionnaire responses. With a mean score of 3.7769, survey question 4 ranked 11th on the survey questionnaire responses. Last, with a mean score of 3.6867, survey question 7 ranked last on the survey question responses.

  Research question 2. The second research question sought to examine the difference in public elementary, middle, and high school teachers' perceptions about the degree to which their schools functioned as PLCs. Of those who were sent questionnaires, 231 public elementary, 67 junior high, and 101 high school teachers from Saipan responded to the survey questionnaire. Multiple comparison tests revealed a

significance score of .406 between elementary and junior high school teachers'

perceptions, a significance score of .000 between elementary and high school teachers'

perceptions, and a significance score of .001 between junior high and high school

teachers' perceptions of the degree to which their schools function as PLCs.

Research question 3. The third research question sought to examine the

difference in public school teachers' perceptions about the degree to which their schools

functioned as PLCs based on teachers' ethnicities. Of those who were sent

questionnaires, 177 Pacific Islanders, 110 Filipino, 63 Caucasians, and 49 teachers of

other ethnic backgrounds participated in the study. Out of the four main ethnic categories,

Filipinos had the highest mean score of 4.2417, Pacific Islanders scored in second with a

mean score of 4.0461, Others scored third with a mean score of 3.8469, and Caucasians

scored the lowest with a mean score of 3.5384.

Multiple comparison tests revealed the following significance scores. The

significance score between Pacific Islanders and Filipinos was .072, with Caucasians it

was .000, and with Other it was .248. The significance score between Filipinos and

Caucasian was .000 and with Others it was .003. The significance score between

Caucasian and Others was .069.

Research question 4. The fourth research question sought to examine the

difference in public school teachers' perceptions about the degree to which their schools

functioned as PLCs and number of years teaching. Correlations tests revealed that the

teachers' perceptions about the degree to which their schools functioned as PLCs and

number of years teaching were unrelated, with a significance score of .261.

Research question 5. The fifth research question sought to examine the difference in public school teachers' perceptions about the degree to which their schools functioned as PLCs based on teacher's gender. Correlations tests revealed that teachers' perceptions about the degree to which their schools functioned as PLCs were related to a teacher's gender, with a significance score of .001.

Research question 6. The sixth research question sought to examine the difference in public school teachers' perceptions about the degree to which their schools functioned as PLCs and a teacher's age. Correlations tests revealed that the teachers' perceptions about the degree to which their school function as PLCs were related to a teacher's age, with a significance score of .008.

Implications for the System

Since its inception in 2005, the PLCs in the CNMI have been utilized to carry out a number of different purposes related to school improvement, student achievement, teacher and student learning, and professional development activities. Based on the results of this study, the data revealed areas in which the CNMI PSS can continue to support in the improvement of PLCs in the CNMI. One of the ways the school system can support PLCs is through professional development. According to Darling-Hammond and McLaughlin (2003), school systems can support professional development by ensuring that the following features are in place:

- Blocks of time for teachers to work and learn collaboratively;
- Strategies for team planning, sharing, learning, and evaluating; and
- Cross-role participation (teachers, administrators, parents, psychologists).

In addition, Darling-Hammond and McLaughlin felt that "district (or local authority) leadership must encourage and sustain schools as reflective communities and provide the necessary resources" (p. 1).

Though some schools in the CNMI have dedicated blocks of time for teachers to work and learn collaboratively, this is still an area that is decided at the school level. Though the decision made at the school level is critical, the support and mandate at the system level is even more critical in ensuring that all schools provide this time for teachers.

Strategies for team-planning, sharing, learning, and evaluating have also been provided at various professional development activities within the CNMI school system. Though the schools and teachers receive this type of training, the follow up and implementation may not be so consistent across schools. This is an area that can be improved upon with the support and guidance from the school system.

Cross-role participation is another area that can be improved upon with the support and guidance from the school system. Though the PLCs in the CNMI continue to be an important tool in the improvement process, those who are part of the PLCs are mostly teachers. Teachers from the various content areas and grades are part of the PLC as well as by department in the high schools. Cross-role participation can be further improved by involving parents, community members, as well as counselors with the support and guidance from the school system.

Furthermore, Darling-Hammond and McLaughlin (2003) also recommend that school systems ensure that:

- Policies move away from credit for seat time staff development and toward professional development that involves teachers in networks, and working collaboratively to explore practice;

- Tight boundaries and narrow accounting lines that discourage teachers from reflecting on school-wide goals or the needs of individual children. The success of new policies and initiatives will depend on local responses to specific teacher and learner needs;

- Proposed and existing policies can be filtered through the following criteria to examine how well they correspond to teachers' learning and change. For example, does the policy:

    o Reduce the isolation of teachers;

    o Encourage teachers to assume the role of learner;

    o Provide a rich menu of opportunities;

    o Establish an environment of professional trust and encourage problem solving;

    o Provide opportunities for everyone in the school to understand the new concepts and practices;

    o Permit the restructuring of time, space, and scale; and

    o Focus on learner center outcomes that address the how and why aspects of learning?

These are some areas that can be further examined by the school system to ensure that the structure and practices of PLCs in the CNMI are supported and in place.

Implications for Schools

DuFour and Eaker (1998) state, "Creating a collaborative environment has been called the single most important factor in sustaining the effort to create a learning community" (p. 130). The public schools in the CNMI all have PLCs. The members of the PLCs are not only involved in activities at the school level, but at the state level as well. As a result of this study, the data clearly show that there is still much work to be done to improve the practices of PLCs in the CNMI. One of the main ideas shared by DuFour and Eaker states, "Collaboration by invitation is ineffective: meaningful collaboration must be embedded into the daily life of the school" (p. 130). As mentioned earlier, though all schools in the CNMI have PLCs, the level of success based on teacher perception varies from school to school. According to DuFour and Eaker, in order for PLCs to be effective and successful, four prerequisites must be met:

1. Time for collaboration must be built within the school day and year;

2. The purpose of collaboration must be made explicit, and structures must be provided to facilitate it;

3. Educators must be trained and supported in their efforts to become effective collaborators; and

4. Educators must accept their individual and collective responsibilities for working together as true professional colleagues.

These are some areas that can be further examined by the individual schools to ensure that the structure and practices of PLCs in the CNMI are supported and in place at their individual school sites.

Implication for Teachers

DuFour and Eaker (1998) state, "It is impossible to create good schools without good teachers, just as it is impossible to create professional learning communities without teachers who function as professionals" (p. 233). For schools, implementing successful learning communities can be quite difficult without the support from teachers. It becomes even more challenging for teachers in PLCs to carry out effectively the activities and practices of a PLC without the support and guidance from their school leaders. According to DuFour and Eaker (1998), "Teachers represent the heartbeat of a school, and the changes essential to school improvement must be manifested by individual teachers at the classroom level" (p. 233).

Discussion

Diversity in PLCs. The PLCs in Saipan schools are made up of a diverse group of educators. The role of the school leader is critical in the continuous improvement of PLCs. Authors R.B. Lindsey, K.N. Robins, and R.D. Terrell (2003) state that school leaders who are proficient in embracing the diversity that exists within schools must:

> (a) be adept at recognizing that a typical school faculty is composed of teachers, aides, staff, counselors, and administrators who have had widely different life experiences, (b) recognize that the experiences of the school faculty and staff may be much different from the experiences of students and parents in the community served by the school, (c) address the issues of labeling in a way that helps people from a dominant culture understand the pain caused by labeling and helps recipients of such labeling go beyond that pain to focus on self-determination and self-identification. (p. 51)

Research questions 2, 3, 5, and 6 all reveal insight into some diversity issues related to school culture. Research question 2 results showed a difference in teachers' perceptions at the elementary, junior high, and high school levels. Research question 3 results showed a difference in teachers' perceptions based on ethnicity. Research question 5 results showed a difference in teachers' perceptions based on gender. Last, research question 6 results showed a difference in teachers' perceptions based on age.

Teaching and learning in PLCs. The key to improved teaching and learning is through the implementation of PLCs. DuFour (2009) states that in a PLC, "teachers are organized into grade level, course specific, or interdisciplinary collaborative teams in which educators work independently to achieve common goals for which members are mutually accountable" (p. 1). As students learn from teachers who learn, teaching and learning become seamless. Research question 1 results reveal teachers' perceptions of the degree to which their schools function as PLCs in areas that are strongly practiced as well as those areas that are weakest and need to be strengthened and provided with more support. Research question 4 reveals an unrelated relationship between teachers' perceptions and number of years teaching.

Continuous improvement in PLCs. School improvement and professional development go hand in hand. Through PLCs, schools can continue to improve and empower teachers to be leaders in their own learning and practices. All the research question results reveal the teachers' perceptions about the degree to which their schools function as PLCs. Each question has its own importance and place in the PLC model. Through well-planned professional development and strong PLCs, schools can and will continue to improve. Fullan (2001) states, "Ultimately, your leadership in a culture of

change will be judged as effective or ineffective not by who you are as a leader but by *what leadership you produce in others*" (p. 137).

Recommendations and Future Research

DuFour (2009) states, "The quality of the individual teacher remains paramount in student learning and the PLC concept is our best strategy for creating the system that ensures more good teaching in more classrooms more of the time" (p. 1). The results of this study have provided a clearer picture of the state of the PLCs in the CNMI. This study has not only shed light on this critical piece of the CNMI's educational system, it has also opened more opportunities for continued improvement. By examining the degree to which Saipan schools function as PLCs, the school district can continue to make decisions that are informed and supported by data.

Results from research question 1 revealed the teachers' perceptions about the degree to which their schools functioned as PLCs. Responses for survey questions 1, 2, and 8 received favorable responses, whereas survey questions 10, 4, and 7 received the least favorable responses. Thus, future research should be conducted by examining the teachers' perceptions and the degree to which their schools function as PLCs in order to inform regularly school districts about their progress toward building and sustaining strong PLCs. Additionally, it is recommended that schools provide continuous professional development to inform teachers about the characteristics of PLCs and how teachers can sustain PLCs through school improvement efforts.

Results from research question 2 revealed a significant difference between the high school teachers' perceptions with teachers from the elementary and junior high schools. Future research should be conducted in this area in order to examine further

teachers' perceptions at the high school level and the relationships between teachers'
perceptions at the elementary, junior high, and high school level. It is recommended that
professional development continue for elementary, junior high, and high school teachers
in the areas that were responded least favorably by the teachers.

Results from research questions 3, 5, and 6 all reveal significant differences in
teachers' perceptions about the degree to which their schools function as PLCs based on
ethnicity, gender, and age. Further research should be conducted in these areas in order to
examine further teachers' perceptions and the relationships among teachers' perceptions
based on ethnicity, gender, and age. Additionally, more professional development in
these areas is recommended to improve teacher relationships as it relates to ethnicity,
gender, and age. Professional development is recommended to increase awareness and
improve skills in areas related to cultural proficiency and sensitivity.

Results from research question 4 revealed that teachers' perceptions about the
degree to which their school function as PLCs were not related to number of years
teaching. Because teachers' perceptions and number of years teaching was shown to not
be related, further research is not recommended. However, it is the hope that by
improving upon the professional development activities and experiences for all teachers,
teachers' perceptions about the degree to which their schools function as PLCs will not
be determined by number of years teaching or any other impeding factor, but through
improved practices in teaching and learning. Future research can include a study to
determine the impact of school leadership on PLCs, parent perceptions of PLCs in their
schools, and research to examine further elementary and junior high schools'
implementation of PLCs compared to high schools.

Senge (2000) states, "Learning is nature's expression of the search for development. It can be diverted or blocked, but it can't be prevented from occurring" (p. 57). The results from this study revealed many positive activities at the school level as they relate to PLCs. However, there are also some concerns that were revealed by the results. By unpacking the data and looking at ways in which the CNMI PSS can continue to support the PLCs at the school level, teachers and students will all be able to be a part of the seamless relationships that should exist in teaching and learning. Teachers and students should all be empowered to be leaders of their own learning. "The core educational task in our time is to evolve the institutions and practices that assist, not replace, that natural learning process" (p. 57).

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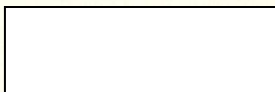
APPENDIX A

IRB Exemption

PEPPERDINE UNIVERSITY

Graduate & Professional Schools Institutional Review Board

October 4, 2010

Protocol #: E0710D03
Project Title: *Teachers' Perceptions of Professional Learning Communities in Public Schools on Saipan*

Dear Ms. Barcinas Taylor:

Thank you for submitting the revisions requested by Pepperdine University's Graduate and Professional Schools IRB (GPS IRB) for your study, *Teachers' Perceptions of Professional Learning Communities in Public Schools on Saipan*. The IRB appreciates the work you and your faculty advisor, Dr. Robert Barner, have done on the proposal. The IRB has reviewed your revisions and found them acceptable. You may now begin your study. As stated previously, although you submitted an application for expedited review, the IRB has determined that the above entitled project **meets the requirements for exemption** under the federal regulations (45 CFR 46 - http://www.nihtraining.com/ohsrsite/guidelines/45cfr46.html) that govern the protections of human subjects. Specifically, section 45 CFR 46.101(b)(2) states:

> (b) Unless otherwise required by Department or Agency heads, research activities in which the only involvement of human subjects will be in one or more of the following categories are exempt from this policy:

> **Category (2) of 45 CFR 46.101,** research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: a) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and b) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Based upon review, the GPS IRB has determined that **your proposed study is exempt from further IRB review.**

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit a **Request for Modification Form** to the GPS IRB. Because your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the GPS IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the GPS IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the GPS IRB and the appropriate form to be used to report this information can be found in the

Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual (see link to "policy material" at http://www.pepperdine.edu/irb/graduate/).

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval. Should you have additional questions, please contact me. On behalf of the GPS IRB, I wish you success in this scholarly pursuit.

Sincerely,

Doug Leigh, Ph.D.
Associate Professor of Education
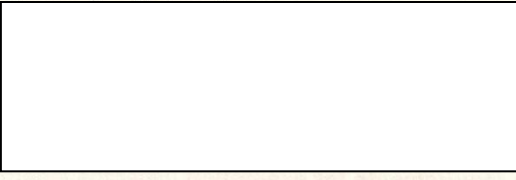
cc: Dr. Lee Kats, Associate Provost for Research & Assistant Dean of Research, Seaver College
           Ms. Alexandra Roosa, Director Research and Sponsored Programs
           Dr. Doug Leigh, Chair, Graduate and Professional Schools IRB
           Ms. Jean Kang, Manager, Graduate and Professional Schools IRB
           Dr. John McManus
           Dr. Robert Barner
           Ms. Kristin Bailey

APPENDIX B

Request to School Principals to Conduct Study

PROFESSIONAL LEARNING COMMUNITIES

Request to Conduct Study

Dear Principal:

I am conducting a study for my doctoral dissertation to determine teachers' perceptions of the degree to which their schools function as professional learning communities and would like to solicit your support in conducting my study at your school.

I would like to request for your permission to distribute and collect a survey questionnaire to your teachers during one of your faculty meetings.

Your participation in this study involves your teachers completing a paper-pencil survey entitled Professional Learning Communities. In total, it will take approximately 7-10 minutes to complete the survey instrument. There are little or no risks associated with this study.

The results of the surveys will be summarized and shared with the system as a whole. In this way, the school will not find out anything about how your teachers have personally filled out the survey. All information your teachers provide will remain confidential. Please provide me with a date and time that would be best appropriate for this activity to take place.

I've attached a Letter of Support from Dr. Sablan to conduct this study. Please let me know if you need more information from me.

Thank you so much for your continued support.

Sincerely,

Jessica B. Taylor
Doctoral Student

Your signature below indicates your consent for your school to participate in this survey.

Signature: _____
Name: _____
School: _____
Date: _____

APPENDIX C

Permission to Conduct Study Letter

COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS

STATE BOARD OF EDUCATION
PUBLIC SCHOOL SYSTEM
P.O. BOX 501370
SAIPAN, MP 96950

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coe.ras@pss.cnmi.mp

March 18, 2010

Jessica Barcinas Taylor
Doctoral Student - Pepperdine University
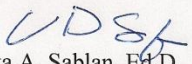Saipan, MP 96950

Dear Ms. Taylor:

First, I want to extend to you my congratulations for your educational endeavor with Pepperdine University. This educational journey that you have pursued thus far is commended as the Commonwealth and more importantly, the CNMI Public School System look for scholars that can help to achieve its vision toward quality education for our children.

Pursuant to Board of Education Policy 1440, I hereby approve your research study entitled "To determine teachers' perceptions regarding the degree to which their schools function as professional learning communities". This is an excellent topic and will certainly help us in many ways to also evaluate the activities that we do to support curriculum, instruction and assessment including professional development for our faculty.

Please be further informed that your research is independent of the CNMI Public School System and that individuals participating in the research study are volunteers, including the schools. For this reason, you are informed that you must get further approval from the school to participate in the research study. I recommend highly that you meet with respective schools to ask them for their permission to use their school as part of the research; that any faculty or staff is also inform that their participation is voluntary; and that in the event that students will be involved that include observations in the classrooms, that you must seek written permission from parents/guardians of the students including the school principals whose school will be involved. If the schools should have any question regarding research study within the CNMI Public School System, please share this letter with them.

At the completion of your research study, you are requested to provide the CNMI Public School System a copy of your study. In addition to this, I would like to invite you to share your findings to the Office of Instructional Services in our effort to strengthen our professional learning communities.

Best wishes,

Rita A. Sablan, Ed.D.
Commissioner of Education

Board of Education
Telephone : (670) 237-3010
Fax   : (670) 664-3711

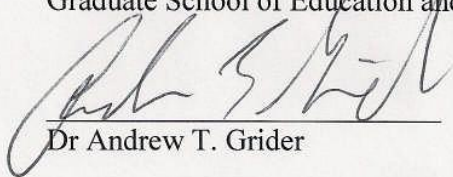*website: http://www.pss.cnmi.mp*

Commissioner of Education
Telephone : (670) 237-3001
Fax   : (670) 664-3798

APPENDIX D

Approval Letter from Dr. Grider to Use Survey Instrument

January 11, 2010

I hereby grant Jessica Barcinas Taylor full permission to use and modify my survey instrument entitled "Professional Learning Community Survey" for her study entitled, *Teachers' Perceptions of Professional Learning Communities in Public Schools on Saipan* which will be conducted as part of her doctoral degree at Pepperdine University's Graduate School of Education and Psychology.

_____   Dated ___2/2/10___
Dr Andrew T. Grider

APPENDIX E

PLC Survey Instrument

Professional Learning Community Survey Questionnaire

Directions: Indicate on the line the letter next to the corresponding question that best reflects your response.

_____ 1. Indicate the **name of the school** in which you work.

a.	Dandan Elementary School	k.	Chacha Oceanview Junior High School
b.	Garapan Elementary School	l.	Hopwood Junior High School
c.	GTC Elementary School	m.	Kagman High School
d.	Kagman Elementary School	n.	Marianas High School
e.	Koblerville Elementary School	o.	Saipan Southern High School
f.	Oleai Elementary School		
g.	San Antonio Elementary School		
h.	San Vicente Elementary School		
i.	Tanapag Elementary School		
j.	WSR Elementary School		

_____ 2. Indicate the **number of years of teaching**.

_____ 3. Indicate your **ethnicity**.

a.	Chamorro	i.	Yapese
b.	Carolinian	j.	Korean
c.	Chamorro/Carolinian	k.	Caucasian
d.	Chuukese	l.	African American
e.	Filipino	m.	Chinese
f.	Palauan	n.	Japanese
g.	Pohnpeian	o.	Other Pacific Islander (please specify) _____
h.	Marshallese		
		p.	Other (please specify) _____

_____ 4. Indicate your **gender**.

a.	Male
b.	Female

_____ 5. Indicate your **age**.

Professional Learning Community
Survey Questionnaire

Directions: Indicate on the line the letter next to the corresponding question that best reflects your opinion, ranging from Strongly Agree to Strongly Disagree, as each represents a degree on a continuum.

_____ **1. I meet at least once every other week with my teacher team to work collaboratively on improving student learning.**

    a. Strongly Agree
    b. Agree
    c. Neither Agree nor Disagree
    d. Disagree
    e. Strongly Disagree

_____ **2. My team works together to clarify the essential outcomes for each unit of instruction using district standards and resources as well as student achievement data.**

    a. Strongly Agree
    b. Agree
    c. Neither Agree nor Disagree
    d. Disagree
    e. Strongly Disagree

_____ **3. My team works together to establish common pacing for each unit of instruction.**

    a. Strongly Agree
    b. Agree
    c. Neither Agree nor Disagree
    d. Disagree
    e. Strongly Disagree

_____ **4. My team works collaboratively to clarify the criteria by which we will judge the quality of student work, and we practice applying those criteria until we can do so consistently.**

    a. Strongly Agree
    b. Agree
    c. Neither Agree nor Disagree
    d. Disagree
    e. Strongly Disagree

_____ 5. **My team monitors the learning of each student at least four times each year on essential outcomes through a series of team-developed (common) formative assessments that are aligned with district standards.**

    a. Strongly Agree
    b. Agree
    c. Neither Agree nor Disagree
    d. Disagree
    e. Strongly Disagree

_____ 6. **Students who experience academic difficulty are guaranteed access to a system of interventions that provide more time and support for learning.**

    a. Strongly Agree
    b. Agree
    c. Neither Agree nor Disagree
    d. Disagree
    e. Strongly Disagree

_____ 7. **Students are required rather than invited to devote extra time and receive additional support until they are successful.**

    a. Strongly Agree
    b. Agree
    c. Neither Agree nor Disagree
    d. Disagree
    e. Strongly Disagree

_____ 8. **My team members use student achievement results from a variety of assessments to identify strengths and weaknesses in our individual and collective practice and to improve our effectiveness in helping all students learn.**

    a. Strongly Agree
    b. Agree
    c. Neither Agree nor Disagree
    d. Disagree
    e. Strongly Disagree

_____ 9. My team has adopted specific and explicit norms and protocols that guide us in working together.

    a. Strongly Agree
    b. Agree
    c. Neither Agree nor Disagree
    d. Disagree
    e. Strongly Disagree

_____ 10. My team works interdependently to establish SMART goals. (SMART Goals are Strategic, Measurable, Attainable, Results-Oriented, and Time-Bound).

    a. Strongly Agree
    b. Agree
    c. Neither Agree nor Disagree
    d. Disagree
    e. Strongly Disagree

_____ 11. Improved results, achievement of goals, and the work of teams are the basis for a culture of celebration within classrooms and the school.

    a. Strongly Agree
    b. Agree
    c. Neither Agree nor Disagree
    d. Disagree
    e. Strongly Disagree

_____ 12. The shared vision and values among my school's staff influence policies, procedures, daily practices, and day-to-day decisions of all staff members.

    a. Strongly Agree
    b. Agree
    c. Neither Agree nor Disagree
    d. Disagree
    e. Strongly Disagree