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A STUDY OF THE IMPLEMENTATION OF A PROFESSIONAL LEARNING COMMUNITY IN ONE MIDDLE SCHOOL IN GEORGIA

by

JANA MARIA HODGES UNDERWOOD

(Under the Direction of Barbara J. Mallory)

ABSTRACT

As public demands for school accountability continue to increase due to federal legislation such as the *No Child Left Behind Act of 2001*, educators struggle to meet rising minimum standards. In an effort to address these pressures and search for ways to improve, educators consider implementing a professional learning community model which focuses on the improvement of teaching and learning. While attributes and characteristics of professional learning communities are documented in the literature, little is known about how the model is established or sustained.

The purpose of this case study was to understand how one middle school implemented a professional learning community model and planned for sustainability of the model. More specifically, the researcher determined the school's level of immersion in the basic dimensions of a professional learning community, identified compelling and constraining forces affecting implementation, and assessed beliefs of certified personnel about the sustainability of the model. As a quantitative method, a survey instrument to assess perceptions of the faculty on instructional practices was administered to certified personnel. Descriptive statistics reported were mean, median, mode, and standard deviation. Qualitative methods used in this case study included an interview with the principal, a focus group discussion with 5 certified personnel selected by the principal as being knowledgeable about reform efforts in the school, a focus group discussion with 5 certified personnel randomly selected by the researcher, observations of professional learning community meetings, and a review of artifacts.

Findings indicated the school was deeply immersed in the basic dimensions of professional learning communities. In addition, compelling forces impacting implementation were categorized as: (a) leadership, (b) time, (c) small changes, (d) staff attitude, (e) on-site expertise, (f) risk-free environment, and (g) system level support. Constraining forces were categorized as: (a) time and logistical issues, (b) staff attitude, (c) stressors and demands, (d) professional development, (e) teacher turnover, (f) student population, and (g) external forces. Factors leading to sustainability of the model were categorized as: (a) leadership, (b) staff recruitment, (c) system level support, and (d) planning for leadership succession.

INDEX WORDS: Educational Change, School Reform, Professional Learning Community, Learning Organizations, Teacher Collaboration, Shared Leadership, Collective Learning, Shared Values, Supportive Conditions, Shared Personal Practice, Sustainability, Learning-Focused Schools, Middle Schools, Case Study, Georgia

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by

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DOCTOR OF EDUCATION

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2007

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by

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Electronic version approved: December 2007

DEDICATION

In recognition of their love and encouragement, I dedicate this dissertation to the memory of my parents, Marjorie and Harry. Thank you for your guidance and your belief in me. Your support has been a constant source of inspiration in my life and continues to give me direction.

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CHAPTER I

INTRODUCTION

With public concern over education sparked by the 1983 report, *A Nation at Risk*, from the National Commission on Excellence in Education, American education is embarking on various attempts at school reform in response to increasing public demands for changes in the educational system (DuFour & Eaker, 1998; Hord, 2004b; Senge, 2000). Due to movements such as the Excellence Movement in the 1980s and the Restructuring Movement in the 1990s, fragmented reform efforts in schools are producing little to no improvement (Huffman & Hipp, 2000). According to DuFour and Eaker, education reform endeavors, while research-based, fail to make significant improvements in student achievement. The processes used in reform models typically have no effect on instructional quality and levels of achievement because educators focus more on "commitments to offer workshops or implement programs" instead of student assessments (Schmoker, 2004a, p. 426).

In recent years, the perception of a school organization as a learning organization is influencing school reformers (Senge, 2000). Although changing any aspect of school structures can be difficult, many current school improvement initiatives are focusing on the restructuring of school culture to improve teaching and student achievement (Senge). Rooted in the business sector and based on Senge's theory that when members of an organization learn, the entire organization learns, the professional learning community model is moving into the realm of education.

With increasing accountability mandates in federal legislation such as the *No Child Left Behind Act of 2001*, educators are considering professional learning

communities as an option for school improvement because of its many positive benefits including higher student performance (Hord, 2003; Huffman & Jacobson, 2003; Lieberman & Miller, 2000; Schmoker, 2004a). When organizations are structured as learning organizations, improvement occurs in the organization (Senge, 2000). Lowperforming schools can overcome implementation problems that accompany reform efforts and increase student achievement when the staff and school are organized as a professional learning community (Morrissey, 2000).

Background of the Study

Although a variety of definitions can be found in the literature, common terms and phrases associated with the concept of professional learning communities include relationships, collaboration, shared ideals, shared leadership, shared goals and vision, improved teaching practices, data-driven decision-making, commitment to teaching and learning, strong culture, and lifelong learning (DuFour & Eaker, 1998; Hipp & Huffman, 2000; Holland, 2002; Hord, 1998; Senge 1999, 2000). According to Senge (1990), a learning organization is one "where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together" (p. 3). Hord (1997) refers to a professional learning community as an organization "in which teachers in a school and its administrators continuously seek and share learning, and act on their learning" (p. 6). Intertwined in professional learning communities, Hord (2004a) states, are "five major themes: supportive and shared leadership, shared values and vision, collective learning and application of that learning, supportive conditions, and shared personal practice" (p. 1). These dimensions of

professional learning communities are generally agreed upon by researchers such as DuFour and Eaker, Hord (2004b), and Youngs and King (2002).

According to DuFour (2004), there are four building blocks that lay the foundation for a professional learning community: (a) mission, (b) vision, (c) shared values, and (d) goals. The first building block in creating professional learning communities is to state a mission or purpose for the existence of the community which includes a focus on improved teaching and learning. The second building block is to establish a vision to provide a sense of direction which begins with a dialogue across the curriculum about the school's current reality, evolves into a vivid picture of what the organization hopes to become, and compels professionals to work together to make it a reality. The development of shared values is the third building block which provides the direction that enables individuals to act autonomously. The fourth building block is to determine goals that are linked to the vision by establishing priorities, setting specific and measurable objectives, establishing a timeline, and determining criteria to be used in evaluating progress toward the goals. DuFour further states that once the four building blocks are in place and balanced, the school has a solid foundation for implementing school improvement efforts and becoming an effective professional learning community.

The key to establishing and sustaining successful professional learning communities is to have effective leadership (Hipp & Huffman, 2003). According to Morrissey (2000), in a study of five schools' development into professional learning communities by the Southwest Educational Development Laboratory, leadership is critical in creating the support and structures necessary for growth and development of the staff in this new direction. Successful professional learning communities have administrators who do not practice top-down leadership, but provide supportive and shared leadership (Hipp & Huffman, 2000; Holland, 2002; Huffman & Hipp, 2000; Huffman & Jacobson, 2003).

The principal, Morrissey (2000) states, provides physical conditions and resources to support the staff in their continuous learning, develops and facilitates organizational structures for shared decision-making and leadership, implements systems to communicate and obtain input on a regular basis, and keeps the vision at the forefront of the professional learning community. Leaders of professional learning communities encourage others to contribute ideas through conversations and team meetings, and work on relationship and trust building. In schools with an effective professional learning community, principals provide supportive and shared leadership and are proactive in providing assistance, nurturing, and responsibility (Huffman & Hipp, 2000).

In successful professional learning communities, school leaders model and communicate the importance of a shared mission and vision focused on teaching and learning, share decision-making, create a collaborative structure for learning to occur, use data to inform practice and decisions, and develop internal capacity of all stakeholders (DuFour & Eaker, 1998; Hipp & Huffman, 2000; Hord, 1997; Huffman & Hipp, 2000; Morrissey, 2000).The degree of school improvement depends on readiness level, a climate which fosters trust and respect, collective efforts of all stakeholders and leadership effectiveness (Hipp & Huffman; Holland, 2002; Huffman & Hipp, 2003; Morrissey). Successful transformation and sustainability depend on how firmly entrenched changes have become in the school's culture (DuFour & Eaker; Hipp & Huffman, 2003; Huffman & Hipp; Strahan, 2003; Thompson, Gregg, & Niska, 2004). According to Huffman and Jacobson (2003), leaders who are more successful in developing a professional learning community exhibit a transformational or collaborative leadership style. Effective leadership guides growth and development toward a professional learning community structure where all staff members collaborate to increase their effectiveness in helping students achieve. Even though the principal is responsible for creating an organizational structure for successful implementation of a professional learning community, improvement is not determined by the actions of the principal alone. While establishing and sustaining successful professional learning communities depend on effective leadership that includes the principal along with teacher leaders, Strahan (2003) confirms the importance of a focus on addressing student needs by targeting areas to improve instruction, instructional strategies, and student achievement.

Though schools acting as professional learning communities have common characteristics, as Huffman and Hipp (2003) cite, implementation of professional learning communities in schools varies and ranges in readiness levels from high-readiness to lowreadiness with high-readiness schools seeing more success. Hipp and Huffman (2000) report empowered decision-making significantly varies in schools of differing readiness levels. In addition, Hipp and Huffman state that, although there is a focus on student learning in both high-readiness and low-readiness schools, staff members in lowreadiness schools focus on improving test scores as opposed to developing a shared vision.

According to the Annenberg Institute for School Reform (2004), advantages of successfully implementing a professional learning community structure include school

improvement, positive cultural changes, development of leadership within the staff, knowledge of adult learning theories, choice of individual and group professional development, and interconnectedness among personnel, students, and community. Several benefits for teachers identified by Hord (1997) include reduced isolation, increased knowledge of effective teaching practices, increased awareness of the learning process, increased professional inspiration, higher morale, improved changes for learners, increased commitment to changing culture, and systemic change. Hord also lists benefits for students including lower dropout rates, higher attendance rates, gains in achievement, and decreased achievement gaps. In professional learning communities, teachers more effectively choose and apply teaching strategies to address student needs (Hipp & Huffman, 2003). In addition to numerous benefits identified in the literature, some concerns recognized in the study conducted by Holland (2002) include teacher burnout, staff fragility, and a lack of skills for group decision-making.

As DuFour (2004) indicates, collaboration in a professional learning community is a systematic process in which teachers work together to analyze and improve their classroom practices and is identified by Johnson (2006) as an important factor in the success of reform endeavors. Working along with effective leadership to target student learning, teams of teachers come out of isolation to act as change agents as "they reform one classroom at a time" (Johnson, p. 150). In schools functioning as effective professional learning communities, teachers learn and implement new skills or initiate changes in teaching practices which result in substantial increases in test scores (Thompson, et al., 2004; Trimble & Peterson, 2000).

While Schmoker (2004a) indicates true professional learning communities are "still extremely rare" (p. 424), Leo and Cowan (2000) state that little is known about how to create a professional learning community. Though current literature documents advantages and benefits of a professional learning community along with various success stories, research fails (a) to indicate how the transformation takes place, (b) to identify compelling forces that facilitate implementation, and (c) to explain how to handle constraining forces that hinder implementation. Leonard and Leonard (2005) state that creating and sustaining a professional learning community is a difficult task which produces challenges that make benefits elusive. Changing to a professional learning community, according to Morrissey (2000), is not a simple undertaking, especially when specific steps or actions necessary in developing this new structure are not clearly described in the literature. According to Visscher and Witziers (2004), although there is general agreement in the research on the practices constituting a professional learning community, "the concept seems to be rather 'fuzzy' when it comes to questions like which structural arrangements and instruments are at the disposal of school management to promote the professional development and learning of teachers within the context of communities" (p. 786).

Since research lacks a collective knowledge of how characteristics of a professional learning community are manifested, Morrissey (2000) suggests that areas needing further study include key elements or compelling forces that make transformations successful, processes used to assist in the growth and change of professional practices, and plans for addressing constraining forces that get in the way of success. In addition, Morrissey states: Our speculation is that schools continue to struggle with improvement issues because there is a significant disconnect between "what research says" and the school's ability to put the research into practice while simultaneously balancing the daily struggles and dramas associated with the highly complex organizations that we call schools. (p. 22)

While success depends on sustaining and embedding efforts into the culture, according to Hipp and Huffman (2003), many schools have not addressed institutionalization, thus resulting in sustainability as a major concern. Coburn (2003) indicates that although sustainability is fundamental, "few conceptualizations address it explicitly" (p. 6). Joyce (2004) states that although some successful cases have been documented, "generalizable strategies have been elusive" (p. 77). "There is much work still to be done in order to fully understand and successfully implement professional learning communities" (Hord, 2004, p. 4).

Statement of the Problem

Well-documented in the literature, attributes, structure, and benefits of professional learning communities motivated educators to implement professional learning communities as an effort toward school improvement amid increased mandates and demands for accountability. Professional learning communities were characterized in the literature by supportive and shared leadership, reflective dialogue, a shared vision focused on teaching and learning, improved systems thinking, supportive conditions, collaboration and team learning, data-driven decision-making, and shared personal practice. In effective professional learning communities, gains in student achievement and decreases in achievement gaps resulted from data-driven changes in instruction including increased student engagement, improved teaching, prioritized areas for improvement, motivated teachers and students, and a coordinated focus on teaching and learning as staff members collaborate.

With the establishment of professional learning communities, many positive changes for schools including higher student performance became attractive to school leaders as they engaged in school reform efforts to meet accountability demands; however, specific steps to take in development, maintenance or sustainability of a professional learning community structure were not described in the literature. Administrators experienced difficulty as they attempted to transform their schools into professional learning communities. Additionally, guidance for educators interested in being leaders in professional learning communities was scarce.

While attributes and benefits of professional learning communities were documented in the literature, research on the creation or sustainability of a professional learning community model addressing each school's individual context was lacking. Though some constraining forces affecting the implementation of effective professional learning communities were identified in the literature, how to manage or avoid those forces was not clear. Without appropriate guidance, educators struggled to establish or to recreate effective professional learning communities; thus, success levels varied.

While the structure of a professional learning community provides necessary support for low-performing schools to show gains in student achievement and school improvement, there is a gap in the literature in putting the theory of professional learning communities into practice. More specifically, the identification of compelling forces that facilitate implementation and constraining forces that hinder implementation of professional learning communities is lacking in the literature. Although effective leadership was touted as key to successful transformation and sustainability of professional learning communities, there was a lack of research on effective implementation of the model during the change process. Even with this lack of research, implementing professional learning communities was an option educators exercised in order to meet mounting demands and pressures of accountability to increase student achievement.

Therefore, the researcher proposed to understand the implementation of a professional learning community in one middle school by examining the level of immersion in the five dimensions, identifying compelling and constraining forces impacting implementation, and assessing beliefs of certified personnel about sustainability of the professional learning community. This study yielded insight into one middle school's implementation and plan for sustainability of the professional learning community model.

Research Questions

The researcher proposed to examine the implementation of a professional learning community in one middle school in Georgia. The study was guided by the following subquestions:

- 1. To what extent is the school immersed in the basic dimensions of a professional learning community?
- 2. What are compelling forces that impacted the implementation of the professional learning community?

- 3. What are constraining forces that impacted the implementation of the professional learning community?
- 4. What factors do participants identify that will lead to sustainability of the professional learning community?

Conceptual Framework

In the realm of school reform literature, various descriptions of models for school improvement were found along with supporting data. Though demands for accountability continued to increase, the basis for implementation of school reform measures by educators remained centered on the desire to improve student achievement by making systemic changes in the learning organization. One model encompassed by school reform initiatives was a professional learning community structure with its strong commitment of teachers and administrators affecting its success level. This model was grounded on five dimensions as described by Hord (2004): (a) supportive and shared leadership where the principal shares leadership, power, authority and decision-making, as well as supports and encourages continuous learning; (b) shared values and vision which show a total commitment focused on teaching and learning; (c) collective learning and application where all school staff are engaged in seeking and applying new knowledge to address students' needs; (d) supportive conditions for structures which support the new culture and strengthen collaborative relationships; and (e) shared personal practice where teachers report successes and failures, praise and recognize accomplishments, and observe and provide feedback to one another.

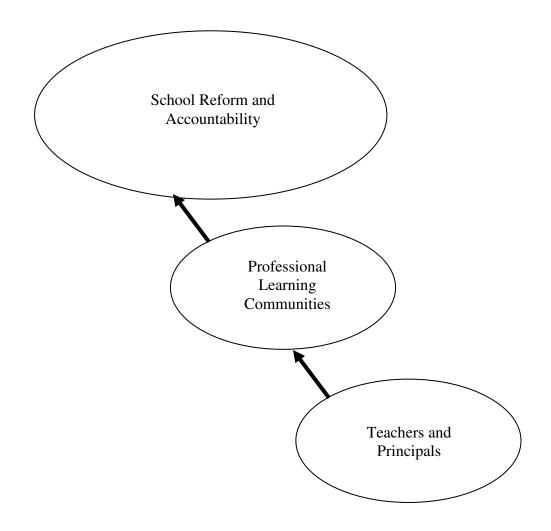


Figure 1. Conceptual Framework

Significance of the Study

Under increasing public scrutiny, school leaders search for better ways to address growing pressures and mandates of escalating accountability measures. In order to meet continuously rising minimal requirements for meeting yearly progress and demands for improved student achievement, school reform efforts continue to intensify with a greater focus on the quality of teaching and its effects on student learning. Collaborative efforts between school leaders and teachers, with teachers at the forefront and in the best position to directly influence student achievement, are being implemented to improve teaching and learning. The development of an environment promoting continuous learning and structured professional development concentrating on improved teacher collaboration leads to a professional learning community model.

Any change in school structures and processes involves time, anxiety and uncertainty, ongoing technical assistance, learning new skills, understanding the rationale for change, assessing organizational structures within and in relation to the school, and interaction with peers. The literature provides an understanding of the dimensions of a professional learning community and the importance of leadership to implementation and sustainability of the model, but less is known about the actual implementation process.

Therefore, the researcher proposed to understand the implementation of a professional learning community in one middle school by examining the level of immersion in Hord's five basic dimensions, identifying compelling forces that facilitate implementation, identifying constraining forces that hinder implementation, and describing factors that participants believe would lead to sustainability of the model in

order to provide administrators and other school leaders additional information as they implement a professional learning community model.

Contributing to the knowledge base of the participants, the profession, the researcher, as well as other researchers, this research examined the implementation of a professional learning community and provided insight into the creation of and sustainability of professional learning communities. The findings could affect policy as guidelines for developing a professional learning community are formed and refined.

Knowledge of how to cultivate the structure of their school so that improvement in teaching and learning continues and is sustained over time was shared with participants in this study. With input from participants, findings provided relevant, meaningful information and guidance related to school improvement during the change process and sustaining process.

As a School Improvement Specialist, conducting this study provided the researcher with an expanded knowledge base of professional learning communities and their benefits and provided additional insight into the development and sustainability of the structure and culture of a professional learning community. With expertise in professional learning communities, the researcher became better prepared to provide more effective guidance and more appropriate professional development during the transformation process.

Delimitation

Using a controlled sample limited to one middle school in Georgia provided information relevant and restricted to only one geographical area and one school organizational level.

Limitations

Limitations of this study identified by the researcher were as follows:

- 1. Results of this study were limited to one school and restricted to one geographical area and one school organizational level.
- 2. Interviewing only the principal and conducting two focus groups each with 5 certified personnel in one school in this study provided perceptions of a limited number of personnel.
- Participants could have been unfamiliar with the terms used in the data collection instrument or could have had differing views as to their current status of school practices.
- 4. Focus group discussions with teachers in a group setting could have inhibited the responses of the participants.
- 5. Available applicable artifacts were few in number.
- Unknown factors could have contributed to a rating on the survey which was not reflective of the participants' actual perception of each dimension of a professional learning community.
- 7. The researcher was a participant researcher.

Procedures

Introduction

In this study, the researcher proposed to understand how one middle school implemented a professional learning community model and planned for sustainability of the model. More specifically, the researcher examined forces affecting implementation and sustainability of the model by assessing beliefs, practices, and evidence of the existence of Hord's five dimensions of the professional learning community: (a) supportive and shared leadership, (b) shared values and vision, (c) collective learning and application, (d) supportive conditions, and (e) shared personal practice. The literature reviewed supported a professional learning community model in the school improvement process and emphasized the importance of the principal's role in creating and sustaining improvement efforts; however, there was limited research on how to establish and sustain effective professional learning communities during the change process. With this study, the researcher attempted to fill the void in the literature.

Research Procedures

The researcher conducted a case study of the implementation of a professional learning community in one middle school. The researcher used quantitative methods including the administration of a survey instrument to all certified personnel, and qualitative methods including an interview, teacher focus group discussions, examination of artifacts, and observations to gather data for analysis.

Population

The population for this study included all certified personnel and all paraprofessionals from one middle school that has implemented a professional learning community model. In addition to all certified personnel completing a survey, the principal participated in an interview and two groups of 5 certified personnel participated in focus group discussions. The school was located in southern Georgia.

Sampling

In this study, one middle school was selected based on the researcher's first-hand knowledge of their current immersion into a professional learning community model. For one focus group discussion, the principal selected 5 certified personnel knowledgeable about reform efforts in the school. The researcher randomly selected 5 certified personnel for a second focus group discussion.

Instrumentation

Developed by Olivier, Hipp, and Huffman, the *Professional Learning Community Assessment (PLCA)* was used as the survey instrument. Based on Hord's five dimensions of professional learning communities, the *PLCA* assessed perceptions of school personnel and other stakeholders on school practices. The instrument used six descriptors along with clarifying statements for each critical dimension identified in the literature as an effective attribute of professional learning communities. These six dimensions assessed were (a) shared and supportive leadership, (b) shared values and vision, (c) collective learning and application, (d) shared personal practice, (e) supportive conditions related to relationships, and (f) supportive conditions related to structure. Participants rated each of 45 statements about school practices according to personal degree of agreement with the statement. Demographic data including gender, number of years teaching experience, and academic area were collected during the study.

In addition, the researcher conducted an interview of the principal and facilitated two focus group discussions with 5 identified personnel in each group. Open-ended interview questions, developed by the researcher, were used to acquire information to determine themes on compelling forces, constraining forces, and sustainability.

Data Collection

Demographic data including gender, number of years teaching experience, and academic area were collected from participants. Informed consent was obtained from participants prior to data collection. Participants' written and oral responses as well as the identification of the school and school system were kept confidential. In order to answer research question 1, a survey of all certified faculty members was conducted using the survey instrument, *PLCA*. An interview, focus group discussions, observations, and examination of artifacts provided additional information. In order to ensure a better return rate for the survey instrument, the researcher explained the purpose of the survey, emphasized that all responses would be anonymous, and administered the survey during a regularly scheduled faculty meeting.

In order to answer research questions 2, 3, and 4, an interview, two focus group discussions, observations of professional learning communities, and artifact review were used as data collection methods. The researcher developed open-ended questions for use in an interview with the principal and two focus group discussions with 5 selected participants in each group to collect qualitative data on forces impacting implementation and sustainability of the model. The principal interview and focus group discussions were audio-taped while responses were recorded by the researcher. Observation notes were recorded by the researcher during collaborative team meetings. In addition, artifacts such as mission and belief statements along with minutes from meetings of the professional learning communities and the interdisciplinary team were collected for examination. *Data Analysis*

In order to answer research question 1, data obtained from the survey were analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics were reported. Qualitative methods including interviewing the principal, facilitating focus group discussions, examining artifacts, and conducting observations of professional learning communities provided additional data for research question 1. Data were used to identify recurring themes about school practices characteristic of professional learning communities and to determine level of immersion in basic dimensions of the model.

In order to answer research questions 2, 3, and 4, the researcher used data collected from the principal interview, the focus group discussions, the review of artifacts, and observation notes to determine recurring themes and trends about compelling and constraining forces that impacted the implementation of a professional learning community and sustainability of the model.

Definition of Terms

- (1) Learning organization an organization "where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together" (Senge, 1990, p. 3).
- (2) Professional learning community an organization "in which teachers in a school and its administrators continuously seek and share learning, and act on their learning" (Hord, 1997, p. 6). Intertwined in professional learning communities, according to Hord (2004), are "five major themes: supportive and shared leadership, shared values and vision, collective learning and application of that learning, supportive conditions, and shared personal practice" (p. 1).

(3) Regional Educational Service Agency (RESA) – "an agency established to provide shared services to improve the effectiveness of educational programs and services of [local educational agencies (LEAs)] and to provide direct instructional programs to selected public school students"

(www.doe.k12.ga.us).

(4) Southwest Educational Development Laboratory (SEDL) – a "private, nonprofit educational research, development, and dissemination (R D & D) corporation" based in Austin, Texas. SEDL conducts projects which focus on the improvement of teaching and learning. SEDL attempts to "bridge the gap between research and practice" (www.sedl.org/about/).

Summary

In this era of federal mandates and accountability pressures for improved student achievement, educators continue to search for a reform model to assist them in attaining desired results—improved teaching and improved student learning. One such model that provides many benefits for both students and teachers while concentrating on continuous learning and student achievement is a professional learning community model which centers its efforts on the improvement of teaching practices so that student learning increases. In order to become a successful and effective professional learning community, systemic changes are made in the school culture so that a life-long commitment to student learning becomes the heart of its existence. Decisions based on various sources of data are made by collaborative teams of teachers and administrators who actively support and facilitate a continued focus on improving teaching and learning. As additional effective professional learning communities are documented in the literature, educators seeking to improve their schools attempt to recreate that success by implementing this model in their organizations. Though the literature provides data on successful professional learning communities and hails the importance of specific dimensions in the implementation and sustaining process, there has been little success in reconstructing the necessary foundation and practices in other schools. Guidance in making and sustaining systemic changes in education in the form of professional learning communities is limited and is an area for further research in the field of education.

CHAPTER II

REVIEW OF RESEARCH AND RELATED LITERATURE

Introduction

A review of research and related literature on school reform, professional learning communities, basic dimensions of professional learning communities, the change process, and sustainability of school improvement efforts provided the basis for this study on the implementation and sustainability of a professional learning community model. While the review of the literature revealed that little empirical research exists, anecdotal evidence was found. Basic dimensions of professional learning communities were identified in the research as foundational information on critical attributes of the model. In addition, conceptual origin, benefits, collaboration, collegiality, role of leadership and leadership succession were documented along with change process, complexity of change, and compelling and constraining forces affecting change.

School Reform Efforts

Beginning with the 1983 report, *A Nation at Risk*, from the National Commission on Excellence in Education and continuing with current demands for school improvement, concern over the status of American education is growing. Various attempts at school reform and increased public demands for accountability and changes in the educational system are being implemented (DuFour & Eaker, 1998; Hord, 2004b; Senge, 2000). Though research-based, education reform endeavors fail to make significant improvements in student achievement (DuFour & Eaker). Additionally, little school improvement is evident in change initiatives introduced since the Excellence Movement of the 1980s and the Restructuring Movement of the 1990s (Huffman & Hipp, 2000).

The movement that began in the 1980s is known as the Excellence Movement with schools doing "more" of everything—teaching a more rigorous curriculum, assigning more homework, going to school more days per year, testing more frequently, and expecting more of teachers (DuFour & Eaker, 1998; Lieberman & Miller, 2000). According to DuFour and Eaker, based on the Restructuring Movement of the late 1980s and early 1990s, a new emphasis on site-based reform is seen in education and includes major initiatives such as a summit convened by President George H. W. Bush to determine recommendations for improving the educational system. The result of the summit, a top-down approach to school improvement, is known as "Goals 2000" which listed six national educational goals to be met by 2000 and provided schools freedom on how they achieved their goals (DuFour & Eaker). Though various school reform initiatives are implemented in an effort to address public concerns for improvement in education, processes used in reform models typically have no effect on instructional quality and levels of achievement (Schmoker, 2004a).

Changing demographics, increased numbers of families living in poverty conditions, and increased numbers of students requiring special accommodations are cited as significant factors for the current call for changes in education (Lieberman & Miller, 2000). In the midst of increasing accountability as measured by student achievement and graduation rates along with federal legislation such as the *No Child Left Behind Act of 2001*, educators are seeking reform efforts to meet challenges by making positive and effective changes in the teaching and learning processes (Hord, 2003; Huffman & Jacobson, 2003; Lieberman & Miller; Schmoker, 2004a). The concept that schools can learn, Senge (2000) reports, has become more accepted in the educational arena recently as schools are recreated, made more vital, and are more sustainably renewed in the process of becoming a learning organization.

"Changing any organization is difficult, but changing something as complex as the American system of education is an absolutely daunting task" (DuFour & Eaker, 1998, p. 13). As DuFour and Eaker suggest, the failure of educational reform is due to: (a) the complexity of the task to change a complex educational system, (b) a misplaced focus in the past on strategies not making a difference, (c) a lack of clarity on intended results leading to initiatives focused on methods and processes rather than results, (d) a lack of perseverance by educators to pursue ideas with diligence and tenacity along with a "this too shall pass" attitude, and (e) a failure to appreciate and attend to the change process by not being trained in initiating, implementing, and sustaining change along with a failure to anchor change within the school culture.

Senge (2000) indicates that schools are difficult to change because they are constantly evolving. Although changing school structures can be a difficult task, many school improvement initiatives focus on restructuring school culture to improve teaching and student achievement (DuFour & Eaker, 1998; Hipp & Huffman, 2000, 2003; Hord, 1997a, 1997b, 1998; Huffman & Hipp, 2003). Positive effects of creating and embedding a collaborative culture within a school include improved teacher morale, better knowledge and use of teaching strategies, increased student achievement, and higher attendance rates (Hipp & Huffman, 2000; Holland, 2002; Peebles, 2004; Thompson, et al., 2004; Trimble & Peterson, 2000; Visscher & Witziers, 2004). Due to increasing accountability mandates, educators are considering professional learning communities as an option to increase student performance (Hord, 1997; Schmoker, 2004b). A professional learning community is a model for school improvement which builds capacity within the school to acquire desired results (Schmoker, 2004a). Lieberman and Miller (2000) describe professional communities as a "promising trend" for educating teachers and suggest that the "idea of belonging to a community changes the way we think about teacher learning. Its importance lies in the fact that it changes the relationship of teachers to their peers, breaking isolation that most teachers have found so devastating" (p. 58).

As Huffman and Jacobson (2003) report, the development of a professional learning community is one area of school reform being researched by educators in search of school improvement. While not all professional learning communities excel to the same level or at the same rate, many benefits to adults and students are found at all levels of implementation (Hipp & Huffman, 2000; Holland, 2002; Huffman & Hipp, 2000). DuFour and Eaker (1998) suggest the best opportunity for improvement and "the challenge for educators is to create a community of commitment—a professional learning community" (p. 15).

Professional Learning Communities

Definitions

While several definitions for professional learning communities are documented in the literature, there is general agreement across definitions that a professional learning community emphasizes relationships, shares ideals, and develops a strong culture committed to improved student learning (Annenberg Institute for School Reform, 2004; Hord, 1997; Leo & Cowan, 2000; Schmoker, 2004b; Vander Ark, 2003). Sparks (2002) describes professional learning communities as schools in which staff members provide meaningful and sustained assistance to one another to improve teaching and student learning. Professional learning communities "comprise groups of educators, administrators, community members, and other stakeholders who collectively examine and improve their own professional practice" (Annenberg Institute for School Reform, p. 2).

As Hugo (2002) proposes, a "learning community may refer to groups, locales, weak or strong emotional ties in a group, and qualities of participatory democracy in action" (p. 6). "A professional learning community shares and exhibits a set of commitments, beliefs, and practices, which result in candor, collaboration, and coherence toward adult and student learning" (Vander Ark, 2003, p. 6). "A true learning community identifies, honors, and provides opportunities for any and every successful team or teacher to share his or her methods and successes with colleagues" (Schmoker, 2004b, p. 88).

"The broad concept [of learning communities] can be summarized as school staff members taking collective responsibility for achieving a shared educational purpose, and collaborating with one another to achieve that purpose" (Newmann, 1994, p. 1). A professional learning community, according to Sykes (1999), is a social constructivist approach which mediates teacher beliefs and practices, influences student learning and has "a set of carefully measured teaching and learning outcomes" (p. 237).

Senge (1999) defines a learning organization as one in which "people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together" (p. 3). Hord (1997) refers to a professional learning community as an organization "in which teachers in a school and its administrators continuously seek and share learning, and act on their learning" (p. 6). Intertwined in professional learning communities, adds Hord (2004a), are "five major themes: supportive and shared leadership, shared values and vision, collective learning and application of that learning, supportive conditions, and shared personal practice" (p. 1). These dimensions of professional learning communities are agreed upon by researchers such as DuFour and Eaker (1998), Hord (2004b), Senge (2000), and Youngs and King (2002).

Conceptual Origin

According to Thompson, et al. (2004), with its roots in the business sector, the concept of professional learning communities is based on Senge's belief that when members of an organization learn, the entire organization learns. With the publication of Senge's book, *The Fifth Discipline*, "his description of learning organizations moved into the educational environment. As Senge's paradigm was explored by educators and shared in educational journals, the label became learning communities" (Hord, 2004b, p. 6). "The quality movement as we have known it up to now in the United States is in fact the first wave in building learning organizations—organizations that continually expand their ability to shape their future" (Senge, 1999, p. 34).

In his book, *The Fifth Discipline*, Senge (1990) identifies five disciplines for maximizing an organization's potential as (a) building shared vision – a mutual purpose and commitment rather than compliance, (b) striving for personal mastery – what really

matters to us as individuals and a commitment to lifelong learning, (c) performing with mental models – an awareness of assumptions, generalizations, and images that influence our understanding of the world and actions we take, (d) promoting team learning – an interaction of groups which begins with dialogue, and (e) improving systems thinking – a conceptual framework integrating all disciplines into a body of knowledge and skills so that organization members see the whole as opposed to the parts, and influence the change process of the organization as well as actions taken to shape the organization.

Educators, according to Senge (2000), lean toward "the 'Fifth Discipline' approach because of the underlying promise of organizational learning—that people can marry their aspirations with better performance over the long run" (p. 5). Senge also maintains, in an effort to become more effective, schools embrace the new model that enables them to function as a professional learning community with an emphasis on relationships, shared ideals, and a strong culture—a community that is committed to its improvement. According to Huffman and Jacobson (2003), the concept of professional learning communities provides "a viable process for stakeholders to engage collaboratively in dialogue and planning for the purpose of school improvement and student achievement" (Huffman & Jacobson, p. 248).

Thompson, et al. (2004) suggest many schools are "working to become professional learning communities in the hope that student learning will improve when adults commit themselves to talking collaboratively about teaching and learning and then take action that will improve student learning and achievement" (p. 1). By restructuring and reculturing schools, professional learning communities focus on improving teaching and learning through structures such as team learning, study groups, coaching and mentoring (Huffman & Jacobson, 2003; Thompson, et al.; Wheelan & Kesselring, 2005). "Re-culturing schools requires the ability to understand not only what is happening in your classroom, but in your work group and in the larger organization of the school" (Thompson, et al., p. 9). According to Fullan (2000), restructuring alone makes no difference in teaching and learning quality, while deeper changes made by reculturing with a focus on assessment and improvements do make a difference in teaching and learning quality.

Based on adult learning theory instead of a school reform initiative, Morrissey (2000) proposes that a professional learning community is the supporting structure for schools to use their internal capacity to continuously transform themselves. Going back as far as the seventeenth and eighteenth centuries, Hugo (2002) identifies adult learning as "groups of adults who spontaneously and voluntarily [come] together for the purpose of mutual improvement through common study" (p. 12). According to Senge (2000),

What does it mean for an organization to learn? In practice, it means developing a clear and honest understanding of current reality that is accessible to the whole organization, is used to produce new, equally accessible knowledge, and that helps people take effective action toward their desired future. (p. 552)

Benefits of Professional Learning Communities

In her research findings, Hord (1997a, 1998) identifies several benefits for teachers participating in successful professional learning communities including reduced isolation, increased commitment to goals, shared responsibility for student success, increased knowledge of effective teaching practices, increased awareness of how to help students achieve, increased professional inspiration, higher morale, improved changes for learners, increased commitment to changing culture, and embedding systemic change. Hord also identifies many benefits for students including lower dropout rates, higher attendance rates, increased learning with higher gains in content areas, and decreased achievement gaps.

In successful professional learning communities, teachers "want to understand their students and how they learn" (Office of Educational Research and Improvement, 2000, p. 25). Students' needs are emphasized and addressed as the staff's collective inquiry and learning processes are implemented (Holland, 2002; Hord, 1998; Office of Educational Research and Improvement). By learning to work collaboratively and share information, teachers become more successful in choosing and applying more effective strategies to address student needs (Holland; Strahan, 2003).

According to the Annenberg Institute for School Reform (2004), professional learning communities successful in school improvement provide many advantages, promote positive cultural change, develop leadership, are strengthened by adult learning theory, are enhanced by interconnectedness, and have key structural conditions in place. When teachers are able to determine their needs and to participate in their own professional development, learning communities are powerful, practical, and relevant to what happens in classrooms (Office of Educational Research and Improvement, 2000).

Morrissey (2000) indicates that low-performing schools can overcome implementation problems that accompany reform efforts and increase student achievement when the staff and school are organized as a professional learning community. Strahan (2003) maintains that when teachers work collaboratively to improve instruction, they target prioritized areas for improvement and coordinate efforts to implement effective teaching strategies, thus developing stronger teacher efficacy to meet targeted goals.

Professional learning communities provide the support necessary for overcoming the status quo and making complex changes, have a collective focus on student learning, and have a shared responsibility for student achievement (Sparks, 2002). As Hord (2004b) points out, "professional learning communities can play a major role in turning troubled schools around" (p. 5). "By participating in strong professional communities, these practitioners have the support to create engaging and challenging learning experiences for students, who under other circumstances, may have been ignored, poorly educated, or left behind" (Holland, 2002, p. 342).

Basic Dimensions of Professional Learning Communities

Vander Ark (2003) affirms learning communities create the opportunity for a common intellectual mission, coherent curriculum, and a supportive culture. Critical attributes of successful professional learning communities are documented in educational research and share terms such as relationships, collaboration, shared ideals, shared leadership, shared goals and vision, improved teaching practices, data-driven decision-making, commitment to teaching and learning, strong culture, and lifelong learning (Annenberg Institute for School Reform, 2004; DuFour & Eaker, 1998; Hipp & Huffman, 2000, 2003; Holland, 2002; Hord, 1998; Huffman & Hipp, 2000; Huffman & Jacobson, 2003; Leonard & Leonard, 2005; Office of Educational Research and Improvement, 2000; Senge 1999, 2000; Visscher & Witziers, 2004; Youngs & King, 2002).

Professional learning communities, Hord (1997a, 2004b) proposes, have five intertwined themes or dimensions detailing how they look and how they operate: (a)

supportive and shared leadership, (b) collective learning and reflective dialogue, (c) shared values and vision, (d) supportive conditions, and (e) shared personal practice. Referring to each school's distinctive context, Hord (1998) states, the attributes or dimensions are present in schools, but in various degrees and are implemented in "unique ways by different staffs" (p. 2).

Shared and Supportive Leadership

Professional learning communities have supportive and shared leadership where the principal shares leadership, power, authority and decision-making as well as supports and encourages continuous learning (Hord, 1997a, 2004b). Hipp and Huffman (2000) report that effective leaders facilitate change centered on the improvement of teaching and learning. Interactive themes in shared leadership include "capacity building, creating conditions for participation, and empowered decision-making" (Hipp & Huffman, p. 13). Additionally, within the dimension of shared and supportive leadership, Hipp and Huffman (2003) identify critical attributes as "nurturing leadership among staff; shared power, authority and responsibility; and broad-based decision-making for commitment and accountability" (p. 6).

According to Emihovich and Battaglia (2000), traditional leadership styles are shifting in order to support new methods for professional learning. Morrissey (2000) reports traditional leadership is being replaced with a structure of shared leadership where all staff members, including administrators, work together toward school improvement. In the research of Huffman and Jacobson (2003), participants describe their schools as a "democratic organization guided by positive principles, ethics, and values" (p. 248). As Hord (1997a) states, leadership is no longer top-down and leaders of professional learning communities should be "envisioned as democratic teachers" (p. 9). In addition, Hord (1998) states democratic participation is the climate that allows goals to be reached.

Key to successful professional learning communities are the principal and leadership of the school (Hipp & Huffman, 2000, 2003; Hord, 1997a, 1997b; Huffman & Jacobson, 2003; Morrissey, 2000). "Principals must have the ability to share authority, facilitate the work of the staff, and have the ability to participate without dominating" (Thompson, et al., 2004, p. 4). As Morrissey reports on the study of 5 schools' development into professional learning communities by the Southwest Educational Development Laboratory (SEDL), leadership is critical in creating the support and structures necessary for growth and development of the staff in this new direction.

Principals recognize that moving to a professional learning community model demands "less command and control and more learning and leading, less dictating and more orchestrating" (DuFour & Eaker, 1998, p. 184). According to Hipp and Huffman (2000), leaders in high readiness schools are proactive, innovative, and intuitive; have high expectations; build on the strengths of faculty members; and build capacity, while leaders in low readiness schools are viewed as suspicious and empower teachers to deal more with classroom tasks than school level decisions. Huffman and Jacobson (2003) suggest that when developing professional learning communities, collaborative or transformational styles of leadership have greater success. As Schmoker (2004) acknowledges, in effective team-based organizations, leadership becomes simpler, more manageable, and less dependent on rare qualities like charisma.

According to National Staff Development Council materials (Georgia Department of Education, 2004), the principal in a school structured as a professional learning community prepares teachers for skillful collaboration, creates an organizational structure that supports collegial learning, understands and implements an incentive system that ensures collaborative work, creates and maintains a learning community to support teacher and student learning, and participates with other administrators in one or more learning communities. In professional learning communities, as reported by DuFour and Eaker (1998), the principal models and communicates the importance of mission, vision, values, and goals; shares decision-making; creates collaborative structures focusing on teaching and learning; and concentrates on results to inform practice, celebrate successes, and identify areas for growth.

Collective Learning and Application

Collective learning, a dimension of professional learning communities, is described by Hord (1998) as a process in which all staff members "work collaboratively and continually to learn together, and apply their learning for the benefit of all students" (p. 4). Morrissey (2000) refers to collective learning as engagement of all "school staff at all levels in processes that collectively seek new knowledge and ways of applying that knowledge to their work" (p. 6). Activities supporting collective learning include

engaging in collaborative problem solving around specific issues or dilemmas, identifying needs, and articulating a focus for the work; building knowledge by studying and discussing current issues and practices in quality teaching and learning, thus exploring ways to develop a culture of ongoing professional learning in a school or district; and observing, analyzing, and providing feedback and ideas about school data and teacher and student work. (Annenberg Institute for School Reform, 2004, p. 2) Collective learning in professional learning communities has a focus on school improvement which allows teachers to study and discuss best practices as they make adjustments and learn to apply new techniques and strategies to create a more productive learning environment for all students (Emihovich & Battaglia, 2000; Hord 1997b; Morrissey, 2000). Within the dimension of collective learning, critical attributes include "shared information and dialogue; collaboration and problem solving; and application of knowledge, skills, and strategies" (Hipp & Huffman, 2003, p. 7).

People in a professional learning community are relentless in questioning the status quo, seeking new methods, testing those methods, and then reflecting on the results (DuFour & Eaker, 1998). Reflective dialogue, suggests Hord (1997a), enables participants to learn to apply new ideas and information to problem solving and, according to Strahan (2003), links professional development to practice. A critical element in strong professional communities, reflective dialogue is evident when teachers talk about situations and their associated challenges (Kruse, Louis, & Bryk, 1994). Furthermore, Kruse, et al., state that teachers form a basis for action by sharing norms, beliefs and values.

Collaboration in a professional learning community is a systematic process in which teachers work together to analyze and improve their classroom practice (DuFour, 2004; Hord, 1998; Huffman & Hipp, 2000). As Holland (2002) proposes, collaboration is a method to reinvent and revitalize practices. As teachers move from a culture of working in isolation into a professional learning community, an increase in self-efficacy among teachers as well as a belief that they can make a difference can be seen (Zimmerman, 2005). Research findings show collaboration has a positive effect on student achievement (Huffman & Hipp, 2000; Leonard & Leonard, 2005; Thompson, et al., 2004; Visscher & Witziers, 2004). As collaborative efforts and processes are developed, according to Hipp and Huffman (2003), teachers become more successful in implementing teaching strategies focused on improving student learning. In professional learning communities, Hipp and Huffman (2000) find collaboration is evident as decisions are made regarding student achievement.

Hord (1998) identifies consistent collaboration as a basic feature of a professional learning community where the focus is on improving teaching and learning. In addition, Morrissey (2000) states resulting collegial relationships produce solutions to problems, strengthen bonds, and increase commitment to school improvement. Although they consider themselves working in a professional learning community, many people misinterpret working together in a collegial manner as true collaboration which focuses on improving teaching and learning (D. Cowan, personal communication, March 2, 2007). Collegial relationships such as respect, trust, and caring associations are identified by Leo and Cowan (2000) as supportive conditions from which collaboration builds and leads to collective learning and application of that learning so that student learning increases.

Shared Values and Vision

DuFour and Eaker (1998) assert a collective commitment of shared values, vision, and mission separate learning communities from ordinary schools. Developed with input from all staff members, a shared vision with an unwavering focus on student achievement and learning is consistently referenced by all members of professional learning communities in all aspects of a school's work and learning processes (DuFour & Eaker; Hipp & Huffman, 2000; Holland, 2002; Hord, 1998; Huffman & Hipp, 2000; Leo & Cowan, 2000; Morrissey, 2000).

In professional learning communities, a vision focused on student learning and shared values guides discussions and decisions about teaching and learning, and enables individuals to act autonomously (Hord, 1997b, 1998). A difference in schools that are not professional learning communities, Hord (1998) advises, is that typically, teachers cannot remember their vision statements. In professional learning communities, Morrissey (2000) notes decisions and norms of behavior are guided by shared values and vision.

Hipp and Huffman (2003) identify critical attributes of shared values and vision including "espoused values and norms; focus on students; high expectations; and shared vision guides teaching and learning" (p. 7). "Regardless of the terminology, the identification of the attitudes, behaviors, and commitments that will advance the vision of a school is crucial to the process of building a professional learning community" (DuFour & Eaker, 1998, p. 99). Once embedded in the culture, shared vision and values focused on student learning become the basis for an effective learning organization (Kruse, et al., 1994; Morrissey, 2000). "Visions cannot be imposed, but emerge over time" (Hipp & Huffman, p. 8).

As professional learning communities develop with a focus that requires a shift from ensuring students are taught to ensuring students learn, DuFour and Eaker (1998) cite four building blocks which provide the foundation for success: mission, vision, shared values, and goals. According to DuFour and Eaker, the first building block in creating professional learning communities is to state the mission or purpose for the existence of the community which should be answered with the word "learning." In successful professional learning communities, DuFour and Eaker find the mission provides clarity in developing priorities and in giving direction to the organization as well as further clarifies what students are expected to learn and how to fulfill the responsibility that all students will learn.

The second building block in creating professional learning communities identified by DuFour and Eaker (1998) is to establish a vision to provide a sense of direction by beginning with dialogue about the school's current reality and evolving into a vivid picture of what the organization hopes to become. This vision, according to DuFour and Eaker, is so compelling that the professionals work together to make it a reality. In addition to input from members of the organization, input from students, parents, businesses, and other community members helps to develop a sense of ownership in the vision of the organization and helps members to understand their ongoing roles (DuFour & Eaker).

In creating professional learning communities, the development of shared values is the third building block identified by DuFour and Eaker (1998) which provides the direction for individuals to act autonomously. Usually largely ignored in other school improvement initiatives, shared values, according to DuFour and Eaker, is a vital part of a successful professional learning community as staff make commitments to using shared values or guiding principles as direction on what is to be done.

The fourth building block in creating professional learning communities is the development of goals that are linked to the vision (DuFour & Eaker, 1998). These specific and measurable goals are created by identifying priorities, establishing a

timeline, and determining criteria to be used in evaluating progress toward the goals (DuFour & Eaker). In order for a school to be an effective professional learning community, DuFour and Eaker state all building blocks must be balanced and, once in place, provide the school with a solid foundation for implementing school improvement efforts. Schools then develop communication, collaboration, and culture in the professional learning community (DuFour & Eaker).

Supportive Conditions

In professional learning communities, supportive conditions exist in school structure allowing time for collaboration, empowering teachers, and reducing isolation (Huffman & Hipp, 2000; Kruse, et al., 1994). Physical, or structural conditions, and people capabilities, or collegial relationships, are identified by Hord (1997a) as types of supportive conditions necessary for productive functioning of the professional learning community. Physical or structural factors include time to collaborate, interdependent teaching roles, proximity of staff to each other, teacher empowerment, communication structures, schedules that reduce isolation, and availability of resources, while people capability reflects the human qualities of people in the organization (Hipp & Huffman, 2003; Hord 1997a, 1997b, 1998; Morrissey, 2000). Members of a professional learning community exhibit collegial relationships that include a willingness to accept feedback and a willingness to work toward improvement (Hipp & Huffman; Hord, 1997a, 1997b, 1998; Morrissey). In supportive learning communities, Lieberman and Miller (2000) affirm teachers reinforce each other in a climate that encourages observing students, sharing teaching strategies, trying out new strategies, getting feedback, and redesigning curriculum and methods of instruction.

"Structures that support the vision of a school and learning community are vital to the effectiveness and innovation of teaching at the classroom level (Morrissey, 2000, p. 6). Critical attributes of supportive conditions include "caring relationships; trust and respect, recognition and celebration; risk taking and a unified effort to embed change" (Hipp & Huffman, 2003, p. 7). In high-readiness schools, principals create conditions promoting success and support staff "in reorganizing time opportunities to expand their capacity and to challenge them to consider new actions" (Huffman & Hipp, 2000, p. 13). Kruse, et al. (1994) assert that simply adding additional time at the end of the workday is not enough and suggest almost daily opportunities to collaborate are needed.

Shared Personal Practice

Shared personal practice is experienced when teachers share successes and failures, praise and recognize accomplishments, and observe and provide feedback to one another as new instructional strategies are implemented and revised (Hord, 1997a, 2004b). According to Morrissey (2000), although it tended to be the last dimension to develop since it requires a complete paradigm shift, shared personal practice is the "clearest link to the classroom" (p. 7). "For people to learn together, they must be comfortable challenging their own and [others'] assumptions and beliefs within safe places" (Thompson, et al., 2004, p. 5). Strahan (2003) reports that successful schools have teachers who work collaboratively to develop stronger instructional strategies for enhancing student achievement which increases not only the capacity of individuals but also the capacity of the entire organization. "Not only do these folks have school plans, they also have plans for teams, grade levels, or other subgroups. And, often, individual teachers write improvement plans for themselves" (Office of Educational Research and

Improvement, 2000, p. 31). Critical attributes across the dimension of shared personal practice include "observation and encouragement; shared outcomes of new practice and provided feedback; and analysis of student work and related practices" (Hipp & Huffman, 2003, p. 7).

While team learning is identified by Senge (2000) as essential for learning organizations to master, Peebles (2004) states team learning is vital since teams have become the "fundamental learning unit in modern organization" (p. 10). "Some of the kinds of teams that operate in the majority of U. S. schools include (a) faculty groups as a whole, (b) grade-level teams, (c) vertical teams, (d) school leadership teams, and (e) site-based management teams" (Wheelan & Kesselring, 2005, p. 323). As stated in the findings of Trimble and Peterson (2000), when the executive team models effective team work, the performance of other team structures is influenced. DuFour and Eaker (1998) suggest four fundamentals for effective team collaboration: (a) time for teams to meet is built into the school day, (b) the purpose of the team meeting is explicit, (c) personnel receive necessary training and support to be effective, and (d) the responsibility to work together is accepted.

In professional learning communities, educators continuously seek and share learning, and they use that knowledge to enhance their effectiveness as professionals to benefit student learning since all contexts within a professional learning community are guided by a commitment to student learning (DuFour & Eaker, 1998; Hord, 1997a, 1997b; Morrissey, 2000). In a school that works together as a professional learning community, the staff is ready when significant changes occur by preparing for them in advance, predicting upcoming needs of the students, and learning ways of revising their methods in preparation for change (Morrissey).

Change Process

While external pressures for accountability mount and school reform measures increase in intensity and in number, many schools opt for a professional learning community model to meet their needs for school improvement, but find major change is both difficult and complex (DuFour & Eaker, 1998). According to Emihovich and Battaglia (2000), redesigning the system "requires more than rethinking ways to use time, disburse credit, allocate resources, or modify structural elements alone" (p. 225). Change is described by Fullan (1985) as a process in which individuals alter their traditional means of thinking and doing as they develop new skills and find meaning and satisfaction in other ways of doing. Organizations undergoing change experience three phases identified by Fullan: (a) initiation—beginning steps of mobilization, adoption, and development; (b) implementation—application and putting into practice of new changes; and, (c) institutionalization—integration of the innovation in the culture.

In the report, *No Dream Denied*, by the National Commission on Teaching and America's Future (2003), recommendations for successful change include these key elements: (a) encouraging teacher collaboration and differentiated staffing, (b) sharing instructional leadership among teachers, (c) redesigning and downsizing schools into small learning communities, (d) supporting the vision with technology, and (e) preparing new teachers in close collaboration with these schools and supporting their continuous professional development (p. 49). Due to major challenges of the change process, Senge

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(1999) suggests that organizations start small with a few core people committed to change for more successful reform.

Complexity of Change

As well as being challenging, changing the structure of an organization is complicated, especially as the status quo is being transformed. According to Hargreaves and Fink (2000), if reform efforts are not in agreement with traditional ways of operation, the new model "neither spreads nor lasts" (p. 694). As Morrissey (2000) notes, transforming a school into a professional learning community requires significant alteration of both structural and normative aspects of schooling, but research lacks information on how transformation takes place, compelling forces which facilitate change, and constraining forces which hinder change. "The technical and social support provided by professional learning communities and teams are essential in overcoming the inertia of the status quo and persisting in making complex changes in leadership and teaching" (Sparks, 2002, p. 6-6).

Due to their constantly evolving nature, Senge (2000) indicates, schools are difficult to change. Furthermore, Fullan (1985) states (a) change takes time, (b) change always involves anxiety and uncertainty, (c) technical and psychological support is required to cope with anxiety, (d) change is incremental and developmental as individuals learn new skills by practicing and providing and receiving feedback, (e) a breakthrough is discovered when people understand why something works better, (f) organizational conditions determine whether a change is successful, and (g) pressure by way of interaction with leaders and other peers is involved in successful change (p. 396). Hord (1997a) acknowledges changing perspectives of both the public and the profession to enable them to understand and value teacher professional development requires a focused and concerted effort. In the report, *No Dream Denied*, by the National Commission on Teaching and America's Future (2003), principles or core elements for turning schools into effective learning communities are identified as: (a) becoming learner-centered—adjusting teaching to the child's developing knowledge and skill, (b) becoming knowledge-centered—focusing on the what and the why of teaching concepts, (c) becoming assessment-centered—using formative and summative assessments, and (d) becoming community-centered—working and sharing knowledge with peers and the community.

Transforming into a professional learning community and changing the focus from teaching to learning, DuFour and Eaker (2004) report, require a key shift in assumptions where learning becomes the constant while time and support become the variables. In addition, DuFour and Eaker (1998) identify common mistakes made during the change process as: (a) allowing too much complacency by not creating a high enough sense of urgency, (b) failing to create powerful guiding coalitions within the organization to champion the change process, (c) underestimating the power of the vision and its clear sense of direction, (d) under-communicating the vision, (e) permitting obstacles that block change, (f) failing to create short-term goals to reach and celebrate, (g) declaring victory too soon before change initiatives become embedded in the culture, and (h) neglecting to firmly entrench the changes in the culture. While Leonard and Leonard (2005) indicate that there has been limited success in recreating effective professional learning communities based upon successful models in other schools, Schmoker (2004a) suggests true professional learning communities are extremely rare. Considered by Huffman (2001) to be a second-order change where the organization itself is altered, the development of a school into a professional learning community model requires "substantial and profound changes that occur in relationships, culture, roles, norms, communication patterns, and practices" (p. 2). Referencing the importance of leadership in the transformation process, Hord (1997b) affirms, "transforming the school organization into a learning community can be done only with the leaders' sanction and active nurturing of the entire staff's development as a community" (p. 6).

Role of Leadership During Change

Being more than just one of the dimensions identified in the literature, the role of leadership within a professional learning community model is ascertained to be the key to establishing, facilitating and sustaining successful professional learning communities focused on teaching and learning (Hipp & Huffman, 2000, 2003; Hord, 1997b, 1998; Morrissey, 2000). The quality of leadership affects the capacity of professional learning communities positively or negatively and in varying degrees (Youngs & King, 2002). If the principal's view of a professional learning community is narrow, according to Mort (2000), student learning is allowed to fall behind other entities, such as parental and community, in priority. Moral leadership leads to an increase in teachers' self-efficacy and belief that they can make a difference (Zimmerman, 2005). "Today's leaders must incorporate skills that include and support all members of the school community and facilitate reaching the identified shared goals of the organization" (Huffman & Jacobson, 2003, p. 240).

Thus strong actions by the principal on behalf of community development are necessary, it appears, to 'get the ball rolling' and, once the initiative is under way, it is also necessary for the principal to share leadership, power, authority, and decision making with the staff in a democratically participatory way. (Hord, 1997a, p. 49)

Successful professional learning communities have administrators who do not practice top-down leadership, but provide supportive and shared leadership (Hipp & Huffman, 2000; Holland, 2002; Huffman & Hipp, 2000; Huffman & Jacobson, 2003). "Principals must have the ability to share authority, facilitate the work of the staff, and have the ability to participate without dominating" (Thompson, et al., 2004, p. 4). As Huffman and Hipp report, in schools with effective learning communities, principals proactively sense when support is needed, when nurturing is needed, and when they need to take charge. Huffman and Jacobson state that leaders who have collaborative or transformational styles have a greater chance for success when implementing a professional learning community model. According to Thompson, et al.,

If principals are to become the "lead teacher and lead learner" they must move beyond traditional leadership styles to create professional learning communities where the goal is to develop people, including oneself. Developing people, each with their own mental models and beliefs about schooling and learning, cannot be accomplished in an organization that does not value the lived experiences of all stakeholders. (p. 5)

As Morrissey (2000) reports, leadership is critical in creating the support and structures necessary for growth and development of the staff in the new direction of a

professional learning community model. During the change, the principal, Morrissey states, provides physical conditions and resources to support the staff in their continuous learning, develops and facilitates organizational structures for shared decision making and leadership, implements systems to communicate, obtains input on a regular basis, and keeps the vision at the forefront of the professional learning community.

To have the greatest impact, principals must define their job as helping to create a professional learning community in which teachers can continually collaborate and learn how to become more effective. Principals must recognize that this task demands less command and control and more learning and leading, less dictating and more orchestrating. (DuFour & Eaker, 1998, p. 184)

While the principal, as the leader in the school improvement process, creates the organization for teacher and student success, the principal does not transform the school alone (Hipp & Huffman, 2000, 2003; Huffman & Hipp, 2000; Morrissey, 2000). Leaders of professional learning communities encourage people to contribute ideas through conversations and team meetings and to work on relationship and trust building. (Hipp & Huffman; Holland, 2002; Huffman & Hipp, 2003; Morrissey; Youngs & King, 2002). In "effective team-based organizations, leadership becomes simpler, more manageable, and less dependent on rare qualities like charisma" (Schmoker, 2004b, p. 88).

Leadership in a professional learning community model is found to have many roles, according to DuFour and Eaker (1998), who suggest the principal of a professional learning community should model and communicate the importance of mission, vision, values, and goals; share decision-making; create collaborative structures focusing on teaching and learning; and concentrate on results to inform practice, celebrate successes, and identify areas for growth. "Thus, collaborative leadership is important as successful learning communities develop the capacity to include all of the stakeholders: students, teachers, families, and community" (Huffman & Jacobson, 2003, p. 240).

A learning community is a phenomenon, as Leonard and Leonard (2005) describe, "intuitively desirable yet manifestly problematic" (p. 23). Leonard and Leonard further state that if "schools continue to fall short of providing the structures, the resources, and the expectations for them to consistently occur at the school site, the image of schools as professional learning communities, for all its intuitive attraction, may remain more of an isolated apparition than a common reality" (p. 36).

Compelling Forces Affecting Change

Although Hord (1997a) states that available research provides little guidance to school leaders in the creation and development of professional learning communities, some research describes factors, or compelling forces, which contribute to successful implementation of the model focused on improved teaching and learning. For schools to be more successful in the transformation into a professional learning community, Hipp and Huffman (2000) maintain leadership is the key in creating "pathways for success" (p. 25). Additionally, Holland (2002) identifies leadership and governance as an important organizational characteristic of effective professional learning communities.

"An environment of trust, openness, support and safety must exist for staff to take collective responsibility for student learning" (Hipp & Huffman, 2000, p. 6). Professional capacity, as Holland (2002) describes, is a major support for a professional learning community. According to Holland, professional capacity includes community, trust, collaboration, and shared responsibility for student learning. Although implementing collaborative work is the most challenging hurdle, Emihovich and Battaglia (2000) recognize that strong, collaborative school cultures can "provide the scaffold to support reform in more meaningful ways" (p. 235).

Leonard and Leonard (2005) identify routine collaboration as an important component to the establishment of professional learning communities, but confirm that administrators are dissatisfied with collaborative efforts in their schools. Johnson (2006) reports that forming collaborative relationships where teachers learn, experience, and reinforce new skills is important for reform efforts to be realized. Strahan (2003) emphasizes the importance of collaboration that focuses on instructional improvement to the success of professional learning communities.

With professional learning communities focusing on improving teaching and learning by making systemic changes in school culture, Hipp and Huffman (2003) suggest that preparation programs for school administrators should go beyond management issues and should "provide practical experiences that focus on relationships and learning outcomes" (p. 10). With little guidance for establishing professional learning communities in the literature, Morrissey (2000) acknowledges that research provides some advice for developing some of the basic dimensions identified by Hord. In addition, Morrissey advises that detailed examples exist in the literature for developing mission and vision statements as well as shared values and goals; however, no other strategies are found for Hord's other dimensions of professional learning communities that are critical to success.

Constraining Forces Affecting Change

Although recognized as a means for school improvement, the movement to professional learning communities, according to Leonard and Leonard (2005), experiences limited success as reformers try to recreate or transform their organizations into this model. With each school having its own unique context, Hipp and Huffman (2003) reveal, there is no "absolute recipe for change" (p. 9). With little guidance in the literature, Emihovich and Battaglia (2000) state there are no simple solutions for schools wanting to implement a professional learning community model.

While many benefits are identified for students and staff, there are some constraining forces identified in the literature which affect the development and effectiveness of a professional learning community, but how to deal with those forces is lacking in research (Fink & Brayman, 2006; Giles & Hargreaves, 2006; Hargreaves & Goodson, 2006; Holland, 2002; Johnson, 2006; Leonard & Leonard, 2005; Mort, 2000; Visscher & Witziers, 2004). According to Morrissey (2000), available research does not include (a) a collective knowledge of how characteristics of professional learning communities manifest, (b) specific actions for developing community, (c) elements leading to successful transformations, (d) processes used in the change process, and (e) potential constraining forces. With research lacking guidance in establishing professional learning communities, leaders have difficulty transforming schools into the model (Sykes, 1999). In addition, the accelerated turnover rates of principals create problems and challenges as well as upset among faculty members (Fink & Brayman).

The school faculty is "perceived as both the greatest asset and greatest barrier to establishing a learning community" (Mort, 2000, p. 109). The faculty, according to Mort,

at times does not understand or fully embrace the need to change current teaching practices and has a limited view of the role of professional development in student achievement. Johnson (2006) notes that changes to instruction are not easy and usually encounter conflict. Furthermore, according to Johnson, constraining forces affecting change include (a) a technical dimension of teachers lacking content knowledge to implement new strategies, (b) a political dimension of lacking support from school or district level leaders and lacking resources, and (c) a cultural dimension of influencing teacher beliefs and values toward teaching. Another constraining force Johnson identifies is preparation ethic which is described as the need of teachers to impart content knowledge in preparation for the next grade and for the required assessments instead of subscribing to an inquiry approach to learning.

Envy of competing schools, standardization, policy reform, leadership succession, changing teacher demographics, and changing student demographics are identified in the research as constraining forces (Giles & Hargreaves, 2006; Hargreaves & Goodson, 2006). As Huffman and Hipp (2000) indicate, the establishment of professional learning communities is hindered by many issues such as escalating accountability requirements, demands on school personnel, a wide range of diverse student needs, teacher isolation, teacher burnout, and numerous stressors. Although many positive aspects of professional learning teacher burnout, staff fragility, unfamiliarity with consensus processes, and requirements of school-within-school structures. Additionally, the Annenberg Institute for School Reform (2004) lists "stumbling blocks" to implementing effective professional learning communities as (a) focusing on process instead of instructional content and approaches,

(b) limiting more rigorous feedback by being reluctant to make work public, (c) not addressing deep-seated issues of trust and equity, (d) allowing leadership capacity to remain underdeveloped, (e) poorly documenting effects of changes in practice and improved student learning, and (f) being aware that structural changes alone do not ensure change in practice.

Visscher and Witziers (2004) note in their study of high school subject area departments that although "the professional community concept is usually considered valuable in research and school improvement, some literature suggests that the notions underlying this concept may be questionable" (p. 787). One of these notions is the belief that shared visions are not easy to develop when teachers, even within same subject area groups, have conflicting ideas (Visscher & Witziers).

Simply declaring a vision by a school leader and imposing it on the organization will not generate the collective energy needed to propel an organization forward. The central task of the leader is to build a vision including all participants in the organization. (Huffman & Hipp, 2000, p. 6)

As Visscher and Witziers (2004) suggest, these "factors do not only impede the development of 'true' professional communities, but also question to some extent whether the professional community concept is a realistic one in the context of secondary schools" (p. 787). Visscher and Witziers also note, though teacher autonomy may exist, it is determined by the framework agreed upon by peers who intensely regulate teacher behaviors with respect to content, goals, and testing.

Consultation between teachers is especially limited to planning teaching activities, accomplishing the planning, the nature and content of testing, the pace of teaching

and the teaching content, whereas there is little consultation on aspects of the didactics of teaching, and the problems teachers meet in daily practice. (Visscher & Witziers, p. 793)

Constraining forces affecting active collaboration of teachers, identified by Newmann (1994), are: (a) many teachers are hesitant to engage in providing feedback to peers about teaching; (b) limited organizational systems exist to assist in the examination of student data, problems, and possible solutions; and (c) consensus is challenging to achieve when differences in power structures, both formal and informal, exist. A lack of sufficient time to collaborate is reported to be a major constraining force to the success of professional learning communities (DuFour & Eaker, 1998; Hord, 1998; Huffman & Hipp, 2000; Office of Educational Research and Improvement, 2000; Leonard & Leonard, 2005). In addition, teacher attitude toward student responsibility is seen as a problem by Newmann who states,

To build cultures of collective responsibility for student learning, educators must overcome a common tendency to attribute students' difficulties largely to conditions beyond the school—especially the family, peers, and neighborhood. While these influences are real, teachers in a strong community feel significant individual responsibility to maximize student success. (p. 2)

Successful school improvement, according to Fullan (1985), depends on the leadership's "feel" for the process of improvement, a value system that guides the process, interaction and communication that is intense, and a planning and implementation process that is collaborative.

Developing the right type of leadership and building necessary trust levels are two areas which are found to be troublesome during implementation (Annenberg Institute for School Reform, 2004; Hipp & Huffman, 2000, 2003; Leo & Cowan, 2000; Leonard & Leonard, 2005). As Hipp and Huffman (2000) indicate, obstacles to effectiveness in lowreadiness schools include a lack of trust and an unwillingness to change. Findings of the study conducted by Wheelan and Kesselring (2005) suggest "that if faculty members work to become more trusting, cooperative, and work oriented as a group, student learning and performance will improve" (p. 329). "Without a climate of trust and respect, and structures that promote continual learning, it is impossible to build a professional learning community" (Hipp & Huffman, 2003, p. 6).

While practitioners search for guidance on how to implement school improvement initiatives, Leonard and Leonard (2005) recognize that establishing and sustaining a professional learning community is "at best difficult and at worst doubtful" (p. 25). As Fullan (2000) states, the literature reports little information on how to establish or recreate successful professional learning communities. A significant constraining force affecting change is sustainability which is impacted by rapid leader turnover (Coburn, 2003; Fink & Brayman, 2006). There is "ample evidence that sustainability may be the central challenge of bringing reforms to scale" since "few conceptualizations address it explicitly" (Coburn, p. 6).

Sustainability

Although many positive benefits of a professional learning community model are found in the literature, researchers express concern about the sustainability of the model over time (Huffman & Jacobson, 2003; Leonard & Leonard, 2005). Reforms, Coburn (2003) acknowledges, "can be adopted without being implemented, and can be implemented superficially only to fall into disuse" (p. 6). Hargreaves and Fink (2004) report that most "school leadership practices create temporary, localized flurries of change by little lasting or widespread improvement" (p. 9). As Hipp and Huffman (2003) maintain, the success of any reform initiative depends on how well the endeavor can be sustained and embedded in the culture. More than just maintaining over time, sustainability is planning for the future (Hargreaves & Goodson, 2006).

Challenge of Sustainability

Sustainability is a major challenge of schools trying to bring reforms to scale (Coburn, 2003). Scale, according to Coburn, is defined by several dimensions: depth, sustainability, spread, and shift of reform ownership. One of the mistakes schools make during the change process is the neglect "to anchor changes firmly in the culture" (DuFour & Eaker, 1998, p. 53). Restructuring, according to Fullan (2000), is defined as "changes in the structure, roles, and related formal elements of the organization" and though easier to put in place, restructuring alone made no difference in teaching quality or learning quality. Conversely, reculturing, Fullan emphasizes, is more deeply rooted than restructuring and allows improvement to thrive. Although embedded in the culture, Huffman and Jacobson (2003) suggest that changes may not prove to be entirely successful over time. Structures are useful to productive change but insufficient to sustain change without leadership (Joyce, 2004).

Sustainability, according to Hargreaves and Fink (2003), is described as enduring, demanding commitment, requiring investments that are long-term, and inspiring improvements that continue to be ongoing. Furthermore, in identifying key characteristics of sustainability, Hargreaves and Fink explain that sustainability is improvement that (a) fosters learning, (b) endures over time, (c) can be supported by resources that are both available or obtainable, (d) does not negatively impact the environment of any surrounding schools or systems, and (e) "promotes ecological diversity and capacity throughout the educational and community environment" where everyone benefits from committed relationships within the organization (p. 695).

In addition to difficulties encountered with any change, Hargreaves and Fink (2003) report sustainability of educational change involves more than just maintaining those improvements over time and presents major challenges to organizations undergoing change. According to Hargreaves and Fink, the movement from the implementation phase to the institutionalization phase of any reform model not in agreement with traditional institutions of education, "neither spreads nor lasts" (p. 694). Fullan (2000) states the key reason for breakdown of school improvement efforts is a failure to understand "that both local school development and the quality of the surrounding infrastructure are critical for lasting success" (p. 581).

In a 5-year study of secondary schools in the United States and Canada, a retrospective look at the previous 30 years provided data on sustainability of educational reform efforts (Giles & Hargreaves, 2006; Hargreaves & Fink, 2000; Hargreaves & Goodson, 2006). Failure to sustain improvements, reports Hargreaves and Fink, is traced to several problems including leadership succession, staff recruitment and retention, size, district and policy context, and community support. Giles and Hargreaves indicate that external change forces responsible for the demise of reform efforts are "envy and anxiety of competing institutions in the surrounding areas, the evolutionary process of aging and

decline in the organizational life-cycle, and the regressive effects of large-scale, standardized reform strategies" (p. 127). Furthermore, Giles and Hargreaves maintain that schools operating as professional learning communities can offset some change forces negatively affecting sustainability of improvement efforts by "renewing their teacher cultures, distributing leadership, and planning for leadership succession" (p. 152). Forming a strong culture of collaboration "could provide the scaffold to support reform" (Emihovich & Battaglia, 2000, p. 235).

Leadership Succession

While, researchers such as Hipp and Huffman (2000, 2003), Hord (1997a, 1997b), Huffman and Jacobson (2003), and Morrissey (2000), conclude that the principal and effective leadership are key to school improvement, Fink and Brayman (2006) report an increased principal turnover rate due to factors such as mobility, retirement, rotation, difficulty to retain, and unpopularity of the principal, significantly affects sustainability of reform efforts. With this continuous change in leadership undermining long-term improvement efforts, in the study by Hargreaves and Fink (2004), leadership sustainability is a serious and "key force leading to meaningful, long-term change" (p. 9). Additionally, for improvements to continue, leadership sustainability must be planned (Fink & Brayman; Giles & Hargreaves, 2006; Hargreaves & Fink, 2003, 2004). Sustainable leadership, according to Hargreaves and Fink (2004): (a) matters—not only increases test scores, but makes meaningful improvements; (b) lasts-plans for succession are in place; (c) spreads—ensures that others are involved in developing the vision; (d) is socially just—makes improvements by not negatively impacting other schools around; (e) is resourceful—attracts and sustains the best leaders; (f) promotes

diversity—plans for continuous improvement and does not impose standardization; and,(g) is activist—works with the community to preserve the mission.

Hargreaves and Fink (2003) identify aspects of sustainable leadership as (a) leading learning—keeping the focus on learning in all actions, (b) distributed leadership—sharing responsibilities with others, and (c) leadership succession—planning for the departure of the principal. Well-developed succession plans, reports Fink and Brayman (2006), assist in efforts to sustain school improvement and should be a mandatory part of any school's improvement plan. In listing implications of sustainable leadership, Hargreaves and Fink assert the importance of embedding the future of leadership in all stakeholders, acknowledging the vertical system of leadership that continues over time, and recognizing sustainable success depends on leadership that is distributed throughout the learning community.

Although Hargreaves and Fink (2004) state that successful leadership succession is rare, they emphasize the importance of planning for succession by distributing leadership and ensuring that other leaders within the community share in the development of the vision. In an effort to address leadership succession, Giles and Hargreaves (2006) suggest schools can be more successful "by involving the community early, by planning ahead for two sets of leadership succession in 8 years, and by building process teams and multiple professional communities of learning and support into the school's administrative structures and self-skilling decision-making processes" (p. 151).

Fink and Brayman (2006) report that principals are able to develop professional learning communities that can sustain change by engaging teachers in a collaborative environment and empowering them. Though distributed leadership is important, Coburn (2003) states that supportive mechanisms need to be in place at various levels in order for teachers to sustain change. Hargreaves and Fink (2000) propose a "three-dimensional" design for sustainability which includes depth, length, and breadth. More specifically, Hargreaves and Fink refer to (a) depth as developing social and emotional understanding where a connection to culture and a concentration on deep learning for students is achieved, (b) length as sustaining change over time where an organization that is recultured can anticipate and plan for addressing change and obstacles, and (c) breadth as addressing how new initiatives can be implemented without interfering with surrounding entities and how changes in policy become an integral part of reform efforts.

Hargreaves and Fink (2003) state that in order for teaching and learning to be sustained, it must also be sustaining. While Giles and Hargreaves (2006) maintain the future of reform efforts depends on resiliency to standardization, they further indicate, the paradox of learning organizations and communities in education is that they are being advocated most strongly just at the point when standardized reform movements legislate the content and micromanage the process of learning to such a degree that there is little scope for teachers to learn in what little time is left over. Professional learning communities are postmodern organizational forms struggling to survive in a modernistic, micromanaged, and politicized educational world. Where standardized reform practices continue to tighten their grip, as is now the case in North America, the future for schools as learning organizations and professional learning communities that will develop the creativity and flexibility needed in the new knowledge economy does not look promising. (p. 153) According to Hipp and Huffman (2003), schools that are institutionalized across all dimensions of a professional learning community find more success with sustainability of the model and for continuous learning to persist.

Summary

The review of the literature allowed the researcher to examine professional learning communities with particular attention given to basic dimensions of effective professional learning communities, compelling and constraining forces that impact implementation, and sustainability of the model. While research was available on critical attributes, benefits, student achievement and improved teaching, little was found on the transformation process, compelling forces that positively affect implementation, constraining forces that negatively impact implementation, and sustainability. The researcher proposed to examine one middle school operating as a professional learning community to determine the extent to which the school was immersed in the basic dimensions of a professional learning community, to determine compelling and constraining forces that impact implementation, and to identify factors leading to sustainability of the model.

Sparked by the 1983 report, *A Nation at Risk*, the American public demanded improvement from the educational system. In response to the increased pressures and cries for accountability, educators worked toward school improvement by initiating a variety of school reform efforts. Although research-based, school reform efforts proved to be of little success in making changes necessary for systemic improvements. In schools where improvements were made, reform efforts were not sustainable if those changes were not embedded in the culture or if leadership changed. In Senge's study of learning organizations, principles were identified for maximizing an organization's potential: shared vision, personal mastery, mental models, team learning, and systems thinking. Originated in the business sector and based on the belief that when individuals learn, the entire organization learns, Senge's concept of professional learning communities emerged into the educational arena and was further defined with Hord's basic dimensions of effective professional learning communities: (a) shared and supportive leadership, (b) collective learning and application, (c) shared values and vision, (d) supportive conditions, and (e) shared personal practice. With a commitment to improved teaching and learning, professional learning communities helped educators restructure their environments and focus on learning new strategies and implementing those techniques so that learning occurs. Effective professional learning communities provided the means for many schools to successfully implement major changes in the school structure and culture resulting in significant school improvement.

While described as difficult and complex, the change process was characterized as having three phases: (a) initiation, (b) implementation, and (c) institutionalization. Schools attempting to make major cultural changes experienced challenges and constraining forces which affected systemic change for school improvement. While many schools achieved success through the professional learning community model, others did not. In the literature reviewed, studies showed benefits for students and teachers with this reform model, but failed to adequately guide educators in the process of establishing the model or sustaining the model once improvements became embedded in the culture. The literature identified some constraining forces affecting implementation, but did not provide guidance for dealing with those forces. In addition, compelling forces that assist in the implementation of a professional learning community model were lacking in the literature. While a crucial aspect identified for success of a professional learning community model was leadership, one of the major concerns in the literature was planning for leadership succession.

Touted for its positive effects on teaching and learning, a professional learning community was described in the literature as a model committed to continuous learning for all. In effective professional learning communities, all stakeholders shared a mission, vision, and values focused on the improvement of teaching and learning; shared leadership and responsibility for collective learning; and, shared personal practice by observing and providing feedback, all within an environment with the structure to facilitate school improvement as well as to support the people in the organization.

CHAPTER III

METHODOLOGY

Introduction

As public demands for accountability of the educational system increase, school reform efforts intensify and become more focused on improving student achievement (DuFour & Eaker, 1998; Hord, 2004a; Senge, 2000). A professional learning community, a school reform model centering its efforts on the improvement of teaching and learning, is described in the literature as gaining attention among the educational sector for its success in school improvement. (DuFour & Eaker; Thompson, et al., 2004).

Dimensions of effective professional learning communities identified in the literature are: (a) shared and supportive leadership, (b) collective learning and application, (c) shared values and vision, (d) supportive conditions, and (e) shared personal practice (Hord, 1997a, 2004b). With each school's context being unique, the dimensions are implemented in a variety of ways by different groups of educators (Hord, 1998).

While attributes, structure, and benefits of professional learning communities are documented in the literature, available research lacks information on how to create, maintain, or sustain the model (Leo & Cowan, 2000; Leonard & Leonard, 2005; Morrissey, 2000). In addition, research lacks guidance on how to manage or avoid constraining forces which impact implementation of professional learning communities (Annenberg Institute for School Reform, 2004; Morrissey).

The purpose of this study was to understand the implementation of a professional learning community by examining how one middle school implemented and planned for sustainability of the model. More specifically, the researcher examined the level of immersion in Hord's dimensions, identified compelling and constraining forces impacting implementation, and assessed beliefs of certified personnel about the sustainability of the professional learning community.

For this study, operational definitions for a learning organization and a professional learning community are based on those of Senge (1990) and Hord (1997a), respectively. Senge defines a learning organization as one in which "people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together" (p. 3). Hord refers to a professional learning community as an organization "in which teachers in a school and its administrators continuously seek and share learning, and act on their learning" (p. 6).

In this chapter, the researcher further described the case study utilized and included additional information on research procedures, population, participants, instrumentation, validation, data collection, and data analysis.

Research Questions

The researcher proposed to examine the implementation of a professional learning community in one middle school in Georgia and used the following sub-questions to guide the study:

- 1. To what extent is the school immersed in the basic dimensions of a professional learning community?
- 2. What are compelling forces that impacted the implementation of the professional learning community?

- 3. What are constraining forces that impacted the implementation of the professional learning community?
- 4. What factors do participants identify that will lead to sustainability of the professional learning community?

Research Procedures

In order to understand how one middle school implemented a professional learning community and planned for sustainability, the researcher conducted a case study. Both qualitative and quantitative methods were used in the study. An existing survey, the *Professional Learning Community Assessment (PLCA)*, was administered to all certified personnel in attendance at a regularly scheduled faculty meeting. In addition to conducting an interview with the principal, the researcher facilitated a focus group discussion with 5 certified personnel selected by the principal for their knowledge about the school's reform efforts and facilitated a focus group discussion with 5 certified personnel randomly selected by the researcher. Other data collection methods included a review of available artifacts and observations of professional learning community meetings.

While case study methods are more commonly used in a variety of fields, case studies are gaining popularity in education as educational researchers become more interested in studying more complex phenomena in educational settings (Borg, Gall, & Gall, 1993). The use of case studies in education assist researchers in understanding the "complex range of influences that shape teaching and learning" (McKee, 2004, p. 7) and result "in a rich and holistic account of a phenomenon" (Merriam, 1998, p. 41). According to Freebody (2003), the goal of a case study is to put in place an inquiry so researchers and educators "can reflect upon particular instances of educational practice" (p. 81). While definitions of case study vary with references to the research process, the unit of analysis, or the product (Merriam, 1998), there seems to be agreement in the literature that case studies vary in complexity while providing an in-depth, vivid description or explanation of a phenomenon, an event, a subject, or a setting, usually from the perspective of the participants (Bogdan & Biklen, 2003; Freebody; Gall, Gall, & Borg, 2003; Jensen & Rodgers, 2001; Merriam). Within a natural or real-life setting, case studies provide researchers with an examination of "an instance in action" (Bassey, 1999, p. 24). Case studies "make the familiar unfamiliar, enabling us to see what previously went unnoticed" (McKee, 2004, p. 7). Researchers agree the process used to collect data should ensure validity and reliability, and that triangulation of data should be used in analysis to corroborate evidence and increase validation (Gall, et al.; Tellis, 1997a, 1997b; Yin, 1999).

Qualitative research is described by Gall, et al. (2003) as inquiry methods used to discover "meanings and interpretations by studying cases intensively in natural settings and by subjecting the resulting data to analytic induction" (p. 634). Quantitative research is described by Gall, et al. as inquiry methods used to "describe and explain features of this reality by collecting numerical data on observable behaviors of samples and by subjecting these data to statistical analysis" (p. 634). As Marshall and Rossman (1999) state, qualitative research is naturalistic, interactive, interpretive, and "a broad approach to the study of social phenomenon" (p. 2). According to Gall, et al., researchers believe qualitative methods are best to determine themes and relationships whereas quantitative

methods are best to validate themes and relationships. While Bassey (1999) specifies major data collection methods in qualitative studies as asking questions, observing events, and reading documents, Tellis (1997a) indicates the most important source of information is interviews.

Research interviews consist of three major types: (a) key informant interviews of individual participants who have special knowledge on the research topic, (b) survey interviews to supplement data collected through other methods, and (c) focus group interviews of participants who are knowledgeable about the research topic (Gall, et al., 2003). Although the concept is not new to researchers, according to Glesne (2006), using focus groups for a discussion on a particular topic is becoming more popular and is particularly useful to action research in collecting data on participants' perspectives. Planning issues for group discussions are different from individual interviews and include determining a location for the group, selecting participants, establishing the number of people to be included, and using appropriate facilitation skills (Glesne). A supportive environment for the interview process should be created by the researcher in order to encourage discussion and the expression of participants' different opinions or points of view (Marshall & Rossman, 1999).

An advantage of focus group discussions is that the method is socially oriented and more natural and relaxed (Marshall & Rossman, 1999). Glesne (2006) states that, although time is used efficiently by determining the perspectives of several people at one setting, researchers may not get in-depth responses. A disadvantage, according to Marshall and Rossman, lies with the interviewer having less control over the discussion than in individual settings. Glesne states that recording responses while facilitating can be challenging and may require the use of tape recording and another person to assist with note-taking.

Using multiple data sources so that data can be triangulated to provide validity of findings, the case study design was chosen in order to report an in-depth, vivid explanation and examination of professional learning communities from the perspective of the participants. In this case study, the researcher used quantitative methods including the administration of a survey instrument to all certified personnel, and qualitative methods including conducting an interview with the principal, facilitating two focus group discussions each with 5 certified faculty members, reviewing artifacts, and conducting observations.

Participants

Based on the researcher's first-hand knowledge of their current immersion in the model, the researcher, a school improvement specialist, selected a middle school that has implemented a professional learning community. The Title I school was located in a rural community and served 432 students in grades 6, 7 and 8 with 66% identified as economically disadvantaged and 11% identified as students with disabilities. The student population consisted of 25% black, 1% Hispanic, 72% white, and 1% multi-racial. Although it made adequate yearly progress (AYP) for 2006, the school was in its fifth year as a needs improvement school. Administrators had an average of 23 years of experience and included 1 full-time principal and 1 full-time assistant principal. Certified personnel consisted of 6.8% administrators, 8.8% support personnel, and 84.4% teachers. The student to teacher ratio was 13 to 1.

The participants were members of the middle school faculty and staff including all certified personnel, the principal, all paraprofessionals, a focus group of 5 certified personnel selected by the principal for their knowledge of the school's improvement efforts, and a focus group of 5 certified personnel randomly selected by the researcher. All certified faculty members were administered a survey. In addition to conducting an interview with the principal, two focus group discussions were facilitated. One group of 5 certified faculty members identified by the principal as being key participants in a professional learning community within the school participated in a focus group discussion. Another group of 5 randomly selected certified personnel participated in a separate focus group discussion. The principal was in her seventh year in that position.

Instrumentation

Developed by Olivier, Hipp, and Huffman, the *Professional Learning Community Assessment (PLCA)* was used as the survey instrument and was administered to all certified personnel in attendance at a regularly scheduled faculty meeting. Based on Hord's dimensions of professional learning communities, the *PLCA* was designed to assess perceptions of school personnel and other stakeholders on school practices. The instrument used six descriptors along with clarifying statements for each critical dimension identified in the literature as an effective attribute of professional learning communities (see Table 1). The dimensions assessed were (a) shared and supportive leadership, (b) shared values and vision, (c) collective learning and application, (d) shared personal practice, (e) supportive conditions related to relationships, and (f) supportive conditions related to structure. Participants rated each of 45 statements about school practices according to personal degree of agreement with the statement. Demographic data including gender, number of years teaching experience, and academic area were collected during the study.

Table 1

Dimensions	PLCA statements	Literature	Research question
Shared and Supportive Leadership	Items 1-10	Hord (1997a, 1997b, 2004a)	1
Shared Values and Vision	Items 11-18	Hord (1997a, 1997b, 2004a)	1
Collective Learning and Application	Items 19-26	Hord (1997a, 1997b, 2004a)	1
Shared Personal Practice	Items 27-32	Hord (1997a, 1997b, 2004a)	1
Supportive Conditions – Relationships	Items 33-36	Hord (1997a, 1997b, 2004a)	1
Supportive Conditions – Structures	Items 37-45	Hord (1997a, 1997b, 2004a)	1

Item-Analysis	Table: Professiona	d Learning Communit	v Assessment

An interview with the principal was conducted and two focus group discussions with 5 identified personnel per group were facilitated by the researcher. The interview with the principal and the focus group discussions were held in the office conference room. Open-ended interview questions, developed by the researcher, were used to acquire information to determine themes on compelling forces, constraining forces, and sustainability (see Table 2). In addition to making written notes during the interviews, the researcher audio-taped the sessions and later transcribed the audio-tapes for analysis.

Table 2

Item-Analysis Table: Interview Protocol

Interview topic	Literature	Research question
Describing school organization	Hipp & Huffman, 2000; Hord, 1998; Huffman & Hipp, 2000; Huffman & Jacobson, 2003; Leonard & Leonard, 2005; Thompson, et al., 2004	1
Planning for implementation	Hipp & Huffman, 2000; Hord, 1998; Huffman & Hipp, 2000; Huffman & Jacobson, 2003; Leonard & Leonard, 2005; Thompson, et al., 2004	2, 3, 4
Identifying compelling forces that facilitated implementation	Hipp & Huffman, 2000; Hord, 1998; Huffman & Hipp, 2000; Huffman & Jacobson, 2003; Leonard & Leonard, 2005; Thompson, et al., 2004	2
Identifying constraining forces that hindered implementation	Holland, 2002; Johnson, 2006; Leonard & Leonard, 2005; Mort, 2000; Visscher & Witziers, 2004	3
Addressing difficulties encountered during implementation	Holland, 2002; Johnson, 2006; Leonard & Leonard, 2005; Mort, 2000; Visscher & Witziers, 2004	3
Planning for the future	Hipp & Huffman, 2000; Holland, 2002; Hord, 1998; Huffman & Hipp, 2000; Huffman & Jacobson, 2003; Johnson, 2006; Leonard & Leonard, 2005; Mort, 2000; Thompson, et al., 2004; Visscher & Witziers, 2004	2, 3, 4
Sustaining the model over time and through leadership succession	Fink & Brayman, 2006; Giles & Hargreaves, 2006; Hargreaves & Goodson, 2006; Hipp & Huffman, 2003; Huffman & Jacobson, 2003; Leonard & Leonard, 2005	4
Providing suggestions or recommendations	Fink & Brayman, 2006; Giles & Hargreaves, 2006; Hargreaves & Goodson, 2006; Hipp & Huffman, 2000; Hord, 1998; Huffman & Hipp, 2000; Huffman & Jacobson, 2003; Leonard & Leonard, 2005; Thompson, et al., 2004	2, 3, 4

Validation

The authors of the survey instrument provided construct validity through two phases. In the first phase, evidence of construct validity concerning the importance of each of 44 statements on the *Professional Learning Community Assessment (PLCA)* was established through an expert panel of 76 educators consisting of educators with a variety of educational experience including classroom teachers. In determining the importance and relevance of each item for inclusion in an assessment about professional learning communities and in determining items to be retained for the field test, the expert study assigned each item a rating of high, medium, or low. The rating results for the 44 items included 43 items (98%) receiving a rating of high and 1 item (2%) receiving a rating of medium.

In the next phase, a field test of the *PLCA* was conducted in school settings resulting in 247 completed and usable surveys. Persons completing the *PLCA* were asked to use a 4-point Likert scale ranging from 1 representing "strongly disagree" to 4 representing "strongly agree." Descriptive statistics were used to analyze the data including means and standard deviations along with minimum and maximum values. Item means ranged from 2.39 to 3.35.

Construct validity was determined with a factor analysis method using Varimax and Direct Obliman procedures. Cronbach's Alpha coefficients provided internal consistency reliability ranging from .83 for Collective Learning and Application and Supportive Conditions to .93 for Shared Values and Vision.

Data Collection

Demographic data including gender, number of years teaching experience, and academic area were collected. Informed consent from participants was obtained prior to data collection. All surveys and oral responses were kept confidential. In addition, no distinguishing information was reported that will allow the school, system, or participants to be identified. In order to answer research question 1, a survey of all certified faculty members was conducted using the *PLCA*. Participation was voluntary. In order to ensure a better return rate for the survey instrument, the researcher explained the purpose of the survey, emphasized that all responses were anonymous, and administered the survey during a regularly scheduled faculty meeting.

In order to answer research questions 2, 3, and 4, an interview with the principal, two focus group discussions with certified personnel and informal observations were conducted. In addition, artifacts were collected for examination. The researcher developed open-ended questions to use in an interview with the principal and in focus group discussions with selected participants so that qualitative data could be collected on forces impacting implementation and sustainability of the model. The focus group discussions and the principal interview were audio-taped and transcribed. Observation notes were recorded by the researcher during collaborative team meetings and during whole-faculty professional development meetings. All certified and classified personnel attended collaborative team meetings held during the school day while only certified personnel attended whole-faculty professional development meetings held after school. In addition, artifacts such as mission and belief statements, teacher handbook, student handbook, master schedule, calendar of activities, and minutes from meetings of the professional learning communities and interdisciplinary team were collected for examination. Additional artifacts were collected as deemed appropriate once the researcher had access to other school documentation.

Response Rate

In order to ensure a high return rate for the survey instrument, the researcher explained the purpose of the survey, emphasized that all responses were anonymous, explained that participation was voluntary, and administered the survey during a regularly scheduled faculty meeting. The goal for response rate of the survey was 100 percent for the survey instrument.

Data Analysis

Data obtained from the survey were analyzed using the Statistical Package for Social Sciences (SPSS) in order to answer the following research question:

 To what extent is the school immersed in the basic dimensions of a professional learning community?

Descriptive statistics were used to summarize survey data and included maximum and minimum ratings along with mean, median, mode, and standard deviation. Results were analyzed to identify recurring themes about school practices characteristic of professional learning communities and to determine level of immersion in the basic dimensions of the model.

The researcher used data collected from the principal interview and the focus group discussions, artifacts, and observation notes to determine recurring themes and trends about compelling and constraining forces impacting the implementation of a professional learning community and sustainability of the model in order to answer the following research questions:

- 2. What are compelling forces that impacted the implementation of the professional learning community?
- 3. What are constraining forces that impacted the implementation of the professional learning community?
- 4. What factors do participants identify that will lead to sustainability of the professional learning community?

Responses were coded in categories to determine recurring themes and trends. The researcher used the following steps in coding open-ended questions: (1) develop logical categories and create a coding sheet, (2) code each response according to category, (3) create tables to report results for each question, and (4) write a description of the findings (Griffin, 2005).

Reporting the Data

A data table was used to organize and summarize data collected with the survey instrument. A table of raw data was provided to the authors of the *PLCA*. Descriptive statistics such as maximum and minimum ratings, mean, median, mode, range, and standard deviation were reported. Themes and trends identified from an interview and focus group discussions were organized, compiled and reported in table or chart format. In addition, a narrative of findings was organized by research question.

Summary

In this chapter, research procedures and research methods including population, sampling procedures, instrumentation, data collection processes, and data analysis

procedures were further described. The purpose of this case study was to understand how one middle school implemented a professional learning community and planned for sustainability. In order to determine the level of immersion in the five dimensions, identify compelling and constraining forces impacting implementation, and assess beliefs of certified personnel about sustainability of a professional learning community, the researcher used both quantitative methods, including the administration of a survey instrument, and qualitative methods, including an interview, focus group discussions, observations, and review of artifacts. By conducting this case study, the researcher's goal was to provide insight into the creation, maintenance, and sustainability of a professional learning community model.

CHAPTER IV

REPORT OF DATA AND DATA ANALYSIS

Introduction

As public demands for accountability in education increase, school reform efforts intensify and become more focused on improving student achievement (DuFour & Eaker, 1998; Hord, 2004a; Senge, 2000). A professional learning community, a school reform model focused on the improvement of teaching and learning, is gaining attention among educators for its success in school improvement (DuFour & Eaker; Thompson, et al., 2004). Originating in the business sector with Senge's belief that when individuals learn, the organization learns, the concept of professional learning communities is emerging in the educational arena. The concept is further described with Hord's (1997a, 2004b) basic dimensions of a professional learning community: (a) supportive and shared leadership, (b) shared values and vision, (c) collective learning, (d) supportive leadership, and (e) shared personal practice.

The literature reviewed for this study supported a professional learning community as a model for school improvement and described the role of the principal in the creation of and planning for school improvement efforts with this model; however, limited research on the establishment and sustainability of the model was found. The researcher conducted a case study of one middle school in order to understand how the school implemented a professional learning community and planned for sustainability of the model. More specifically, the researcher examined forces affecting implementation and sustainability of the model by assessing beliefs, practices, and evidence of existence of Hord's basic dimensions of a professional learning community. In this chapter, the researcher provided details on data collection processes, data analysis processes, and research findings. In addition, the researcher organized and discussed findings according to research questions.

Research Questions

This case study examined the implementation of a professional learning community in one middle school in Georgia and was guided by the following subquestions:

- To what extent is the school immersed in the basic dimensions of a professional learning community?
- 2. What are compelling forces that impacted the implementation of the professional learning community?
- 3. What are constraining forces that impacted the implementation of the professional learning community?
- 4. What factors do participants identify that will lead to sustainability of the professional learning community?

Research Procedures

This case study of the implementation of a professional learning community in one middle school consisted of both qualitative and quantitative procedures to collect data. By using multiple data sources, the researcher increased the validity of findings by triangulating the data. In this study, qualitative methods included a focus group discussion with 5 certified faculty members selected by the principal as being knowledgeable about reform efforts in the school, a focus group discussion with 5 certified faculty members randomly selected by the researcher, an interview with the principal, observations of professional learning community academic team meetings, and a review of school artifacts. For the randomly selected focus group, the researcher assigned a number from 1 to 37 to a list of all certified personnel and generated random numbers using a Texas Instrument calculator, TI-83 Plus. Teachers were selected for participation in the focus group based on their assigned numbers being generated by the calculator. As some of the teachers requested not to participate, the researcher generated additional random numbers in order to assemble a group of 5 randomly selected certified personnel for the focus group discussion. In both focus group discussions and the principal interview, open-ended questions, developed by the researcher, were used to acquire information to determine themes on compelling forces assisting implementation, constraining forces hindering implementation, and sustainability.

The *Professional Learning Community Assessment (PLCA)*, an existing survey developed by Olivier, Hipp, and Huffman, was selected by the researcher to administer to all certified personnel in attendance at a regularly scheduled faculty meeting held in the school's multi-purpose room. Based on Hord's basic dimensions of a professional learning community, the *PLCA* was designed to assess perceptions of school personnel and other stakeholders on school practices. Consisting of six descriptors with clarifying statements for each critical dimension identified in the literature as an effective attribute of professional learning communities, the survey assessed the following dimensions: (a) shared and supportive leadership, (b) shared values and vision, (c) collective learning and application, (d) shared personal practice, (e) supportive conditions related to relationships, and (f) supportive conditions related to structure. The authors of the survey instrument provided information on the instrument's construct validity for the study and

gave written permission for the researcher to use the *PLCA*. As a quantitative measure, the researcher administered the *Professional Learning Community Assessment (PLCA)* to certified personnel at a regularly scheduled faculty meeting held in the school's multi-purpose room. The return rate for the survey was 34 out of 37, or 91.89%, with one teacher being absent and two teachers choosing not to participate. In addition, demographic data including gender, number of years of teaching experience, and academic area were collected during the administration of the survey.

School Profile

Based on first hand knowledge of their current immersion in the model, the researcher, a school improvement specialist, selected a middle school that implemented a professional learning community. A Title I school, South Georgia Middle School (SGMS) was located in a rural community and served 432 students in grades 6, 7, and 8, with 66% of students identified as economically disadvantaged and 11% identified as students with disabilities. The student to teacher ratio was 13 to 1.

As shown in Table 3, the student population consisted of 25% black, 1% Hispanic, 71% white, and 2% multi-racial. Administrators had an average of 23 years of experience and included one full-time principal and one full-time assistant principal. On the school staff, there were 37 certified teachers paid through state and local funds. Certified positions consisted of 6.8% administrators, 8.8% support personnel, and 84.4% teachers. A curriculum resource teacher position was added to the staff in 2005-2006 to provide additional instructional support. This position was filled by the former mathematics department chairperson.

Table 3

Subgroup	2003-2004	2004-2005	2005-2006	2006-2007
Black	26%	25%	25%	25%
Hispanic	1%	2%	1%	1%
White	71%	73%	72%	71%
Multi-racial	0%	0%	1%	2%

During the 2006-2007 school year, South Georgia Middle School was listed as a needs improvement school and was previously listed as a failing school as recently as the 2000-2001 school year when the current principal was assigned to the school. The school made adequate yearly progress (AYP) for the 2005-2006 school year and the staff hoped to make AYP for a second consecutive year so the school could be removed from needs improvement status.

During her seven years at South Georgia Middle School, the principal made many changes beginning with a 5 minute extension of the existing 50 minute class periods in her first year in addition to filling 14 vacancies throughout the school. All 7th grade teachers accepted positions elsewhere, leaving the entire grade level with no returning personnel. After the principal and two teachers from the mathematics department attended a one-day presentation by Dr. Robert Lynn Canady on block scheduling, maximizing instructional time became a major factor in the school's improvement efforts, according to school personnel. During the presentation, Dr. Canady explained how one subject area team may implement a team structure within block scheduling.

Implemented in 2002-2003, a block scheduling structure provided 90 minutes of instructional time per block for all subject areas. The mathematics team was the first department to utilize a team approach where only one grade level was taught during any one block period; i.e., grade 6 mathematics was taught during the first block, grade 7 mathematics was taught during the third block, and grade 8 mathematics was taught during the fourth block. In the team structure, each mathematics instructor taught all grade levels, 6, 7, and 8, each day and had a daily 90-minute planning period. With mandated test scores rising from 35% to 52% meeting grade level expectations in mathematics after the first year of block scheduling, the team concept was expanded to include all academic areas the following year.

In 2007, South Georgia Middle School was in its fifth year of block scheduling with each block having a minimum of 90 minutes. According to the principal, since lunch was included in third block, additional time was provided for third block to allow for transition time. The bell schedule listed an additional 10 minutes for third block and an additional 5 minutes for first block. For one 90-minute block, students were enrolled in a connections class such as physical education, health, art, music, band, or computer applications. In 2006-2007, the school began offering acceleration classes for students in need of additional instruction in academic areas. Students who were identified as needing additional help in mathematics, English/language arts, science or social studies were placed in an acceleration class for a 45-minute segment of their connections block for up to two academic areas. If the students needed more than two acceleration classes, they were placed in the two areas which were deemed most critical. Additionally, during connections time, students needing intensive reading instruction were placed in a Science

Research Associates (SRA) reading class taught by a trained reading teacher, and selected special education students were sent by academic teachers to a study skills class for content specific assistance provided by a paraprofessional.

Originally called the "design team" and started in 2004-2005, the school had an interdisciplinary team whose members included subject area department chairs and the principal. Meeting every other month for a half day, the interdisciplinary team was responsible for making leadership decisions on school improvement planning, scheduling, collaboration, and professional development while providing communication within and among departments, planning for professional development, and making recommendations to the principal. For the following year, team members indicated that the interdisciplinary team would meet at least monthly instead of every other month. While most instructional decisions were made by the interdisciplinary team, according to the principal, there were some decisions such as those involving budget or policy where she had the "final word." She further stated that she always considered input from the teams into consideration when making any decision.

In addition to an interdisciplinary team, academic departments, or teams, were organized to focus on curriculum issues specific to their disciplines. Other school groups with task-oriented responsibilities included a discipline committee, a school events committee, and a testing committee. In 2003-2004, South Georgia Middle School implemented a Learning-Focused School (LFS) model with all certified personnel trained in LFS methods. Four teachers were trained as trainers to redeliver segments of LFS training and to provide updates and refreshers. Developed by Dr. Max Thompson and Dr. Julia Thompson, the Learning-Focused Schools model was described by participants as a school restructuring process applying exemplary practices in curriculum, instructional strategies, assessment, organization, and school improvement planning to enhance instruction and increase student achievement.

With academic teams having daily common planning time for 90 minutes, formal structures were in place to facilitate collaboration in academic departments. Academic teams in existence were: ELA, mathematics, science, social studies, connections and acceleration. Collaborative teams met weekly to discuss curriculum issues, lesson planning, and data analysis, and consisted of members of an academic department, one special education teacher, and other support staff; e.g., the media specialist was a member of the English/language arts (ELA) collaborative group and the SRA teacher was a member of the acceleration team. Paraprofessionals also attended collaborative meetings. Wednesdays were designated as team collaborative planning days as teachers were required to collaborate a minimum of 90 minutes per week. According to the teachers interviewed, most internal collaboration occurred within the 90-minute planning block and usually occurred more than once a week in an informal setting. Topics included in collaborative meetings stemmed from interdisciplinary team meetings, school improvement initiatives, and department needs.

In addition to attending national, state, and regional conferences and workshops, South Georgia Middle School teachers participated in school-based professional development planned to support school improvement efforts. Every fourth Monday was designated as "Monday Minds," for monthly professional development opportunities conducted by faculty members or consultants from other organizations such as their area Regional Education Service Agency (RESA). Based on input from the interdisciplinary team or requests identified on the needs assessment, professional learning topics for "Monday Minds" were arranged by the curriculum resource teacher or the principal. "Monday Minds" was also used for redelivery of training components or sharing information learned at conferences or workshops. Tuesdays were reserved as "Tech Tuesdays" when the technology specialist scheduled professional learning or assistance for academic teams integrating technology into instruction.

Major initiatives listed in the school's improvement plan included the continued focus on LFS strategies; the implementation of the design team in 2004-2005; the addition of a curriculum resource teacher position, professional learning opportunities focused on vocabulary instruction, acceleration, scaffolding for at-risk learners, and the implementation of the Effective Behavior Intervention Strategies (EBIS) program in 2005-2006; implementation of acceleration classes, an expansion of the design team to include representatives from special education, gifted, and acceleration in addition to all content areas, and a school-wide monthly professional learning community in 2006-2007. Plans for 2007-2008 included the addition of a graduation coach to identify students who may be in danger of dropping out and help them succeed in school by keeping them on track academically.

Participants

The faculty at South Georgia Middle School consisted of 37 certified personnel including one principal, one assistant principal, one counselor, one media specialist, one technology specialist, one curriculum resource teacher, seven mathematics teachers, seven English/language arts teachers, three science teachers, three social studies teachers, one special education teacher, six connections teachers, and four acceleration teachers. The school had five paraprofessionals on staff. In addition, there were two special education positions that had been vacant for several months. Connections classes were taught by teachers who were certified in physical education, health, art, music, band, or computer applications.

According to demographic data for 34 certified personnel who completed the *PLCA*, 70.6% of respondents were female and 29.4% were male. Over half (58.8%) of certified personnel had 10 or fewer years experience (see Table 4).

Table 4

Number years of experience	Frequency	Percent	Cumulative percent
0-5	11	32.4	32.4
6-10	9	26.5	58.8
11-15	6	17.6	76.5
16-20	2	5.9	82.4
21-25	2	5.9	88.2
26-30	1	2.9	91.2
Over 30	3	8.8	100.0

Years of Experience for Certified Personnel Completing PLCA

The principal had 34 years of educational experience, all within the school system, including 5 years as a 5th grade teacher and 29 years as a school administrator. With certification in middle grades, 25 years were spent at the middle school level. The principal was in her seventh year in that position.

The principal-selected focus group consisted of 5 female certified personnel identified by the principal as being knowledgeable about the school's improvement efforts and included the curriculum resource teacher, the technology specialist, and the department chairs for mathematics, science, and English/language arts. Teaching experience of participants ranged from 0-5 years to 11-15 years (see Table 5). In the discussion of findings, the researcher referenced members of the principal-selected focus group as Teachers P1 through P5.

Table 5

Gen	der	Number of years of teaching experience							Aca	demic	area		
Male	Female	0-5	6-10	11-15	16-20	21-25	26-30	30+	ELA	Mathematics	Science	Social Studies	Connections
	Х			Х					X	Х	Х	X	Х
	Х		Х							X			
	Х	Х									Х		
	Х			Х					Х				
	Х		Х						Х	Х	Х	Х	Х

Years of Experience for Principal-Selected Focus Group Participants

The randomly-selected focus group consisted of three male and two female certified personnel who agreed to participate when their numbers were randomly selected by the TI-83 Plus calculator and included two mathematics teachers, two English/language arts teachers, and one science teacher. Teaching experience of participants ranged from 0-5 years to over 30 years (see Table 6). In the discussion of findings, the researcher referenced members of the randomly-selected focus group as Teachers R1 through R5.

With previous Montessori experience, one participant in the randomly-selected focus group was a Georgia Teacher Alternative Preparation Program (GaTAPP) teacher in his first year at South Georgia Middle School. GaTAPP was described as an alternative preparation option allowing individuals who hold at least a bachelor's degree to obtain requirements for teacher certification while working in a supervised internship program. Another participant was a first-year teacher who worked at SGMS as a student teacher the previous year.

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Geno	Gender		Number of years of teaching experience							Aca	demic	area	
Male	Female	0-5	6-10	11-15	16-20	21-25	26-30	30+	ELA	Mathematics	Science	Social Studies	Connections
Х			Х							Х			
Х		Х							X				
	Х			Х							Х		
X								Х		Х			
	Х	Х							Х				

Findings

In order to present findings, the researcher analyzed and organized data from the survey, the principal-selected focus group discussion, the randomly-selected focus group discussion, the principal interview, observations of professional learning community meetings, and an examination of artifacts. The researcher arranged and discussed findings by research questions.

The researcher examined the implementation of a professional learning community in one middle school in Georgia. The following four sub-questions guided the study:

- To what extent is the school immersed in the basic dimensions of a professional learning community?
- 2. What are compelling forces that impacted the implementation of the professional learning community?
- 3. What are constraining forces that impacted the implementation of the professional learning community?
- 4. What factors do participants identify that will lead to sustainability of the professional learning community?

Respondents rated each item on the *Professional Learning Community*

Assessment (PLCA) from strongly disagree to strongly agree. In order to analyze data collected and determine calculations for descriptive statistics of mean, median, mode, and standard deviation, the researcher assigned a numeric value to each rating on the *PLCA* as follows: 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. For the entire *PLCA*, survey results showed only one rating of strongly disagree which was found

for item number 33: "Caring relationships exist among staff and students that are built on trust and respect." Survey statements were correlated to Hord's basic dimensions of professional learning communities and charted in Table 7.

Table 7

	Shared and supportive leadership	Shared values and vision	Collective learning and application	Shared personal practice	Supportive conditions- relationships	Supportive conditions- structures
Survey questions	1-10	11-18	19-26	27-32	33-36	37-45

Correlation of the PLCA to Hord's Basic Dimensions

Questions used in both focus group discussions and principal interview provided additional clarifying data for research question 1, which addressed the extent the school was immersed in the basic dimensions of a professional learning community. The correlation of research questions to interview topics and interview questions used in both focus group discussions to the research questions was organized in Table 8.

Table 8

Correlation of Interview Topics and Questions to Research Questions

Interview topic	Interview question	Research question/context
Describing school organization	1a, 1b, 1c, 1d, 1e, 1f, 1g, 1h	1
Planning for implementation	2, 3	2, 3, 4
Identifying compelling forces that facilitated implementation	4	2
Identifying constraining forces that hindered implementation	5, 5a	3
Addressing difficulties encountered during implementation	5b	3
Planning for the future	6, 6a	2, 3, 4
Sustaining the model over time and through leadership succession	7, 8	4
Providing suggestions or recommendations	9	2, 3, 4

Research Question 1

To what extent is the school immersed in the basic dimensions of a professional learning community?

In order to understand the extent South Georgia Middle School was immersed in the basic dimensions of a professional learning community, the researcher reported an analysis of results of the *PLCA* along with clarifying responses from both focus group discussions and the principal interview, data collected from the review of artifacts, and data collected from observations of professional learning communities. Data and findings were reported by dimension of the *PLCA*.

Overall, results of the *PLCA* ratings indicated that South Georgia Middle School was deeply immersed in Hord's five dimensions of a professional learning community. With ratings on the Likert scale ranging from 1 – strongly disagree to 4 – strongly agree on the *PLCA*, each of 45 survey statements had a mean of 3.00 or higher indicating respondents generally agreed with each of the statements. Shown in Tables 9, 10, 11, 12, 13, and 14, the average rating, or mean, for each of the descriptive statements within each dimension ranged as follows: (1) shared and supportive leadership – from 3.09 to 3.68, (2) shared values and vision – from 3.18 to 3.68, (3) collective learning and application – from 3.18 to 3.68, (4) shared personal practice – from 3.00 to 3.31, (5) supportive conditions related to relationships – from 3.15 to 3.56, and (6) supportive conditions related to structures – from 3.21 to 3.85. While results indicated the strongest dimension was supportive conditions related to structures, the results also indicated the weakest dimension was shared personal practice.

Standard deviation is defined as a "measure of the extent to which the scores in a distribution deviate from their mean" (Gall, et al., 2003, p. 133). Furthermore, standard deviation is described as a stable measure of variability because in repeated samples from the same population, similar standard deviations can be found (Gall, et al.).

Items 10, 16, 18, 23, 25, 27, 28, 31, 34, and 45 with higher standard deviations indicated more variability, or disagreement, among the ratings of respondents, with more low ratings than other statements. These items were: (a) shared leadership – 10) "Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority"; (b) shared values and vision – 16) "School goals focus on student learning beyond test scores and grades" and 18) "Stakeholders are actively involved in creating high expectations that serve to increase student achievement"; (c) collective learning and application – 23) "The staff engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry," and 25) "School staff and stakeholders learn together and apply new knowledge to solve problems"; (d) shared personal practice – 27) "Opportunities exist for staff to observe peers and offer encouragement," 28) "The staff provide feedback to peers related to instructional practices," and 31) "Opportunities exist for coaching and mentoring"; (e) supportive conditions related to relationships – 34) "A culture of trust and respect exists for taking risks"; and (f) supportive conditions related to structures – 45) "Communication systems promote a flow of information across the entire school

community including: central office personnel, parents, and community members."

Dimension 1: Shared and Supportive Leadership

Questions 1 through 10 on the *PLCA* assessed elements of shared leadership in the school. The average rating, or mean, for each item 1 through 10 ranged from 3.09 to 3.68 and showed there was general agreement among the respondents that elements of shared and supportive leadership were evident in the school (see Table 9). Modes for items 1, 2, 3, 4, and 6 indicated most respondents strongly agreed that the staff was consistently involved in decision-making, the principal considered advice and input, the staff was aware of key information, the principal proactively addressed areas needing support, and the principal shared responsibility for innovative actions. In addition, modes for items 5, 7, 8, 9, and 10 indicated that most respondents agreed that staff had opportunities to initiate change, the principal was a democratic participant sharing power and authority, leadership among staff was promoted and nurtured, committees were involved in decision-making and communication, and stakeholders shared responsibility for student learning in the absence of imposed power.

The percent of respondents who agreed or strongly agreed with each statement in the dimension of shared and supportive leadership were as follows: 1 - 97.0%, 2 - 97.0%, 3 - 100.0%, 4 - 100%, 5 - 93.9%, 6 - 97.0%, 7 - 93.9%, 8 - 93.9%, 9 - 100.0%, and 10 - 79.4%. Items 3, 4, and 9 received no ratings of disagree while items 1, 2, and 6 received one rating of disagree and item 10 received seven ratings of disagree. In the dimension of shared and supportive leadership, seven respondents disagreed with the statement, "Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority." One respondent did not rate items 5 and 8, and wrote "depends" next to both statements.

Table 9

Results of *PLCA* Survey Instrument – Shared and Supportive Leadership

Item	Mean	Median	Mode	Standard deviation
1. The staff is consistently involved in discussing and making decisions about most school issues.	3.53	4	4	.563
2. The principal incorporates advice from staff to make decisions.	3.47	3.5	4	.563
3. The staff have accessibility to key information.	3.56	4	4	.504
4. The principal is proactive and addresses areas where support is needed.	3.68	4	4	.475
5. Opportunities are provided for staff to initiate change.	3.33	3	3	.595
6. The principal shares responsibility and rewards for innovative actions.	3.59	4	4	.557
7. The principal participates democratically with staff sharing power and authority.	3.27	3	3	.574
8. Leadership is promoted and nurtured among staff.	3.24	3	3	.561
9. Decision-making takes place through committees and communication across grade and subject areas.	3.44	3	3	.504
10. Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.	3.09	3	3	.712

The review of artifacts, observations of professional learning communities, focus group discussions, and the principal interview revealed additional data concerning shared

and supportive leadership at South Georgia Middle School. When asked to describe leadership and how decisions were made in the school, Teacher P3 reported that leadership at South Georgia Middle school was "very strong" and Teacher R1 reported that leadership was "very structured." While principal-selected respondents indicated that the interdisciplinary team was responsible for most decisions related to school improvement, communication, curriculum, professional development, and suggestions to the administration, randomly-selected respondents indicated the interdisciplinary team was also responsible for scheduling issues and how the departments worked together. According to a meeting log for the interdisciplinary team, topics for discussion included improved student attendance, providing counseling services beyond the school day, and offering tutoring for students. In addressing shared and supportive leadership in the school, the principal stated that most decisions were made by the interdisciplinary team, but she did have the "final word" on some decisions such as those involving budget or policy issues. She also explained that she takes input or recommendations of the interdisciplinary team and individuals into consideration when making decisions. When asked to describe how decisions were made, both Teacher P4 and the principal reported that when the principal makes a decision, she always gives the rationale as to why it could or could not happen.

In responding to questions about shared and supportive leadership, all respondents agreed there were other people in the building such as department chairpersons, the curriculum resource teacher, and the technology specialist who were school leaders and shared leadership responsibility as well. In the ELA team meeting, student placements were discussed. According to participants, class assignments for new students enrolling at the school were made by department chairpersons. During observations of professional learning communities conducted in 2007, the researcher observed the curriculum resource teacher provide guidance to the groups as needed. In some groups, more guidance was provided due to a lack of knowledge or misunderstanding of topic. The principal suggested that the curriculum resource teacher and the technology specialist were "really the leaders in the school" and were seen as such by the faculty. In the principal-selected group, Teacher P5 maintained the principal allowed them to be leaders. Teacher P2 suggested that they would like to "pull other people up to that [level of leadership]."

Respondents from both focus groups and the principal agreed that leadership is very important in the school improvement process. The principal stated, "I think that's the number one key to running an instructional program." In describing the principal, Teacher R4 stated, "I think the principal is a good leader because she kind of divvies out the work and trusts us to get it done."

Dimension 2: Shared Values and Vision

Questions 11 through 18 on the *PLCA* assessed elements of shared values and vision in the school. The average rating, or mean, for each item 11 through 18 ranged from 3.18 to 3.68 and showed there was general agreement among the respondents that elements of shared values and vision were evident in the school (see Table 10). Modes for items 12, 13, 14, 15, and 17 indicated most respondents strongly agreed that shared values guided decisions concerning teaching and learning, the staff shared a vision focused on student learning, decision-making was based on shared values and vision, a collaborative process was present and assisted in developing a shared vision, and policies

were in alignment with the vision. In addition, modes for items 11, 16, and 18 indicated that most respondents agreed that a collaborative process was present and assisted the staff in developing shared values, goals focused on student learning went beyond major testing and grades, and stakeholders had high expectations for student achievement.

The percent of respondents who agreed or strongly agreed with each statement in the dimension of shared values and vision were as follows: 11 - 97.0%, 12 - 100.0%, 13 - 100.0%, 14 - 100.0%, 15 - 97.0%, 16 - 85.3%, 17 - 100.0%, and 18 - 79.4%. Items 12, 13, 14 and 17 received no ratings of disagree while items 11 and 15 received one rating of disagree, item 16 received five ratings of disagree, and item 18 received seven ratings of disagree. In the dimension of shared values and vision, five respondents disagreed with the statement "School goals focus on student learning beyond test scores and grades." and seven respondents disagreed with the statement did not rate item 17 and wrote "depends" next to the statement. For item 18, one respondent circled "actively involved" in the statement, while another respondent wrote "This is a low income community. Stakeholders are involved as much as possible...However, not a lot of parent involvement."

Table 10

Item	Mean	Median	Mode	Standard deviation
11. A collaborative process exists for developing a shared sense of values among staff.	3.41	3	3	.557
12. Shared values support norms of behavior that guide decisions about teaching and learning.	3.53	4	4	.507
13. The staff share visions for school improvement that have an undeviating focus on student learning.	3.62	4	4	.493
14. Decisions are made in alignment with the school's values and vision.	3.68	4	4	.475
15. A collaborative process exists for developing a shared vision among staff.	3.47	3.5	4	.563
16. School goals focus on student learning beyond test scores and grades.	3.24	3	3	.699
17. Policies and programs are aligned to the school's vision.	3.52	4	4	.508
18. Stakeholders are actively involved in creating high expectations that serve to increase student achievement.	3.18	3	3	.758

The review of artifacts, observations of professional learning communities, focus group discussions, and the principal interview revealed additional data concerning shared values and vision at South Georgia Middle School. In addressing shared values and vision at the school, Teacher P3 said "we all share the same values that we focus on the children and also within our departments" and "we value each other individually." Teacher P4 maintained their focus was to "turn out independent thinkers." When asked to describe the collaboration process in the school and its importance, Teacher P4 stated collaboration "works because everybody knows what everybody else is doing in their classrooms" and "everybody is working for the betterment of the department." As stated by the principal, collaboration was "extremely important because if you don't have that, then everybody's just doing their own little thing and there is no sequence for the students, no building of skills." Additionally, the principal shared,

Regular [education] teachers have said that this has been so helpful. Even if you don't have a special [education] child, but you have a child who is having difficulty, it can be brought up at the meeting and the special [education] teacher can make recommendations.

In response to why the school needs a professional learning community, the principal indicated the "number one reason [for implementing a professional learning community] is for improvement in instruction." According to Teacher R4, collaboration allowed them to "bring in everybody's expertise for the good of the group."

Observations conducted by the researcher in 2007 revealed further data related to shared values and vision. When the researcher entered the building for the first observation of professional learning communities, she saw a banner stating, "Believe, Motivate, Challenge, Succeed." Although no school mission or vision statement was posted in the hallways or in the classrooms visited, the teacher handbook and the school website included a school mission: It is the mission of [South Georgia] Middle School, through forming a partnership between the school, home, and community, to provide our students with a safe learning environment. In addition, we will provide a challenging and precise curriculum to prepare them to act independently as citizens who are technologically prepared to be contributing members of society.

Belief statements found in the teacher handbook and the school website were listed as follows:

- 1. Student learning is the priority for our school.
- 2. All students can learn best in an orderly and safe environment.
- 3. There are different levels of learning for students; therefore, various methods of teaching must be presented in order for all to achieve.
- 4. Each student is intellectually, physically, socially, and emotionally valuable.
- 5. Administrators, teachers, staff, parents, students, and community share responsibility for providing a supportive learning environment within our school.
- Technology integration in the classroom is beneficial to prepare citizens in the 21st century.
- Open communication among teachers, parents, and students is vital to each student's success.
- 8. Students should have a clear understanding of and adhere to all rules, policies, and procedures.

During subsequent observations in 2007, school mission and vision statements were posted in some classrooms. In addition, when teachers discussed lessons, plans, pacing guides, concept maps, and teaching strategies in professional learning communities, an emphasis on improving student learning was evident as teachers focused on improving instructional delivery, ensuring students acquired basic skills such as being able to read, and trying to provide an appropriate education so that students were able to function in the real world. The agendas and logs for interdisciplinary team meetings showed that in addition to student data analysis, the team works to improve student attendance, facilitate counseling outside of school, provide tutoring, and assign student mentors.

Dimension 3: Collective Learning and Application

Questions 19 through 26 on the *PLCA* assessed elements of collective learning and application in the school. The average rating, or mean, for each item 19 through 26 ranged from 3.18 to 3.68 and showed there was general agreement among the respondents that elements of collective learning and application were evident in the school (see Table 11). Modes for items 20, 21, 24, and 26 indicated most respondents strongly agreed that collegiality existed among staff and reflected commitment for improvement, the staff worked collectively to address varied student needs, the focus of professional development was teaching and learning, and staff members were committed to the enhancement of learning. In addition, modes for items 19, 22, 23, and 25 indicated most respondents agreed that the staff collaboratively learned new strategies and applied them to their work, opportunities for open dialogue existed for collective learning, the staff's engagement in dialogue led to collective inquiry, and staff learned and applied new knowledge as they solved problems. The percent of respondents who agreed or strongly agreed with each statement in the dimension of collective learning and application were as follows: 19 - 100.0%, 20 - 97.0%, 21 - 93.9%, 22 - 97.0%, 23 - 88.8%, 24 - 100.0%, 25 - 82.4%, and 26 - 100.0%. Items 19, 24, and 26 received no ratings of disagree while items 20 and 22 received one rating of disagree, item 21 received two ratings of disagree, item 23 received four ratings of disagree, and item 25 received six ratings of disagree. In the dimension of collective learning and application, four respondents disagreed with the statement "The staff engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry" and six respondents disagreed with the statement "School staff and stakeholders learn together and apply new knowledge to solve problems." For item 25, one respondent wrote "yes" above "staff," and wrote "no" next to a circled "stakeholders."

Table 11

Item	Mean	Median	Mode	Standard deviation
19. The staff work together to seek knowledge, skills and strategies and apply this new learning to their work.	3.44	3	3	.504
20. Collegial relationships exist among staff that reflect commitment to school improvement efforts.	3.50	4	4	.564
21. The staff plan and work together to search for solutions to address diverse student needs.	3.42	3	4	.614
22. A variety of opportunities and structures exist for collective learning through open dialogue.	3.44	3	3	.561
23. The staff engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.	3.27	3	3	.674
24. Professional development focuses on teaching and learning.	3.68	4	4	.475
25. School staff and stakeholders learn together and apply new knowledge to solve problems.	3.18	3	3	.716
26. School staff is committed to programs that enhance learning.	3.65	4	4	.485

The review of artifacts, observations of professional learning communities, focus group discussions and the principal interview revealed additional data concerning collective learning and application at South Georgia Middle School. Not only did the

school calendar for South Georgia Middle School indicate school events, testing dates, holidays, and other important system dates, planned dates for team collaborative meetings, whole group collaborative meetings, and interdisciplinary team meetings were scheduled for the entire school year. At SGMS, Wednesdays were designated as team collaborative planning days. Topics for team meetings stemmed from "interdisciplinary team meetings, school improvement initiatives, and department needs. Both focus groups along with the principal stated that collaboration occurred within departments, with different departments, and with different schools. They further stated that although collaboration occurred formally once a week, it also happened informally more frequently.

According to Teacher P4, collaboration was "vital to the success of our test scores." When asked to describe the school's collaboration process, the principal reported that opportunities were put in place during the 2006-2007 school year for middle school teachers to meet with the high school teachers and 5th grade teachers in a collaborative effort to involve other organizational levels in the collaboration process. Teacher R2 indicated that weekly collaboration opportunities allowed them to all be "on the same page." Teacher P4 noted that collaboration ensured they were "teaching the same content" and "sticking to the curriculum map." As Georgia moves to a new curriculum, known as Georgia Performance Standards (GPS), teachers acknowledged that collaboration offered support for both new and experienced teachers. Teacher R5 stated, "I know it has helped me, a first year teacher, because I know… [I have] support to lean back on, and I'm not going to be hung out to dry." In referencing the effect of collaboration on test scores, Teacher P4 reported, "with the [curriculum] map, [our test

scores] steadily went up when we first started the collaboration...It is just now with the GPS, that has given us a little fallback, but we're still higher."

In addition to block scheduling, the principal and teachers stated there were several initiatives in place to improve student learning. Students were identified for additional assistance in academic areas and were scheduled in one or two acceleration classes. Acceleration was described by the principal and teachers as a Learning-Focused School strategy which previews the most essential content for students by using vocabulary maps, graphic organizers, story maps, and other types of activating or focusing strategies. A spreadsheet was used by teachers to identify students who needed additional assistance. The spreadsheet charted CRCT scores in reading and mathematics and quarterly exam grades and overall course grades for individual students. Each acceleration class was a 45-minute segment which was part of a 90-minute connections block. If any student needed more than two acceleration classes, the student was placed in the two subject areas which were deemed most critical for the student. Also during connections time, students who needed intensive reading instruction were assigned to an SRA reading class taught by a trained reading teacher. Special education students needing content specific assistance were sent by academic teachers to a study skills class with a paraprofessional. The school-wide discipline plan, EBIS, was described by the principal and teachers as a behavior plan that teaches students what appropriate behavior looks like and allows students to earn points for displaying appropriate behavior. Rewards were redeemed for special activities and events.

The principal stated that without these structures in place, "we would not be able to provide the programs and the strategies that we provide now that our students really

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need." She went on to say that acceleration for their "at-risk children is the number one thing [affecting student achievement]."

Mondays were reserved as faculty meeting days at South Georgia Middle School with "Monday Minds" designated as a professional development opportunity held on the fourth Monday of the month. Based on input from the interdisciplinary team or requests identified on the needs assessment, professional learning topics were arranged for "Monday Minds" by the curriculum resource teacher or the principal. It was reported by school personnel that most of the professional development opportunities were provided by their area RESA or other outside consultants while further professional development opportunities were provided by teachers sharing expertise or information from conferences and workshops. According to participants interviewed, professional learning opportunities planned for the monthly whole faculty training focused on topics such as the use of assessments while content-specific or group-specific training focused on topics such as mathematics GPS training or special education training. All faculty members were expected to attend monthly "Monday Minds" and weekly collaborative planning sessions.

Professional learning opportunities listed in the South Georgia Middle School Improvement Plan included continued professional learning for LFS training, Georgia Performance Standards, Georgia Online Assessment training, co-teaching, special education workshops, EBIS, and Partnership for Instruction in Science and Mathematics (PRISM). Professional learning opportunities for 2005-2006 included Assessment for Learning, Mathematics Instructional Strategies, Effective Use of Time in the Block, and Reading Across the Curriculum, while professional learning opportunities for 2006-2007 included Six Elements of an Effective Mathematics Lesson, Supporting Mathematics GPS, Georgia Writing Assessment, Writing Academic Prompts, and Analyzing Student Work. Sign-in sheets along with course outlines, PowerPoint presentations, handouts, and notes confirmed professional learning opportunities were available for teachers to seek new knowledge focused on teaching and learning. In addition, the school improvement plan and course outlines indicated teachers would be expected to apply the new skills in the classroom.

Teacher P1 stated their "focus on professional development is [the] Learning-Focused Schools model, as well as analyzing student work, teacher commentary, and implementing standards-based classrooms." The principal maintained the professional development program was very important because, "if you are going to improve your instruction, you have to look at where you're at, what your needs are, and then plan for staff development according to that information." Teachers agreed with Teacher P3 that the professional development plan was "tied back to our needs." When asked about planning for professional development, the principal stated, "We do a lot with our data and we set benchmarks. We don't just give lip service to it." Analysis of student data was documented in interdisciplinary team logs and in academic team professional learning community agendas.

In addition, observations conducted by the researcher in 2007 revealed further data related to collective learning and application. Professional journals and books were housed in the workroom. Topics for available books included differentiated instruction, Learning-Focused Schools, Georgia Performance Standards (GPS), assessments, National Council of Teachers of Mathematics Standards, teaching in the block, Project Sense, life science, and teaching tolerance. In each professional learning community observed during collaborative planning, teachers exhibited a collegial relationship and had good rapport. In all professional learning communities observed, most teachers were actively engaged. Paraprofessionals and student teachers were able to attend and participate in the meetings. In one professional learning community, one teacher was not engaged in a dialogue with the other teachers, but was actively listening.

In the first observation of professional learning communities in 2007, the researcher observed members of the mathematics professional learning community including three student teachers as they discussed concept maps and frameworks developed by the Georgia Department of Education in an attempt to understand them and to see where they fit in mathematics instruction. In the connections professional learning community, members were applying knowledge and skills learned in a professional development session on examining student work. The curriculum resource teacher was leading the examination of student work because this was the first meeting since the initial training. References were made to the checklist and sample guiding questions to use in the discussion and examination process.

During the second visit to the school by the researcher in 2007, "Monday Minds" was observed. The meeting began with the curriculum resource teacher presenting a brief overview of the Georgia Assessment on Performance on School Standards (GAPSS) analysis process which was planned for February 2008. When all teachers convened to begin their book study on Dr. Ruby K. Payne's *A Framework for Understanding Poverty*, the assistant principal led the group in the discussion of chapter one in the book. Teachers were assigned to specific tables by the assistant principal who used name cards to

indicate group members. School leaders such as the principal, curriculum resource teacher, technology teacher, and department heads were placed in different groups. The faculty members seemed playful, yet interested, and focused on the content as they listened and participated. Only one person indicated that he had not read the book. The environment seemed to be risk-free for the teachers as new staff members were willing to contribute ideas and comments and two teachers were willing to share very personal examples. No disparaging remarks were made by the faculty as the comments and examples were related and facial expressions showed concern.

For the third observation in 2007, the researcher visited the school on the fourth Wednesday of the month. The curriculum resource teacher indicated the assigned focus for the fourth Wednesday of every month in the school year was on examining student work and providing teacher commentary. This topic was listed in their school improvement plan. Because this was a relatively new skill for the teachers with many groups doing this for the first time, the curriculum resource teacher attended each professional learning community to provide guidance in the process. During the meetings, the researcher noted differences in the levels of experience in the teams as they analyzed student work samples. While the mathematics team used the required protocol as they examined student work samples and gave feedback, the curriculum resource teacher's role was that of observer providing limited guidance. In the ELA meeting, the curriculum resource teacher's role was more of a participant with some guidance furnished at times. Since most of the members of the connections team missed the initial training on examining student work, the curriculum resource teacher provided extensive guidance in the process. Instead of the intended topic, the social studies team was

developing a rubric to use with an activity and the science team was analyzing student responses to a common assessment. When the assigned topic was clarified by the curriculum resource teacher, the science team stated they had misunderstood what they were supposed to do.

In the fourth observation of professional learning communities in 2007, communications and social studies teams were revising pacing maps while the mathematics team was prioritizing curriculum standards. The ELA and science teams were providing feedback on lesson plans. In addition to instructional issues, all teams were reminded of their focus on student attendance by the department chairpersons.

Dimension 4: Shared Personal Practice

Questions 27 through 32 on the *PLCA* assessed elements of shared personal practice in the school. The average rating, or mean, for each item 27 through 32 ranged from 3.00 to 3.31 and showed there was general agreement among the respondents that elements of shared personal practice were evident in the school (see Table 12). Modes for items 27 through 32 indicated most respondents agreed staff members had opportunities to observe peers, staff members provided feedback on instructional practices to peers, staff members informally shared strategies and suggestions to improve student learning, staff members reviewed student work in order to improve instruction, coaching and mentoring opportunities existed, and individual staff members and teams were able to apply new learning and share results of implementation of new strategies.

The percent of respondents who agreed or strongly agreed with each statement in the dimension of shared personal practice were as follows: 27 - 76.5%, 28 - 82.4%, 29 - 97.0%, 30 - 94.1%, 31 - 85.3%, and 32 - 100.0%. Item 27 received eight ratings of

disagree, item 28 received six ratings of disagree, and item 31 received five ratings of disagree. Items 29 and 30 received one and two ratings of disagree, respectively, while item 32 received no rating of disagree. In the dimension of shared personal practice, eight respondents disagreed with the statement "Opportunities exist for staff to observe peers and offer encouragement," six respondents disagreed with the statement "The staff provide feedback to peers related to instructional practices," and five respondents disagreed with the statement, "Opportunities exist for coaching and mentoring." One respondent wrote an asterisk next to a rating of strongly agree on item 32.

Table 12

Item	Mean	Median	Mode	Standard deviation
27. Opportunities exist for staff to observe peers and offer encouragement.	3.00	3	3	.696
28. The staff provide feedback to peers related to instructional practices.	3.06	3	3	.649
29. The staff informally share ideas and suggestions for improving student learning.	3.41	3	3	.557
30. The staff collaboratively reviews student work to share and improve instructional practices.	3.18	3	3	.521
31. Opportunities exist for coaching and mentoring.	3.12	3	3	.640
32. Individuals and teams have the opportunity to apply learning and share the results of their practices.	3.38	3	3	.493

Results of *PLCA* Survey Instrument – Shared Personal Practice

The review of artifacts, observations of professional learning communities, focus group discussions, and the principal interview revealed additional data concerning shared personal practice at South Georgia Middle School. At least once a month on a Monday, the faculty met for professional development on topics targeted as a result of data analysis and teacher input. Teacher P4 stated, "Sometimes it is our certified staff members presenting what they learned at conferences. Other times, we have other people come in to share like RESA." Professional development opportunities, according to Teacher R3, were important because she was able to talk with others and "whether I decide to take that exact same avenue as my other science people take as long as I get that same goal met, then we're okay, but it's good to have the ideas from other people." Teacher R2 suggested a need for more cross-curricular collaboration. Teachers in both focus groups reported that, in addition to formal observations by administrators, department chairs observed and provided feedback to teachers. No formal observations by peer teachers were mentioned or documented.

According to Teachers P1, P3, R1 and R5, new teachers were trained on Learning-Focused Schools (LFS) methods by school trainers and updates and refreshers on LFS strategies were provided for all teachers. Teacher R2 noted, "Even our faculty meetings usually always have some kind of learning-focused review." According to the principal, Teacher P3 and Teacher P5, "Tech Tuesdays" were planned so the technology specialist could show teachers how to integrate technology into instruction. Both focus groups supported Teacher P3's statement that the technology specialist "is really good about making sure it is in our subject. We actually see how we can use it." In describing the benefits of collaboration, Teacher P4 reported, Everybody knows what everybody else is doing in their classroom...even if there is a change, they bring that back. That is shared with the group...it is weird to see...even when they are not meeting, you can walk into a room and [ask], "What are you doing?" "Oh, I am working on the flow of the lesson." You go into the next room [and hear], "Oh, well, I didn't like this."... So it is everybody still working for the betterment of the department.

In addition, observations conducted by the researcher in 2007 revealed further data related to shared personal practice. During the observations of teams during professional learning communities throughout this study, the researcher watched as groups participated in unit planning, curriculum mapping, examining student work, and sharing ideas or suggestions for improving instruction. In the mathematics group, when a teacher asked for clarification or assistance with strategies used to teach direct proportions, the department chair went to the board to show how she teaches the concept. Other teachers made additional comments and provided reminders to make sure students see "all avenues." A review of PRISM meeting notes by the researcher indicated teachers shared feedback on instructional strategies.

During the third observation of 2007 when the researcher observed team professional learning communities, the assigned topic was analyzing student work and providing teacher commentary. Based on the school improvement plan, this was a standard topic for the fourth Wednesday of every month. In 4 of 6 groups, teachers were sharing samples of student work. The social studies and science teams were observed developing a rubric and analyzing student responses on a common assessment, respectively. Although the topics did not follow the prescribed one for the day, they were focused on improving teaching and learning. In 4 of 6 observations, teachers used the protocol provided during a RESA training session on the process of discussing student work samples and providing feedback. Since this was a new skill for the teachers, each group required some level of guidance in the process by the curriculum resource teacher who was in attendance.

In each of the teams, most of the teachers were actively engaged in the analysis of student samples. The acceleration team seemed especially determined to do the process correctly. When prompted by the curriculum resource teacher as to what was supposed to happen, the team decided to start over so they could do it appropriately. Comments related to student work from the acceleration team included, "I like how you let them draw it out," and "If they give incorrect answers, give them clues or choices." During the debriefing stage, all acceleration teachers gave feedback, noted the problem with some students' abilities to organize information, and indicated they had learned something they could use in their own classes. In the mathematics team meeting, one teacher shared that he required the students to write complete sentences. The special education paraprofessional cautioned that some of their students have difficulty writing a complete sentence and putting their thoughts into words. The group then discussed the possibility of using sentences with blanks and having students hone their skills by practicing writing sentences with the vocabulary words on the word wall. One of the teachers in the connections group suggested to the art teacher that she include a written component in her activity so the students could practice descriptive writing. In addition to comments and feedback on student samples, one ELA teacher also shared information about another teacher's "good journal topics" and a "good activity for students who just don't get it" that his student teacher developed.

Dimension 5: Supportive Conditions – Relationships

Questions 33 through 36 on the *PLCA* assessed elements of supportive conditions related to relationships. The average rating, or mean, for each item 33 through 36 ranged from 3.15 to 3.56 and showed there was general agreement among the respondents that elements of supportive conditions related to relationships were evident in the school (see Table 13). The mode for item 35 indicated most respondents strongly agreed that there was regular recognition and celebration for outstanding achievement. In addition, modes for items 33, 34, and 36 indicated most respondents agreed that caring relationships were based on trust as well as respect, risk-taking was rooted in trust and respect, and staff members exhibited a sustained effort to embed changes in the school culture.

The percent of respondents who agreed or strongly agreed with each statement in the dimension of supportive conditions related to relationships were as follows: 33 - 97.0%, 34 - 82.4%, 35 - 91.2%, and 36 - 88.2%. Item 33 received one rating of strongly disagree and no rating of disagree while item 35 received three ratings of disagree, item 36 received four ratings of disagree, and item 34 received six ratings of disagree. In the dimension of supportive conditions related to relationships, four respondents disagreed with the statement "School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school." While one respondent strongly disagreed, six respondents disagreed with the statement "Caring relationships exist among staff and students that are built on trust and respect." One respondent wrote an asterisk next to a rating of strongly agree on item 33.

Table 13

Item	Mean	Median	Mode	Standard deviation
33. Caring relationships exist among staff and students that are built on trust and respect.	3.35	3	3	.646
34. A culture of trust and respect exists for taking risks.	3.15	3	3	.702
35. Outstanding achievement is recognized and celebrated regularly in our school.	3.56	4	4	.660
36. School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.	3.26	3	3	.666

Results of *PLCA* Survey Instrument – Supportive Conditions – Relationships

The review of artifacts, observations of professional learning communities, focus group discussions, and the principal interview revealed additional data concerning supportive conditions related to relationships at South Georgia Middle School. In describing leadership in the school, Teacher P5 reported that the principal took suggestions from everyone. Teacher P1 added that other school leaders did as well. According to Teacher R4, "I think the principal is a good leader because she kinda divvies out the work and trusts us to get it done." Teacher R1 conveyed "…if you need something told to you, she is also your leader and will correct you on the spot. I admire that in her." Teacher R1 implied that trust existed among staff members because they were open to others observing and providing feedback on instructional strategies. Teacher R2 added, "We are very comfortable when we get observed."

When asked why the school needed a professional learning community, Teacher R2 stated that since the school was a needs improvement school, they needed to do whatever they could "to bring up the quality of teaching." In addition, the principal said they were "on the failing schools list and [had] to do whatever it takes to get off of it." Teachers P3, P4, and P1, respectively, cited needs for a professional learning community as "communication," "to ensure the success of our students," and "to analyze our data to make informed decisions for our students." Teacher R4 revealed that having a professional learning community would be "a more efficient way of staying on track and meeting your goals." Teacher R1 indicated that in a professional learning community, the teams would be able to interpret the new curriculum so that a group understanding of new standards could be established.

In response to what has made it easy to become a professional learning community, Teacher R1 stated that the faculty was open-minded and "It just seems like most people are pretty open to the idea of working together at this school." Also, the principal referenced the willingness of the teachers to "do what's in the best interests of their students...And they are willing to go do whatever it takes."

In addition, observations conducted by the researcher in 2007 revealed further data associated with supportive conditions related to relationships. In the front hallway, the researcher noticed plaques for Teacher of the Year, SACS, Georgia Accreditation, Relay for Life, a letter from State School Superintendent Kathy Cox for performance on the 2004 End-of-Course Test (EOCT) for Algebra I. Student trophies were displayed in the front hallway and student work was displayed outside of classrooms. Throughout the observations of professional learning communities conducted for this study, good rapport among group members seemed evident and trust levels seemed high as teachers were willing to ask questions, ask for and give feedback on strategies, and ask for clarification on content. While waiting to administer the survey at the faculty meeting, the researcher observed a presentation of various certificates of accomplishments to several teachers. In the school improvement plan, strategies were heavily focused on the improvement of teaching and learning as teachers were to meet collaboratively to develop common assessments, analyze student work and provide teacher commentary, use curriculum maps for all subject areas, develop instructional units based on the LFS framework, analyze student data, identify targeted subgroups in need of additional instructional assistance, and provide appropriate interventions for students in need.

During the third observation of professional learning communities in 2007 that focused on analyzing student work and providing teacher commentary, the researcher noted that each group seemed relaxed with each other and with the curriculum resource teacher who was in attendance. Comments from the teachers included, "I like that [idea]" and "You did very well, Mr. B." When the mathematics team members made a suggestion to put the teacher comments either in the margin or on sticky notes, the curriculum resource teacher quietly reminded them the comments need to be related to student work. All groups seemed willing to be redirected by the curriculum resource teacher and others in the group.

Because using the protocol for examining student work was a new skill for the teachers, the curriculum resource teacher provided varying levels of guidance for each of the groups as they went through the process. For the science team who were analyzing student responses to a common assessment instead of examining student work samples,

the curriculum resource teacher stated, "What you are doing should be done, but this is not [examining] student work." Throughout the meeting, she continued to reassure them with other comments related to the worthiness of the task they were doing and redirected them in the process they needed for their chosen task. At the end of the meeting, the curriculum resource teacher described the process of examining student work and guided them in the assignment of roles for the next meeting.

Dimension 6: Supportive Conditions – Structures

Questions 37 through 45 on the *PLCA* assessed elements of supportive conditions related to structures. The average rating, or mean, for each item 37 through 45 ranged from 3.21 to 3.85 and showed there was general agreement among the respondents that elements of supportive conditions related to structures were evident in the school (see Table 14). The modes for items 37 through 43 indicated most respondents strongly agreed that time was built in for collaboration, the schedule provided opportunities for collective learning and collaboration, available resources were in place for professional development, available technology and instructional materials existed, continuous learning was supported by resource personnel and their expertise, facilities provided a clean and inviting environment, and collaboration with colleagues was more accessible with close proximity of grade level personnel and department personnel. In addition, modes for items 44 and 45 indicated most respondents agreed that systems were in place for communication between the school and its external stakeholders.

The percent of respondents who agreed or strongly agreed with each statement in the dimension of supportive conditions related to structures were as follows: 37 - 97.0%,

38 - 97.0%, 39 - 100.0%, 40 - 100,0%, 41 - 100.0%, 42 - 100.0%, 43 - 94.1%, 44 - 94.1%, and 45 - 85.3%. Items 39, 40, 41, and 42 received no ratings of disagree while items 37 and 38 received one rating of disagree, items 43 and 44 received two ratings of disagree, and item 45 received five ratings of disagree. In the dimension of supportive conditions related to structures, five respondents disagreed with the statement "Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members." One respondent wrote an asterisk next to a rating of strongly agree on item 40.

Table 14

Results of <i>PLCA</i> Survey Instrument – Supportive Conditions – Structure
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Item	Mean	Median	Mode	Standard deviation
37. Time is provided to facilitate collaborative work.	3.59	4	4	.557
38. The school schedule promotes collective learning and shared practice.	3.53	4	4	.563
39. Fiscal resources are available for professional development.	3.59	4	4	.500
40. Appropriate technology and instructional materials are available to staff.	3.85	4	4	.359
41. Resource people provide expertise and support for continuous learning.	3.68	4	4	.475
42. The school facility is clean, attractive and inviting.	3.56	4	4	.504
43. The proximity of grade level and department personnel allows for ease in collaborating with colleagues.	3.53	4	4	.615
44. Communication systems promote a flow of information among staff.	3.35	3	3	.597
45. Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.	3.21	3	3	.687

The review of artifacts, observations of professional learning communities, focus group discussions, and the principal interview revealed additional data concerning

supportive conditions related to structures at South Georgia Middle School. When asked about school improvement efforts, Teacher R2 said that since the school was a needs improvement school, the "whole focus is on improving academics, improving cooperation, and improving parent cooperation." One of the major structures supporting improvement efforts reported by all participants, including the principal, was the block schedule with each block having at least 90 minutes of instructional time.

This block structure was based on the work of Dr. Robert Lynn Canady, a leading expert on block scheduling. South Georgia Middle School was organized by academic departments instead of traditional grade level teams. Each academic teacher was responsible for one 6th grade class, one 7th grade class, and one 8th grade class. One grade level was taught per instructional block in each department allowing the entire department to have common collaborative planning time. As Teacher R1 reported, planning for and teaching three different grade levels each day was "overwhelming." Teacher R4 stated so much planning did not allow adequate time for reflection on the lessons. According to all participants, the 90-minute blocks provided appropriate time for students to participate in performance tasks related to the curriculum. The school map showed that academic teams were grouped closely together. Whenever possible, the supporting acceleration teacher was located near teachers in the same academic area.

Participants stated continued support from the central office was a structure important to the school's improvement efforts. The principal confirmed, "If we didn't have the support of the central office, we couldn't do what we do." Even though the school received Title I funding, several of the teachers were paid through additional local funding. Teacher P5 reported that resources such as people, money, and time have always been available. Concerning the current structures, Teacher P4 maintained, "Without them, we would not succeed." In addition, the teachers and the principal agreed that staff resources provided knowledge and expertise in areas such as Learning-Focused strategies.

According to the teachers and the principal, the communication structure for the school was reported as positive because department chairs relayed feedback and input from the department members to the interdisciplinary team meetings and took information back to the departments. In addition to communication with their department chairpersons, teachers reported they were able to go to higher authorities as needed. Teacher P4 stated, "Communication has really helped us professionally...We get factual information. We are always given the information up front." Teacher P5 added, "That goes all the way up. Our superintendent...we have teachers from every school that go and meet with her...We have communication all over the place."

In addition, the school schedule and observations conducted by the researcher confirmed that time was built in for collaboration. Although most of the time in professional learning communities was spent on instructional issues, discussions and announcements such as dates and registration information for GPS, calendar of events, and new materials received were observed. In the fourth observation in 2007, announcements and clarifications from the principal on oral presentations by students were discussed along with disseminating material from the interdisciplinary team on student test data which was to be discussed at the next meeting. Observations of professional learning communities as well as agendas and logs from interdisciplinary team and academic team meetings verified that communication items were discussed and included topics such as lesson plan location, student oral reports, material orders, hall noise, rule enforcement, due dates for pacing guides, and reminders to focus on student attendance.

As teams met to discuss their analysis of student work and other topics, the curriculum resource teacher provided guidance in the process and provided clarification on other topics discussed in the meetings. During the science team meeting, the group was analyzing student responses to a common assessment so that modifications could be made to the test thus making it more appropriate for the content taught. Although this was not the assigned task for the day, the curriculum resource teacher was able to provide guidance in the process matching their task.

Summary Based on Findings for Research Question 1

Results of the *PLCA* indicated SGMS was deeply immersed in Hord's five dimensions of an effective professional learning community with each of 45 survey statements having a mean of 3.00 or higher which indicated general agreement with each statement. In addition to survey results, a review of artifacts, observations of professional learning communities, two focus group discussions, and an interview with the principal provided further data related to each of Hord's dimensions. In the area of shared and supportive leadership, most decisions were made by the interdisciplinary team; however, budget and policy decisions were reserved for the principal who considered input from the interdisciplinary team and individuals before making decisions. Department chairpersons, the curriculum resource teacher and the technology specialist were identified by teachers and the principal as school leaders in addition to the administrative staff. According to survey results and teachers interviewed, the principal promoted shared leadership.

For shared values and vision, teachers indicated that children were the focal point as they worked together to improve teaching and learning. Observations and a review of meeting agendas and logs confirmed that improving instructional strategies and making data-driven decisions were a major focus of the school.

Elements of collective learning and application of learning were found as staff collegially worked together to learn new skills and apply them in the classroom. Professional learning communities provided a variety of opportunities for subject-specific or group-specific training on a weekly basis and for the whole faculty at least monthly. A heavy focus on improving teaching and learning was evident in observations, meeting agendas, meeting logs, and in the school improvement plan. New skills were expected to be implemented at the classroom level. A strong commitment of the faculty to enhance learning was found in survey results and in actions and teacher dialogue.

Although participants generally agreed that shared personal practice was evident, survey results indicated that this was the weakest of all dimensions assessed by the *PLCA* with means ranging from 3.00 to 3.31. Collaboration provided the structure for teachers to give feedback, receive feedback, share ideas, and make suggestions on strategies to improve instruction. Other than teachers indicating that department chairpersons observed teachers in their departments, no records of peer observations were seen. The schedule with each academic team having common planning did not provide opportunities for subject area teachers to observe each other without missing instructional time in the classroom. A need for more cross-curricular collaboration was cited.

In all observations in the school in 2007, a risk-free environment was observed and contributed to high ratings for supportive conditions related to relationships. Trust and respect were evident in all interactions between staff members. With the heavy focus on professional learning geared toward improving teaching and learning with follow-up and support provided, the faculty exhibited a unified effort to make the changes part of the school culture.

According to survey results, supportive conditions related to structures was rated as the strongest of the dimensions assessed with means ranging from 3.21 to 3.85. With block scheduling in place, time was provided for collaboration to occur consistently. By having a team structure, daily common planning for each academic department was available. Teachers indicated this time was important to their success as they implemented a new state curriculum and focused on applying instructional strategies. Both the teachers and the principal indicated that additional funding for more teachers and other support from the system office were vital for the school to have the structure promoting improved teaching as well as promoting student success.

Research Question 2

What are compelling forces that impacted the implementation of the professional learning community?

In order to understand the compelling forces impacting implementation of the professional learning community at South Georgia Middle School, the researcher reported an analysis of responses of the principal-selected focus group discussion, the randomly-selected focus group discussion and the principal interview as well as included data from the review of artifacts. In both focus group discussions and in the principal interview, the researcher asked participants the following interview questions: 2 - ``Why do you need a Professional Learning Community in your school?'', 3 - ``What planning took place in setting up your school as a Professional Learning Community?'', 4 - ``What has made it easy for your school to become a Professional Learning Community and why?'', 6 - ``What do you anticipate happening in the next 5 years regarding your school's being a Professional Learning Community?'', 6a - ``What goals do your Professional Learning Communities have for the next 5 years?'', and 9 - ``What suggestions or recommendations would you give to another school considering a Professional Learning Community model?''.

While teachers indicated that a professional learning community was needed for communication and was vital to ensure the success of the students, the principal responded with more detail as she stated,

A professional learning community is needed so that we can look at all the needs of our students and that we can look at resources we have and analyze the data in order to make the adjustments to the manner in which we provide instruction for our students.

More specifically, when asked why they needed a professional learning community model, Teacher P1 reported, "To analyze data, to make informed decisions for our instruction and for our school improvement plan, and what we are going to implement and tackle to deal with problem areas." While Teacher R4 indicated a professional learning community was "a more efficient way of staying on track and meeting your goals," Teacher R2 acknowledged, "We were a needs improvement school, too, so we needed to do whatever we could to bring up the quality of teaching." Additionally Teacher R1 cited a need for collaboration in order to interpret new curriculum so that after talking it through, they "figure out this is where we need to go... [and] find our common ground." Teacher R2 also indicated the structure allowed them to discuss and to determine the differences in curriculum from one grade level to another.

Block scheduling and common planning were identified by both the principal and Teachers P1, P5, and R1 as factors making it easy to move to a professional learning community. The school's move to block scheduling was cited by all personnel interviewed as a structure which lends itself to a collaboration model; however, no previous planning for implementing a professional learning community model was mentioned by the teachers or the principal except for the plans to move to block scheduling. With the block schedule already in place, collaboration was easy to implement with the structure of the academic teams and the time built in according to both the principal and the teachers.

Teachers indicated that the school's leadership was a factor that made the transition to a professional learning community model easier. In discussing factors that have made it easy to move to a professional learning community, Teacher R2 stated, "Dedication of leadership toward the goals, and they don't let go." Teacher P3 reported that other school leaders model "a lot of what [the principal] does."

Teacher R2, who was new to the faculty, stated that in his previous school system programs were in place for about two years and were "thrown out," but in describing the commitment at South Georgia Middle School, he stated, "They are firmly behind Learning-Focused so they are not going to change in two years to something else." Teacher R2 also stated, "Our department is pretty behind Learning-Focused, and I don't think anyone's resisting. She and I are the only new teachers...half of us are new. The ones who have been here for a while are still gung-ho."

The principal along with Teachers P1, P4, and R1 cited the staff as being a factor in the success of school improvement efforts. Teacher P4 said the "mindset of the staff" and the buy-in of most staff members made the transition easier. Teacher R1 acknowledged that most of the faculty members were open-minded about working together. When asked what factors made the transition to a professional learning community easier, the principal responded,

I think the willingness of my teachers [has made the transition easier] because I can honestly say my teachers are here to do what's in the best interests of their students...It's because they are so dedicated, and they are willing to go do whatever it takes.

In addition, knowledge of staff resources was identified by all personnel interviewed as a factor that positively impacted the school's reform efforts. According to the focus groups, staff members had expertise in specific areas and were able to provide training and support for others. Teacher P5 stated, "Resources have always been there." Furthermore, according to Teacher P5, in order to be successful, "[school and system leaders] give us the people we need, the money we need, and the time we need."

When responding to the question about what might be anticipated for the professional learning community in the next 5 years, the teachers stated that they would be more confident in the new curriculum and in teaching in a standards-based classroom. In addition, Teacher P4 felt "it will become even more [simple]" with transition teams in place to "create a more seamless curriculum." While Teacher P3 forecasted the

professional learning community model would be "instilled in them," Teacher P5 stated, "I think you will see more excitement" as "we can get into some more dynamic instruction and exciting student activities." Teacher P1 predicted there will be more collaboration with the high school and the other middle school as leadership became more supportive and more evident. Additionally, Teacher P2 felt that changing student demographics would change the school as more students moved into the attendance zone.

In referencing professional learning communities and Learning-Focused strategies, the principal stated, "I see that it is going to continue, and I think it will probably improve." The principal reported they would find additional ways to increase parental and community involvement. In addition, the principal suggested they would continue to analyze data to determine where they needed to be and would implement strategies that would help them accomplish their goals. In addition to continuing to use LFS methods, utilizing an interdisciplinary team structure, and having regularly scheduled collaborative team meetings, the school's improvement plan listed the establishment of a systematic process for developing common assessments, analyzing student work, and analyzing student data, as well as the creation of transition teams and a protocol for vertical alignment.

When asked what suggestions they would give to schools implementing a professional learning model, Teacher P1 felt the schools would need to find the time in the schedule for "consistent" collaborative planning opportunities, Teacher P3 felt they should have a shared focus, and Teacher R5 stated they should not expect everyone to be able to handle everything all at once. Teacher R1 suggested they observe other schools, have the commitment of the "top people before presenting to the faculty," and start with

"small pieces." In order to implement a professional learning community, the principal maintained the key to successful implementation was leadership. Furthermore, to be more successful, she insisted that leadership had to be supportive of the model. The principal stated, "You have to have someone who is open to change and will listen to the teachers. You've just got to be able to change. If you don't, you're going to get stagnant and nothing is going to improve."

Summary Based on Findings for Research Question 2

Several compelling forces impacting implementation of professional learning communities were identified by participants and the principal. Already in place before moving to professional learning communities, a block scheduling structure which allowed for common planning for academic teams paved the way for collaboration in a professional learning community model. School leadership was cited as the key to success when school leaders have a shared focus and a commitment to school improvement.

The mindset, buy-in, and willingness of the staff to do what was best for students as well as the knowledge of the staff made the transition to a professional learning community easier. Although school level compelling forces were found, system level support laid the foundation for a successful move to a professional learning community structure by providing funding and personnel to facilitate improved teaching and learning. During professional learning communities, a sense of accomplishment, eagerness to continue improving, and a willingness to share with outsiders were pervasive among the staff.

Research Question 3

What are constraining forces that impacted the implementation of the professional learning community?

In order to understand the constraining forces impacting implementation of the professional learning community at South Georgia Middle School, the researcher reported an analysis of responses of the principal-selected focus group discussion, the randomly-selected focus group discussion and the principal interview.

In both focus group discussions and in the principal interview, the researcher asked participants the following interview questions: 2 -"Why do you need a Professional Learning Community in your school?", 3 -"What planning took place in setting up your school as a Professional Learning Community?", 5 -"What has made it difficult for your school to become a Professional Learning Community?", 5a -"Were those difficulties anticipated?", 5b -"How did you or your school deal with those difficulties?", 6 -"What do you anticipate happening in the next 5 years regarding your school's being a Professional Learning Community?", 6a -"What goals do your Professional Learning Communities have for the next 5 years?", and 9 -"What suggestions or recommendations would you give to another considering a Professional Learning Community model?".

Teacher P3 reported that trying to get buy-in from everyone made it more difficult to become a professional learning community because some were against it. Teachers P1, P4, and P5 stated that negativity from individuals was an issue affecting the move to a professional learning community. Implying that some teachers moved toward improvement while ignoring the ones who did not, Teacher P1 stated, "If there is someone being negative, let them just be, and do what you need to do, and forget about them, and they'll get over it and come on board." Teacher P4 added "And you can't do anything about it. They just have a negative attitude. You just sit there and have your negative attitude, but we'll be over here getting something done." Teacher P4 shared that a new teacher encountered difficulty early in the school year due to a lack of Learning-Focused Schools training and inexperience with collaboration. She relayed that the teacher expressed that now that he understood why they had done this, he would have a much easier time next year. Teacher P5 added, "It's a learning process for everybody."

In responding to how she handled the move to block scheduling, the principal stated,

We had some who did not want to make the change. They wanted things to stay as it was. And I flat out told them we do not use excuses. [In addressing those staff members who did not want to change], I said this is the way it's going to be and if you can't do this, you need to go somewhere else.

When the school moved to the structure where each teacher was responsible for all three grade levels, the principal reported that a mathematics teacher who was originally against the change became her biggest advocate once she saw an increase in student achievement. This teacher's turnaround was cited by the principal as a major influence on the buy-in of her staff to the team approach. With a significant increase in mathematics test scores in only one year, the principal stated the mathematics team members became the "cheerleaders" for the move to the academic team structure which led to more collaboration for the improvement of teaching and learning. The principal contributed the buy-in of other staff members to the success of the mathematics team. When asked what had made it difficult to become a professional learning community, Teacher R4 identified a need for additional professional development for teacher leaders due to their school's diverse group of teachers coming from various backgrounds and having different beliefs. In addition, Teacher R4 reported "Sometimes people are not willing to change" and Teacher R4 suggested,

Some of the teacher leaders could do a better job at valuing other teachers' input and not just being 'this is the way I want it and this is the way it's going to be done.' I feel like some people are withdrawing because of that.

In referencing a lack of participation of some teachers in the collaboration process, Teacher R1 went on to say that some teachers "don't speak out because they have been shot down too many times in the past. Some leaders are strong." The principal reflected that they do not have as much collaboration with other groups as they should since it "is basically just the teachers doing this."

Teacher turnover was reported as another issue which made it difficult to move to a professional learning community. Teacher R1 stated "Sometimes teacher turnover in years past has been [a problem. There have] been a couple of years we had quite a turnover. I don't think this year there's much of a turnover. That can be a problem."

Teacher P1 acknowledged that "things that you have no control over," such as attendance at meetings or other logistical issues, affect the implementation of a professional learning community model. Teacher P2 went on to say that they try to "minimize those things as much as possible and discuss them repeatedly in the interdisciplinary team [meetings] to try [to talk about] what new [problem] has become a hindrance...It's continual dialogue." "Don't think everything is broken because of this one thing. Let's try to figure out how to fix it," suggested Teacher P1. All teachers agreed the principal was open to them as she listened to their problems and attempted to find workable solutions. According to Teacher P3, "She is a leader, but it is also because she can also be a follower. That is one of her best qualities."

Time was considered a constraining force by the principal and the teachers. Over the past few years, adjustments were made in the schedule to include additional time for each class period before the school went to block scheduling. Once in block scheduling, additional minor adjustments were made to allow for transitions associated with lunch and afternoon dismissal. Although instructional time was adjusted, time for teachers to adequately collaborate was limited as new programs were put into practice. With the implementation of Georgia's new curriculum and being responsible for all grade levels, Teacher R2 reported they were still getting used to "this giant braid" as they spend so much time "trying to organize that we don't really spend, as a group, much time actually doing what we're going to teach. I keep thinking next year, it's going to be better because we will know the various parts of it."

An overwhelming workload was mentioned by Teachers R1, R2, R4, P2, and P5 as an area of difficulty and affected available collaboration time. With the pressures of implementing new curriculum along with Learning-Focused Schools strategies, Teacher R1 stated, "When you think about it, that has been a big issue." Teacher P5 indicated that when you get the whole faculty "trying to do these wonderful things, it is a lot of work." "And it wears you down," added Teacher P2. Since the school was structured so that each academic team taught all grade levels, 6th, 7th, and 8th, teachers confirmed that planning for all grade levels has been hard. Teacher R1 stated, "Everything looks so great on paper and there's a lot more work sometimes. They question why would you even complain about having three grade levels because there are all these advantages. And sometimes the disadvantages are about 50-50." Teacher R2 stated,

We have three preps which does help the committee because we are all working on the same thing, but it gives us that much more...So that's made it more difficult, but again, it has added to our sense of community.

Teacher P2 suggested that the student population may be a barrier to school reform efforts as teachers tend to become frustrated when students do not attend school as they should. In addition, the teachers and the principal cited parental involvement as a barrier to the implementation of a professional learning community because it was difficult to involve parents from the community. According to Teacher P5, "It is the population of parents. A lot do not have the education to participate in a dialogue about the school improvement plan...there's not really a discourse there. They defer to our better judgment." Teacher P1 stated that the parents were very trusting of the teachers at SGMS because "they feel we have the knowledge to do what we need to do with their children." Teacher P5 went on to say, "While we are very thankful they trust us, it makes it difficult to involve them and get their input." The principal and teachers indicated that although the school has tried several ways to involve parents, they continue to search for more effective means for increasing parental involvement in both social activities as well as school improvement dialogue.

While Teacher R1 suggested that several teachers not living in the community may be an issue which has not been beneficial to the implementation process, Teacher R2 stated, "I am amazed at the number of people who teach here, who grew up here and went to school here." Teacher R1 predicted that only about 20% of the teachers live in the SGMS community where they work.

In dealing with difficulties, Teacher P3 suggested that they focus on what could be changed, and Teacher R4 stated that they "divide and conquer" as each person takes responsibility for an issue or part of the problem and then the group reconvenes to discuss options and make plans to address the problem. As a way to improve parental involvement and to better understand their student population, Teacher P1 mentioned, "We have purchased the book, *A Framework for Poverty*, and are planning to do a book study." Additionally, in addressing possible changes to ease the issue with time, the principal stated that 3rd block, which included lunch time, was rotated "to appease everyone." She further clarified that connections teachers were locked in to fourth block planning because they shared those teachers with the high school.

Another difficulty experienced by the school was an external one. Although the school's block scheduling provided the time and the structure for collaboration as a professional learning community, the principal indicated that the team structure used in her school "almost cost [them] being certified by [Southern Association of Colleges and Schools]. We were not a typical middle school set up. We are set up on academic teams and because of that, they didn't want to do that. But then their comment to me was that they couldn't argue with my [test] scores."

Summary Based on Findings for Research Question 3

Several constraining forces impacting implementation of a professional learning community model were identified by focus group participants and the principal. While staff buy-in was mentioned as a compelling force, it was also citied as a constraining force as the school began to implement a new instructional structure as they moved toward school improvement. Some faculty members who were against the move to block scheduling and academic teams expressed negativity but were ignored by teachers willing to change. Staff buy-in improved after one academic team realized success in one year. With an academic team structure, the overwhelming workload of teachers was described as a constraining force which consumed a lot of available time, but was lessened as collaboration increased as teachers implemented a new state curriculum and fine-tuned lesson plans to meet requirements of reform efforts. Due to the time required for meeting the demands of the workload, the school's sense of community was heightened as teachers worked together.

Teacher turnover was cited as a constraining force. It was stated that new teachers joining the staff threw off the school's balance for a while and experienced difficulties with a professional learning community model when they were not trained in collaboration efforts and major school initiatives. Providing professional development for school initiatives and for school leaders were mentioned as continued needs.

The student population, generally from low-income families, was considered a barrier due to the increased frustration levels experienced by teachers when student attendance is low. Little parent involvement in school activities and a lack of dialogue with parents on school improvement efforts were cited as constraining forces.

In addition, external influences may be considered a constraining force. With the academic team structure, the school almost lost accreditation by Southern Association of Colleges and Schools because they did not meet the standard middle school model. Logistical issues, such as not attending professional learning communities due to other

scheduled meetings and teachers not living in the school community, were stated as possible constraining forces.

Research Question 4

What factors do participants identify that will lead to sustainability of the professional learning community?

In order to understand factors leading to sustainability of the professional learning community at South Georgia Middle School, the researcher reported an analysis of responses of the principal-selected focus group discussion, the randomly-selected focus group discussion and the principal interview. In both focus group discussions and in the principal interview, the researcher asked participants the following interview questions: 7 – "How might changes in leadership affect your school's professional learning community?", 8 – "How different would your school be if you didn't have a professional learning community?", and 9 – "What suggestions or recommendations would you give to another school considering a professional learning community model?".

When discussing sustainability of their school improvement efforts, teachers focused on leadership. According to Teacher R2, the principal "has been a major part of the progress here." In addition, both teachers and the principal reported that there were several faculty members who were in leadership roles. One consideration on the minds of the teachers was the impending retirement of the principal who had 34 years of experience. The succession of leadership in the school was a topic that was not discussed, according to the teachers and the principal, as the teachers hoped it would not happen. When the principal retires, the teachers stated they would like input in the selection process. Teacher P1 stated, "We would need someone with our vision" while Teacher P4 stated, "We would not need a principal with a vision of their own." Teacher R1 pointed out, "Luckily we have some safety measures. We have a curriculum resource teacher and our tech specialist. They are really strong in the curriculum in the school and in leadership roles."

When asked how changes in leadership might affect the school professional learning community, Teacher R2 suggested, "If we lost the top four people [principal, assistant principal, curriculum specialist, and technology specialist], it would be a disaster unless the other people come in with the same belief in the program." Teacher R2 further clarified that if the teachers supported a program and the administration did not, everyone would suffer. Teacher P5 warned, "It would be very, very frightening" to lose the school's leadership. According to Teacher P5, "As people have left and new people have come in, it does throw the balance of the school off for a while until you feel that person out and see where they are going to fit in to what we have going on." In planning for leadership succession, Teacher P5 proposed, "We need to foster more teacher leaders. We need to get everybody involved."

The principal stated that her teachers were used to shared leadership and knew that she would listen to them. She continued,

So if someone comes in and doesn't have that type of leadership, that it is going to be the way I say it or whatever, then I think... the learning communities would not be as strong as they are now. Morale would go down, and I would see maybe some teachers leaving.

When asked how different the school might be without a professional learning community, the teachers and the principal stated that teachers did not like to consider

that. Comments from the teachers interviewed revealed a concern about the improvements they have made. Teacher P5 stated, "It would be a nightmare." Teacher R3 suggested the professional learning community would be "scattered, disorganized." According to Teacher P1, "We would still have 35% of our 8th graders in math passing." "It would be chaos," suggested Teacher P5. As stated by Teacher P1, "I could not imagine ...without having collaborative planning." Teacher P2 acknowledged, "I think it would hinder our students." Clarifying the remarks of other individuals, Teacher P3 reported, "Our students know that we've got it together. They feel comfortable, they know what to expect." She went on to say that when teaching all three grade levels, professional learning and collaboration were "vital."

Without a professional learning community, Teacher R1 asserted there would be no "cohesion and morale with the faculty." As a result of the school's professional learning community, a high level of trust was implied by the teachers in both focus group discussions and observed in collaborative planning meetings. Teacher R1 suggested they "feel comfortable saying this is what I did and if someone says, 'Are you sure that's the right way?', you ...talk about it and see maybe where you can change it." Additionally, Teacher R2 stated they "are very comfortable when...observed" and Teacher R1 shared that they do not "mind people coming in or discussing [what they have tried] in a department meeting."

Without a professional learning community, according to the principal, the school would go back to "everybody living in their own little world and dealing with their area of the curriculum, and there would be no cross-curriculum communication." The

principal gave credit for increasing test scores to professional learning communities and Learning-Focused Schools strategies.

To other schools beginning to implement a professional learning community, Teacher R1 recommended starting small, getting the "top people on board before presenting to the faculty," and observing other schools using a professional learning community model. Teacher P1 said schools should make sure that "consistent" time was built into the schedule for collaboration. In addition, Teacher P3 recommended making sure that you "have a focus and others' input so that it is not directed by one person." Teacher P2 warned schools that become a professional learning community not to just have it "pretty on paper" because "they can have such a positive piece to their school and aren't utilizing it if they are just making it pretty on paper." Teacher P3 reminded us that schools moving to a professional learning community have to "take the good with the bad."

The principal maintained that the key to successful implementation of any new initiative was leadership from within the school as well as from the system level. She went on to say, "You have to have someone who is open to change and will listen to the teachers. You've just got to be able to change. If you don't, you're going to get stagnant, and nothing is going to improve."

Summary Based on Findings for Research Question 4

Focus group participants and the principal identified leadership as the key to sustainability. Although leadership was deemed vital to the continuation of the professional learning community model which provided the structure for the successful implementation of school improvement efforts, there was no plan in place or in development to address the impending retirement of the principal. Faculty members stated they chose not to discuss the possibility.

New leadership, according to the principal, needed to embrace shared leadership and be willing to listen to the teachers. Focus group participants suggested other school leaders, such as the curriculum resource teacher and the technology specialist, were the safety net in the event the principal retired due to their knowledge of curriculum and leadership. If the school lost its top four leaders, teachers believed their current structure would be in jeopardy unless others came in with the same beliefs. Developing leadership skills in other faculty members was expressed as a need in planning for leadership succession. In addition, hiring personnel having common beliefs with existing staff was cited as necessary for sustainability of the professional learning community model and the continuation of the improvements made to teaching and learning in the school.

Summary

Using both quantitative and qualitative methods, the researcher conducted a case study to understand how one middle school implemented a professional learning community and planned for sustainability of the model. As a quantitative method, the researcher administered an existing survey, *Professional Learning Community Assessment (PLCA)*, consisting of 45 statements to determine the extent the school was immersed in the basic dimensions of a professional learning community. Based on the work of Hord, basic dimensions assessed by the instrument were shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, supportive conditions related to relationships, and supportive conditions related to structures. The dimensions were broken down into 45 clarifying statements. During

administration of the survey instrument, demographic data including gender, number of years of teaching experience, and academic area were collected. Data gathered with the *PLCA* were analyzed by using the Statistical Package for Social Sciences (SPSS). Descriptive statistics including mean, median, mode, and standard deviation were reported.

As qualitative methods, the researcher facilitated an interview with the principal, a focus group discussion with 5 certified personnel selected by the principal as being knowledgeable of the school's improvement efforts, and a focus group discussion with 5 certified personnel randomly selected by the researcher. Observations of professional learning community meetings and a review of limited school artifacts were other qualitative methods used. While the school had limited artifacts for review, available artifacts revealed little detail and insight into the creation and evolution of the school's professional learning community model.

For research question 1 which addressed the extent the school was immersed in the basic dimensions of a professional learning community, the researcher found the school was deeply immersed in the basic dimensions of a professional learning community. Means for each of the 45 statements assessed on the *PLCA* indicated agreement from the participants. In addition, responses from focus group discussions, responses from the principal interview, results from examining artifacts, and observations of professional learning community meetings validated the staff's perception that the school was deeply immersed in the basic dimensions of a professional learning community. More specifically, staff members were involved in shared leadership by making decisions about school issues, sharing responsibility for student learning, and having access to key information. It was reported that the principal takes advice from the staff, proactively addresses concerns and provides support, and promotes shared leadership within the school. Other individuals were identified as being school leaders by their peers and the principal. A need for further training for school leaders was recommended by participants.

Elements of shared values and vision were evident in the school as decisions were made to promote improved teaching and learning, goals for students went beyond test scores, and programs implemented supported improvement of teaching strategies so that student learning would increase. Teachers reported that children were the focal point for all their efforts to improve teaching and learning.

Elements of collective learning and application were observed in the school as the staff continued to participate in professional learning opportunities focused on improved teaching and learning and engaged in open dialogue in a variety of settings to address problems and to improve instructional strategies. Expectations for applying new skills in the classroom were noted in the school improvement plan, collaborative planning sessions, and in meeting logs. Staff members exhibited a strong commitment to school improvement efforts and were able to work together in a collegial, respectful environment.

Although survey results showed it to be the weakest dimension, elements of shared personal practice were evident in meetings where teachers collaborated on lesson plans, instructional practices, and student learning. Feedback and guidance for the improvement of instruction and application of new skills were provided freely and received readily by teachers. In addition, when teachers needed assistance with content issues, peers seemed willing to help. With analyzing student work as a new skill being applied by the teachers, guidance in the process and protocol was provided by the curriculum resource teacher. While teachers seemed willing to be observed, no records of peer observations were reviewed. With the academic team structure within block scheduling, opportunities to observe peers could only occur during instructional time.

The researcher found supportive conditions related to relationships in the school. A high level of trust and respect for individuals was evident in all observations. Within a risk-free environment, teachers seemed willing to try new strategies for improving student learning. With continued training in Learning-Focused School methods as well as other professional development focused on improving instructional strategies so that student learning would increase, the school staff exhibited a sustained effort to embed changes in the school culture.

As indicated by *PLCA* results, the strongest of the dimensions was supportive conditions related to structure. Improvements in the school's culture began with the implementation of a block scheduling structure providing a 90-minute instructional block for each academic class and a 90-minute daily planning block. As collaboration efforts were established in conjunction with the implementation a Learning-Focused School model, the professional learning community structure facilitated improved teaching and learning by affording consistent and adequate time for improvement efforts. Additionally, support from school administrators as well as system administrators enhanced the instructional program.

For research question 2 which addressed compelling forces impacting implementation of a professional learning community, the researcher found consistent and adequate time must be provided for collaboration to occur. In addition, leadership was considered vital to the success of any reform efforts when school leaders share a focus and commitment to school improvement efforts. The mindset, buy-in, and willingness of the staff to improve teaching and learning facilitated the application of new programs and structures. Having knowledgeable resource people within the school and support from the system level provided the foundation for accomplishing and continuing school improvement.

For research question 3 which addressed constraining forces impacting implementation of a professional learning community, the teachers and the principal reported that insufficient time for adequate collaboration at the onset, a lack of staff buyin, staff negativity, an increased teacher workload, inexperience and inadequate training for new teachers in major initiatives, and high teacher turnover were barriers to successful implementation. According to participants, these barriers improved over time. A need for further professional development for school leaders was suggested. Working with students and parents from low-income families was cited as a possible constraining force due to a lack of parent involvement in school improvement dialogue. Additionally, logistical issues and external forces such as school accreditation groups were mentioned as possible barriers to how a school structures itself and operates as a professional learning community.

For research question 4 which addressed factors leading to sustainability of a professional learning community model, the researcher found leadership was essential to

the success and sustainability of professional learning communities. Leaders who shared the school's vision, shared leadership among the staff, and listened to the faculty were described by participants as important to maintaining positive changes for school improvement. Additionally, it was reported that new hires having common beliefs with existing staff members was necessary for sustaining the professional learning community model. Leadership from within the school and leadership from the system level were considered vital to implementing and sustaining a professional learning community model. Without a plan for leadership succession, teachers conveyed uncertainty of the future of professional learning communities and the resulting improved culture that existed in the school.

Twenty-two findings from responses to the research questions were reported in this chapter.

Findings from Research Question 1

To what extent is the school immersed in the basic dimensions of a professional learning community?

The researcher found that:

 Teachers and administrators were immersed in all dimensions of a professional learning community: shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, supportive conditions related to relationships, and supportive conditions related to structures.

Findings from Research Question 2

What are the compelling forces that impacted the implementation of the professional learning community?

The researcher found that:

- 2. The principal encouraged those who were not in favor of the changes to not sign their contracts.
- 3. Leadership shared a focus and a commitment to school improvement efforts.
- 4. Other school leaders modeled the principal.
- 5. Consistent and adequate time was provided for collaboration.
- 6. Knowledgeable resource people were on staff to provide expertise and support for new programs and initiatives.
- 7. A positive mindset, buy-in, and willingness of the staff facilitated implementation.
- 8. New initiatives were implemented in small increments.
- 9. A risk-free environment facilitated collaboration efforts.
- 10. The system level leaders provided additional support and funding to support school improvement efforts.

Findings from Research Question 3

What are the constraining forces that impacted the implementation of the professional *learning community*?

The researcher found that:

- 11. Insufficient time for adequate collaboration was provided at the onset.
- 12. An initial lack of buy-in from the staff and staff negativity hindered the implementation.
- 13. A workload consisting of implementing new state standards, new school initiatives, and academic teams overwhelmed the faculty.

- 14. New teachers lacked experience and adequate training in major initiatives.
- 15. Logistical issues of teachers having to be in multiple meetings at the same time impeded collaboration efforts.
- 16. Teacher turnover, student attendance issues, a lack of parent involvement in a dialogue about reform efforts, and teachers not living within the school community were cited as possible constraining factors.
- 17. External forces such as accreditation agencies could affect organizational structure of professional learning communities.

Findings from Research Question 4

What factors do participants identify that will lead to sustainability of the professional learning community?

The researcher found that:

- 18. Leadership within the school was important to sustaining achievements of reform efforts.
- 19. Leaders who share the school's vision, are willing to share leadership, and are willing to listen to the staff were cited as important factors in the continuation of school reform efforts.
- 20. New hires having common beliefs with existing staff members were preferred.
- 21. Support and funding from the system level were provided to support school improvement efforts.
- 22. No plan for leadership succession existed.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

In this chapter, the researcher provided a brief summary of the study, an overview of procedures and the research questions followed by a discussion of findings. Conclusions and implications of the study, as well as recommendations for further study, were presented with concluding thoughts. The purpose of the study was to understand how one middle school implemented a professional learning community model and planned for sustainability of the model.

Introduction

As public demands for accountability in education increase, school reform efforts intensify and focus more on improving student achievement (DuFour & Eaker, 1998; Hord, 2004a; Senge, 2000). A professional learning community, a reform model that centers its efforts on the improvement of teaching and learning, is becoming increasingly attractive to educators struggling to meet the pressures of accountability (DuFour & Eaker; Thompson, et al., 2004). Originating in the business sector with Senge's belief that when individuals learn, the organization learns, the concept of professional learning communities is emerging in the educational arena as a formidable school improvement process. Basic dimensions of effective professional learning communities identified by Hord (1997a, 2004b) include shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, and supportive conditions related to relationships and structures.

Although available research documents the attributes, structure, and benefits of effective professional learning communities, information on how to create, maintain, or

sustain the model is lacking (Leo & Cowan, 2000; Leonard & Leonard, 2005; Morrissey, 2000). Additionally, guidance on how to manage or avoid constraining forces which impact implementation of the model is scarce (Annenberg Institute for School Reform, 2004; Morrissey).

Overview of the Study

The researcher designed a case study in order to understand the implementation of a professional learning community and sustainability of the model. One middle school operating as a professional learning community was selected for examination by the researcher. In this case study, although many definitions were found in the literature, operational definitions for a learning organization and a professional learning community were based on those of Senge (1990) and Hord (1997a), respectively. In his writings, Senge (1990) defined a learning organization as one in which "people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together" (p. 3). A professional learning community was described by Hord in her findings as an organization "in which teachers in a school and its administrators continuously seek and share learning, and act on their learning" (p. 6).

The researcher's purpose of this case study was to understand how one middle school implemented a professional learning community model and planned for sustainability of the model. More specifically, the researcher determined the school's level of immersion in the basic dimensions of a professional learning community, identified compelling and constraining forces impacting implementation, and assessed beliefs of certified personnel about the sustainability of the professional learning community. A Title I school in a rural community in southern Georgia was selected by the researcher for participation in the study. The school had 37 certified personnel on staff and served 432 students.

This case study of the implementation of a professional learning community in the selected middle school consisted of both qualitative and quantitative methods. An existing survey instrument, the *Professional Learning Community Assessment (PLCA)*, was used as a quantitative measure and was administered to the certified staff. Based on Hord's basic dimensions of a professional learning community, the instrument assessed perceptions of certified personnel on school practices according to basic dimensions of professional learning communities: (a) shared and supportive leadership, (b) shared values and vision, (c) collective learning and application, (d) shared personal practice, (e) supportive conditions related to relationships, and (f) supportive conditions related to structures. The return rate was 34 out of 37, or 91.89%, with one teacher being absent and two teachers choosing not to participate.

For qualitative methods, the researcher interviewed the principal, facilitated a focus group discussion with 5 certified personnel selected by the principal for their knowledge of the school's reform efforts, facilitated a focus group discussion with 5 certified personnel randomly selected by the researcher, conducted observations of professional learning community meetings and reviewed available artifacts.

Research Questions

This case study examined the implementation of a professional learning community in one middle school in Georgia and was guided by the following subquestions:

- To what extent is the school immersed in the basic dimensions of a professional learning community?
- 2. What are compelling forces that impacted the implementation of the professional learning community?
- 3. What are constraining forces that impacted the implementation of the professional learning community?
- 4. What factors do participants identify that will lead to sustainability of the professional learning community?

Major Findings of the Study

- The school was deeply immersed in the basic dimensions of a professional learning community with many elements leaning toward institutionalization.
- Compelling forces facilitating implementation of a professional learning community were identified as (a) leadership, (b) time, (c) small changes, (d) staff attitude, (e) on-site expertise, (f) risk-free environment, and (g) system level support.
- 3. Constraining forces hindering implementation of a professional learning community were identified as (a) time and logistical issues, (b) staff attitude,
 (c) stressors and demands, (d) professional development, (e) teacher turnover,
 (f) student population, and (g) external forces.

 Sustainability of a professional learning community model was found to be dependent on four factors: (a) leadership, (b) staff recruitment, (c) system level support, and (d) planning for leadership succession.

Discussion of Research Findings

This case study provided data on the school's level of immersion in the basic dimensions of a professional learning community, compelling and constraining forces that affected implementation, and factors that led to sustainability of the model. According to the phases of change described by Fullan (1985), the researcher found that the school was between the implementation phase, when changes are applied and put in place, and the institutionalization phase, when changes are fully integrated in the school culture, in its implementation of a professional learning community model. Based on survey results, in most dimensions, the school leaned more toward institutionalization.

As a professional learning community becomes institutionalized in the school culture, staff members participate in shared leadership, share responsibilities for student learning, use shared values to guide decisions about teaching and learning, have an undeviating focus on the improvement of student learning, work together to learn new skills and strategies and apply that learning in the classrooms, are committed to implementing new programs or strategies that enhance learning, collaboratively examine student work to improve instruction, share personal practice for the improvement of student learning by observing and providing feedback to peers, have relationships built on trust and respect, embed changes in the school culture, have sufficient time and resources to collaborate for the improvement of teaching and learning, are in close

proximity to their colleagues, have resource personnel who provide expertise and support, and have a communication system in place.

In this study, survey results along with qualitative data indicated that the middle school was deeply immersed in the basic dimensions of a professional learning community. The dimension of supportive conditions was found to be the strongest dimension evident in the school with means ranging from 3.15 to 3.85 on a scale of 1 to 4 with 4 representing strong agreement. The dimension of shared personal practice was found to be the weakest dimension evident in the school with means ranging from 3.00 to 3.31. Although survey results indicated teachers felt they were strongly involved in the school's improvement of teaching and learning, evidence of participation in the area of shared personal practice was elusive. In a school that practices shared personal practice, researchers found that peers have opportunities to observe and provide feedback as it relates to improving instructional practices, staff members share ideas for the improvement of teaching and learning, coaching and mentoring exists, and staff members examine student work to improve teaching and learning.

Discussion of Findings from Research Question 1

To what extent is the school immersed in the basic dimensions of a professional learning community?

The researcher identified the extent to which the school was immersed in the basic dimensions of a professional learning community. From the analysis of findings, the researcher found that the school was deeply immersed in the dimensions of a professional learning community: (a) shared and supportive leadership, (b) shared values and vision, (c) collective learning and application, (d) shared personal practice, (e)

supportive conditions related to relationships, and (f) supportive conditions related to structure.

Shared and Supportive Leadership

Elements of shared and supportive leadership were practiced by the faculty. An interdisciplinary team consisting of department chairpersons, the curriculum resource teacher, the technology specialist, and the principal was responsible for making most of the decisions about school issues emphasizing school improvement efforts. Although some decisions, such as those on policy and budget, were reserved for the school principal, advice from staff members was taken into consideration as the principal made decisions. Teachers had access to key information mainly through the interdisciplinary team and department structures.

The principal encouraged shared leadership and continuous learning among the staff as she built leadership capacity with the department chairpersons, the curriculum resource teacher, and the technology specialist, and focused change on improved teaching and learning. Initiated by school leaders and endorsed by the principal, innovative actions such as structuring the school on a block schedule, implementing professional learning communities, reorganizing as academic teams, and employing Learning-Focused Schools (LFS) strategies were in place.

Hipp and Huffman (2000) found leaders in high-readiness schools were proactive, innovative, and intuitive; had high expectations; built on the strengths of faculty members; and built capacity. In this study, the researcher found the school to be in a state of high-readiness as the principal built leadership capacity within the school by encouraging and allowing others to be leaders; built on the strengths of the curriculum resource teacher, the technology specialist, and the department chairpersons; searched for research-based instructional strategies to address the unique needs of the student population, maintained high expectations of all staff and students, and addressed staff composition by strongly encouraging those who were not committed to improvement to seek other employment options.

The findings of this study were consistent with the research in that principals in schools where professional learning communities are becoming institutionalized share leadership responsibilities with key personnel who exhibit leader qualities and facilitate school reform efforts among the staff; maintain a staff that is committed to school improvement goals; and adjust their level of command, power, and control as implementation progresses. In her research, Hord (1997a, 2004b) found that professional learning communities have supportive and shared leadership where the principal shares leadership, power, authority and decision-making as well as supports and encourages learning. In effective professional learning communities, the principal creates and maintains a learning community to support both teacher and student learning (Georgia Department of Education, 2004).

Although qualitative data showed a concerted effort to improve student learning, survey results indicated that only 79.4% of the certified staff agreed or strongly agreed that "stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority." This could be due to perceptions by some participants that leadership was very strong and very structured. Participants indicated there was a need for further professional learning for school leaders in the area of leadership. In addition, since collaboration was done mostly by teachers, a need to

increase involvement of other staff members in professional learning communities was suggested by the principal.

In schools identified as professional learning communities, the faculty engages in professional development focused on school goals for the improvement of teaching and learning but also participates in professional learning opportunities that are specific to the individual teacher or administrator needs in support of school goals. The Georgia Department of Education (2004) indicates in its National Staff Development Council materials that the principal should participate with other administrators in one or more professional learning communities. In schools operating as professional learning communities, administrators actively participate in professional learning communities within the school and also participate in professional learning communities with other administrators outside the school.

Shared Values and Vision

Elements of shared values and vision were practiced by the faculty as they focused on student learning. Since teachers wanted to ensure their students were prepared for the real world as independent thinkers, decisions about teaching and learning were based on analysis of data and on what was best for their students. In the participating school, school improvement initiatives were formed based on results from a Dr. Robert Marzano survey that was completed by the staff. In addition, during Design Team training conducted by the area RESA, the school team developed school improvement strategies according to identified needs after an analysis of trend data. When the staff saw the results of the team's data analysis in conjunction with their needs improvement status by the state, the entire staff developed a shared vision anchored in the improvement of student learning. All school decisions and actions were made with an enduring focus on student learning as teachers worked to improve instructional strategies. During the principal interview and the focus group discussions, participants linked all their actions back to student learning indicating a strong commitment to improved teaching and learning.

These findings were consistent with those of DuFour and Eaker (1998), Hipp and Huffman (2000), Holland (2002), Hord (1998), Huffman and Hipp (2000), Leo and Cowan (2000), and Morrissey (2000) who state that all members of a professional learning community consistently reference a shared vision with an unwavering focus on student achievement and learning. DuFour and Eaker found that a shift from ensuring that students are taught to ensuring that students learn occurs in schools as they transform into more effective professional learning communities. As further evidence of a commitment to reform efforts, the school improvement plan was heavily focused on the improvement of teaching and learning. In their research, Hord (1997b, 1998) and Hipp and Huffman (2003) discovered that a focus on student learning guides teaching and learning in a professional learning community. Furthermore, DuFour and Eaker found that the development of goals linked to the vision is a major building block in the creation of professional learning communities. In the school studied, once the shared vision was established, specific goals were developed as a result of further data analysis.

Collective Learning and Application

Elements of collective learning and application were practiced by the faculty. Collective learning was described by Morrissey (2000) as seeking new knowledge and applying the knowledge in the classroom setting. In this study, the researcher found that a commitment to school improvement efforts was evident in professional learning community meetings, also known as collaborative team meetings by the participants, as professional development was geared toward making school initiatives work and improving instructional strategies so that students learned. In support of reform efforts, the school's interdisciplinary team established consistent meeting times for professional learning communities to take place. Mondays were designated as faculty meeting days with at least one Monday reserved as "Monday Minds" when the whole faculty met for professional development opportunities devoted to the improvement of teaching and learning. In addition, Wednesdays were set aside for formal weekly academic team meetings. Besides scheduled weekly meetings for collaboration, academic teams also met informally and, on Tuesdays, met as needed with the technology specialist for technology implementation. During team meetings, there was a shared expectation among the staff that new skills would be implemented in the classroom. This expectation was also found in the school improvement plan.

In collaborative team meetings, the researcher observed staff members working together in a collegial manner to seek new knowledge in professional learning community meetings. For example, teachers were learning how to analyze student work and apply this new knowledge in the classroom setting. During the meetings, teachers listened attentively, asked focused questions, made suggestions and gave useful feedback to the teacher presenting. In the research, discussing best practices focused on improved teaching and learning was found to be an activity that supports collective learning (The Annenberg Institute for School Reform, 2004; Emihovich & Battaglia, 2000; Hord, 1997b; Morrissey). Additionally, sharing information, collaboration and application of skills and strategies were listed as critical attributes of collective learning by Hipp and Huffman (2003) and were evident in the participating school.

As faculty members collaborated, asked for assistance, and provided feedback, classroom practices were transformed, resulting in increased student learning according to teacher perceptions. Staff attributed their willingness to share on their levels of comfort, trust and respect for their colleagues. An open dialogue existed among teachers as they worked to improve instruction so that students learned. Kruse, et al. (1994) found that reflective dialogue about situations and challenges is a critical element in strong professional learning communities. As indicated by participants' perceptions, student test scores increased as a result of the move to a professional learning community and the implementation of LFS strategies. Changes resulting in student achievement gains inspired teachers to persist in their efforts for continuous improvement. Huffman and Hipp (2000), Leonard and Leonard (2005), Thompson, et al. (2004), and Visscher and Witziers (2004) found that collaboration has a positive effect on student achievement. Consistent with the findings of Zimmerman (2005) that as teachers move to a professional learning community, self-efficacy increases as well as a belief that they can make a difference, the participants demonstrated pride and confidence in their school improvement efforts.

Reflecting on implementation of new strategies was seen as an area for improvement. Due to a heavy workload of teaching all grade levels daily, academic teams needed more time to individually reflect on lesson delivery in addition to their group discussions in collaborative meetings. Reflecting on results of trying new methods

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was found to be an important link to connect professional learning to classroom practice by researchers such as DuFour and Eaker (1998), Hord (1997a), and Strahan (2003).

Shared Personal Practice

Some elements of shared personal practice were practiced by the faculty; however, results showed this dimension was the weakest with no records of peer observations available for review and little involvement in formal coaching and mentoring. Although the schedule provided time for peer observations to occur and participants were willing for peers to observe in their classrooms, there was no evidence of formal observations being conducted. Data showed that peers did provide suggestions, ideas, and feedback on lesson planning and content-related issues during collaborative team meetings as well as in informal settings. In her research, Morrissey (2000) found this dimension is usually the last one to develop since it requires a complete paradigm shift. In a collaborative setting, teachers learned new skills and knowledge, applied the new learning in the classroom, and shared results. In addition, teachers were learning to analyze student work and provide teacher commentary in order to improve instructional delivery and student achievement. The findings supported the research of DuFour and Eaker (1998), Hord (1997a, 1997b), Hipp and Huffman (2003), Morrissey (2000), and Strahan (2003) who discovered the importance of working collaboratively to develop or improve instructional strategies to enhance student achievement.

Hipp and Huffman (2003) identified critical attributes of shared personal practice which include observing and encouraging, sharing results of new practices and providing feedback. While teachers were comfortable as they asked for assistance and shared ideas, suggestions, and feedback on instructional practices and lesson plans, no record of peer observations existed. Participants seemed open to the idea of beginning formal peer observations so they could continue to improve their instructional practices. The block schedule allowed time for peer observations but with academic teams having common planning, observations of peers could occur only during instructional time.

While Peebles (2004) found team learning is vital to an organization, Wheelan and Kesselring (2005) determined several types of teams that operate in the majority of American schools including whole faculty groups, grade-level teams, vertical teams, school leadership teams, and site-based management teams. In the participating school, the interdisciplinary team, academic teams and whole faculty groups engaged in professional development opportunities focused on improved teaching and learning. Due to the high number of low-income families served, the whole faculty was involved in a book study focused on children of poverty. This action was consistent with the findings of Morrissey (2000) who discovered that in a professional learning community, schools prepare for changes in advance, predict upcoming needs of students, and learn ways of revising methods in preparation for change.

The Office of Educational Research and Improvement (2000) found that schools operating as professional learning communities had school plans and plans for other groups as well as for individuals. In the participating school, no other plans other than the school improvement plan were available for review; however, academic areas were targeted in the plan. Although group and individual plans of improvement were not available and peer observations were not evident, perceptions of the staff indicated that the school was participating in shared personal practice due to their sharing and providing feedback during collaborative team meetings.

Supportive Conditions Related to Relationships

Elements of supportive conditions related to relationships were practiced by the faculty. High levels of trust and respect were evident as faculty members interacted in a collegial manner while they collaborated, gave feedback and received feedback. In a riskfree environment, teachers asked for and willingly accepted feedback as they worked to improve teaching strategies and were willing to try new strategies. These findings were consistent with those of Hipp and Huffman (2003), Hord (1997a, 1997b, 1998), and Morrissey (2000) who discovered that members of professional learning communities exhibit collegial relationships that include a willingness to accept feedback and a willingness to work toward improvement. Trust and respect along with recognition and celebration were found to be crucial to supportive conditions by Hipp and Huffman. In addition, teachers demonstrated a unified and sustained effort to make changes part of the school culture as they participated in and conducted professional development focused on improving teaching and learning, employed new strategies in the instructional setting, shared outcomes of implementing new strategies and programs, and shifted their focus from teaching to learning. Embedding change and risk-taking were identified as critical attributes of supportive conditions in the research of Hipp and Huffman (2003).

Supportive Conditions Related to Structures

Elements of supportive conditions related to structures were evident in the school. Survey results showed that this was the strongest dimension. The school was organized by academic teams according to subject areas as opposed to the standard middle school model which includes teachers from all major academic subject areas on a team. Time for collaboration was provided through a block scheduling structure which included a daily 90-minute planning block for each academic team and a 90-minute instructional block for each academic class. Academic teams were located in close proximity to each other and encouraged informal collaboration. These findings supported those of Hord (1997a) that physical, or structural, factors such as time to collaborate, proximity of staff to each other, and schedules that reduce isolation are necessary for productive functioning of professional learning communities. Allowing time for collaboration and reducing isolation were cited in the research of Huffman and Hipp (2000) and Kruse, et al. (1994) as supportive conditions existing in school structure and seen in high-readiness schools. The findings of this study agreed with those of Huffman and Hipp who found in highreadiness schools that the principal creates conditions promoting success and supports the staff by reorganizing time for staff to build capacity.

Availability of resources, communication structures, and people capability were other physical factors identified by Hipp and Huffman (2003), Hord (1997a, 1997b, 1998), and Morrissey (2000) as being important to the success of professional learning communities. In the participating school, a communication structure was in place to make key information accessible to all staff members. Department chairpersons were responsible for taking information back to their academic team meetings and were responsible for taking information from academic team meetings to the interdisciplinary team. In addition, participants indicated they were able to go directly to the principal or other leaders, if needed. While academic teams collaborated at least weekly during their planning time, the whole faculty participated in professional development opportunities at least monthly. Teachers such as the curriculum resource teacher and the technology specialist were on site and readily available to assist in the implementation of skills learned in professional development. By having on-site expertise, school improvement efforts were facilitated. Funding for additional teachers was provided by the system to support school improvement efforts.

Discussion of Findings from Research Question 2

What are the compelling forces that impacted the implementation of the professional learning community?

Several compelling forces facilitated implementation of a professional learning community model. The researcher identified seven compelling forces based on an analysis of the data collected in the study. The forces that assisted the implementation were (a) leadership, (b) time, (c) small changes, (d) staff attitude, (e) on-site expertise, (f) risk-free environment, and (g) system level support. Leadership is a critical force in that the transformation of a school into a professional learning community cannot happen without strong leadership. In the school studied, leadership shared a focus and a commitment to school improvement efforts as the school implemented the block schedule, professional learning communities, and LFS strategies. Other school leaders employed the principal's model in their actions. At the onset of making changes for school improvement, the principal informed teachers who were not interested in working to improve teaching and learning to explore other career options. This step was consistent with the findings of Hord (1997a) who discovered that the principal's strong actions are necessary to get school improvement efforts such as a professional learning community started. Once the principal established a core group of school leaders along with the personnel committed to improvement, block scheduling and professional learning communities provided the structure for collaboration to occur and improvement to be

realized. Along with school level support, system personnel offered additional support and funding to enhance school improvement efforts. Consistent with the research, the findings confirmed those of other researchers that leadership is the key to establishing, facilitating and sustaining professional learning communities in addition to creating the conditions for success (Hipp & Huffman, 2000, 2003; Hord, 1997b, 1998; Morrissey, 2000).

Block scheduling provided consistent and adequate time for collaboration and common planning as well as the structure for the move to academic teams. Teachers formally collaborated at least weekly and informally collaborated more frequently. These findings were consistent with those of Kruse, et al. (1994) who found that almost daily opportunities to collaborate are needed to make improvements. New initiatives in the participating school were implemented in small increments. In addition, knowledgeable resource personnel who were on site to provide immediate expertise and support for new programs and initiatives facilitated improved instruction and classroom practice.

A positive mind-set, buy-in and a willingness of the staff to do what was needed to improve teaching and learning made school improvement efforts more successful. A high level of trust and respect among the staff, a willingness to receive and give feedback, and collegial relationships contributed to a risk-free environment where effective collaboration could occur. Holland (2002) found that a sense of community, trust, and collaboration are major supports for professional learning communities. People capabilities and structural conditions were identified by Hord (1997a) in her research as conditions necessary for productive functioning of professional learning communities. A willingness to work toward improvement was found to be characteristic of members of a professional learning community (Hipp & Huffman, 2003; Hord, 1997a, 1997b, 1998; Morrissey, 2000). Also, Wheelan and Kesselring (2005) found that as the faculty develops trust and becomes more cooperative and work-oriented, student achievement increases.

Discussion of Findings from Research Question 3

What are the constraining forces that impacted the implementation of the professional learning community?

Based on an analysis of the data collected in this study, the researcher found seven constraining forces that interfered with the implementation of a professional learning community model. The forces that impeded implementation were (a) time and logistical issues, (b) staff attitude, (c) stressors and demands, (d) professional development, (e) teacher turnover, (f) student population, and (g) external forces. First of all, time is a problem in that there must be consistent and adequate time built in for collaboration to occur. Insufficient time and logistical issues were identified in this study as constraining forces. At the beginning of the school reform efforts, insufficient time for adequate collaboration slowed the process of making changes for the improvement of teaching and learning. Logistical issues such as having to be in multiple meetings at the same time caused stress among the staff until consistent time was established for collaboration. Consistent with research, a lack of sufficient time to collaborate was found to be a major constraining force (DuFour & Eaker, 1998; Hord, 1998; Huffman & Hipp, 2000; Office of Educational Research and Improvement, 2000; Leonard & Leonard, 2005).

Getting the buy-in of the staff proved to be challenging as many staff members did not want to make changes to the status quo and became negative toward school improvement efforts. Staff members who were committed to school improvement efforts ignored the ones who were being negative. In addition, the principal encouraged staff members who did not have the commitment to school improvement to seek employment elsewhere. These findings confirmed that the staff itself could be both a compelling force and a constraining force to implementing change and verified the findings of Mort (2000). Although the school faculty was found to be an asset to establishing a professional learning community, Mort also discovered that the school faculty can be a barrier if they do not fully embrace the need for change. In addition, Hipp and Huffman (2000) found that obstacles to effectiveness of professional learning communities in lowreadiness schools include a lack of trust and an unwillingness to change. As new teachers lacking a commitment to school improvement efforts left the school, new hires were selected based on their willingness to work toward school goals. Additionally, when new teachers were hired, a lack of experience and training in major initiatives became apparent as they tried to implement new instructional practices and required on-site personnel to provide necessary professional development. Consistent with the findings of Johnson (2006), having insufficient content knowledge to implement new strategies is a constraining force affecting change.

A heavy workload of implementing a new state curriculum, learning and applying new instructional strategies and teaching all grade levels in addition to addressing public calls for school improvement were stressors which hindered the change process and caused some teachers to consider other employment options. The findings of this study were consistent with the research reviewed for this study in that increased workloads, pressures of accountability, and other stressors can negatively affect school improvement efforts. More specifically, Huffman and Hipp (2000) found that escalating accountability requirements, demands on school personnel, teacher burnout, and numerous stressors are issues impeding implementation of a professional learning community. Along with many benefits, Holland (2002) found that teacher burnout and staff fragility are negative aspects of professional learning communities due to the increasing workloads.

Other constraining forces found to affect school reform efforts were low student attendance, a lack of parent involvement, and teachers living outside the school community. In the literature reviewed, changes in teacher and student demographics were identified as constraining forces (Giles & Hargreaves, 2006; Hargreaves & Goodson, 2006). Additionally, varying the school's organizational structure from the accepted middle school model to an academic team model within a block structure was considered a possible constraining force as the school experienced difficulties with the accreditation agency. Giles and Hargreaves (2006) wrote in their findings that the future of reform efforts depends on resiliency to standardization. With each school having its own context, researchers discovered that there are no simple solutions for schools wanting to implement a professional learning community (Hipp & Huffman, 2003; Emihovich & Battaglia, 2000).

Discussion of Findings from Research Question 4

What factors do participants identify that will lead to sustainability of the professional learning community?

The researcher found that sustainability of a professional learning community is dependent on four factors identified as: (a) leadership, (b) staff recruitment, (c) system level support, and (d) planning for leadership succession. Although structures may be in place to facilitate reform efforts, findings in this study indicated that leadership within the school was considered important to sustaining achievements of reform efforts. More specifically, leaders who share the school's vision, are willing to share leadership, and are willing to listen to the staff were cited as important factors in the continuation of school reform efforts. Researchers found that leadership of the school is the key to establishing, facilitating, and sustaining professional learning communities (Hipp & Huffman, 2000, 2003; Hord 1997a, 1998; Morrissey, 2000). In addition to the leadership's role in sustainability, Hord (1997b) discovered that schools can only be transformed into professional learning communities with the leaders' endorsement and encouragement. Furthermore, Joyce (2004) found that although structures are useful for productive change, they are insufficient for sustaining change without leadership.

Continued, long-term system level support and funding were identified as vital to the sustainability of school improvement efforts. This was consistent with the findings of Hargreaves and Fink (2003) who describe sustainability as enduring, demanding commitment, requiring investments that are long-term, and inspiring improvements that continue to be ongoing. In addition, Hargreaves and Fink found that available or obtainable resources are crucial to the sustainability of improvements.

The researcher discovered that when recruiting for positions within the school, potential hires need to have beliefs that are common with those of the current staff in order for school improvement efforts to continue. In addition, with no plan for leadership succession, uncertainty and uneasiness about the school's new culture of improving teaching and learning existed among the staff. Teachers were worried that a change in top leadership would alter how they had become used to doing things at the school. These findings were consistent with those of Hargreaves and Fink (2000) who state that failure to sustain improvements can be traced to problems including leadership succession; staff recruitment and retention; size, district and policy context; and community support.

Although other school leaders were considered vital to sustaining school improvement efforts and leadership was distributed within the school, the impending retirement of the principal caused much concern to the staff whose roles in the future were not clear and whose efforts to establish improved instructional strategies may be obstructed by new leaders. In their research findings, Hargreaves and Fink (2003) indicated that sustainable success depends on leadership that is distributed throughout the learning community. Giles and Hargreaves (2006) discovered that schools operating as professional learning communities could offset change forces negatively affecting sustainability of improvement efforts by renewing teacher culture, distributing leadership and making plans for leadership succession. While many changes were becoming institutionalized in the participating school, not having a plan for leadership succession caused participants to worry that the vision of new leadership may not agree with that already established in the school culture and could impede their progress toward school improvement goals. While Huffman and Jacobson (2003) found that, although embedded in the culture, changes may not prove to be entirely successful over time, Giles and Hargreaves discovered that distributed leadership could make a difference in

sustainability and Emihovich and Battaglia (2000) realized that school reform efforts can be supported by a strong culture of collaboration.

Conclusions

Based on the findings for research question 1, the researcher concluded that:

- 1. A school immersed in the basic dimensions of a professional learning community can make major changes to the culture in order to improve teaching and learning.
- Within the school, structural conditions such as building in consistent time for collaboration and establishing academic teams greatly impact the effectiveness of collaboration and build community leading to successful realization of school goals of improved teaching and learning.
- 3. Principals in schools where professional learning communities are becoming institutionalized share leadership responsibilities with key personnel.

Based on the findings for research question 2, the researcher concluded that:

1. The creation and establishment of a professional learning community model is expedited when (a) structures are in place to provide adequate and consistent time for collaboration, (b) staff members with expertise in school improvement initiatives are on site to provide immediate support, (c) staff members accept the need for change and are willing to make necessary improvements, (d) the principal takes action at the beginning of the change process to assemble a staff willing to make substantial changes to instructional practices, (e) all school leaders share a focus and commitment to school improvement efforts, (f) new initiatives are implemented in small increments, (g) a small core group of people initiate changes, and (h) a risk-free environment is in place.

- 2. In addition to developing shared mission, vision, and goals, having consistent and adequate time for collaboration, having a core group of personnel committed to school goals, having on-site expertise, and having system level support are important first steps for schools establishing professional learning communities.
- As collaboration becomes more effective and as teachers share in school leadership, school goals are realized and teacher efficacy improves.

Based on the findings for research question 3, the researcher concluded that:

- The creation and establishment of a professional learning community model is hindered when (a) there is inconsistent and insufficient time for collaboration, (b) new initiatives are too numerous and are not implemented in small increments, (c) new hires are not provided professional development on new programs, (d) peer observations are not conducted, and (e) staff negativity is not addressed.
- External forces may affect the implementation of professional learning communities when the school moves to structures that are not the accepted norms.
 Based on the findings for research question 4, the researcher concluded that:
 - Although teachers may share leadership within the school, having no plan for leadership succession causes concern among a school staff about the continuation of and the progress toward school improvement efforts.
 - 2. While leadership is important to sustaining changes in school culture to support school improvement, system level support is necessary in creating, maintaining, and sustaining school improvement efforts.
 - 3. Successful school improvement efforts depend on the quality of leadership and providing necessary assistance and support to new hires.

4. Staff members committed to making positive changes in school culture want new hires, including teaching staff and administrative staff, to have common beliefs about school improvement efforts.

Implications

As school leaders search for better ways to address growing pressures and mandates of escalating accountability measures, school reform efforts continue to intensify with a greater focus on the quality of teaching and its effects on student learning. Since teachers are at the forefront and in the best position to directly affect student achievement, an environment of continuous learning and structured professional development concentrating on improved teaching and learning can be promising for those committed to school improvement. In the literature, basic dimensions of effective professional learning communities are identified and the importance of leadership in the implementation and sustainability of the model is recognized, but less is known about the actual implementation process.

In this case study, the researcher proposed to understand the implementation of a professional learning community in one middle school by examining the level of immersion in the basic dimensions of a professional learning community, identifying compelling forces that facilitate implementation, identifying constraining forces that hinder implementation, and assessing staff perceptions on factors that may lead to sustainability of the model. By conducting this study, the researcher hoped to provide administrators and other school leaders with additional information as they implement a professional learning community model.

Data collected in this study will add to available research by providing insight into the creation of and the sustainability of professional learning communities and will guide policy-makers as they develop and refine guidelines for developing a professional learning community. Educators will glean relevant, meaningful information about school improvement during both the change process and sustaining process. Participants in this study will continue to focus on the improvement of teaching and learning with a better understanding of sustainability so that their efforts become more embedded in the culture and more likely to continue throughout leadership succession. Finally, by having an expanded knowledge base of professional learning communities and their benefits, the researcher will be better able to serve her client systems as they implement school reform efforts so that student achievement increases.

The researcher suggests that the following be considered when implementing reform efforts in a school:

- Professional learning communities should be considered as a viable school reform effort that improves the quality of teaching so that student learning increases.
- 2. A core of school leaders interested in a professional learning community model should study other schools that have implemented the model and should conduct extensive observations of the schools so they can understand the structures that must be in place to support the changes and understand how staff dynamics affect the implementation.
- 3. Leadership should be willing to listen to the staff and school community, be willing to make modifications to support improvement efforts, and be willing to

make changes to the staff so that improvement efforts are facilitated. Leadership should strongly encourage personnel who are not committed to the shared vision to explore other employment options. School leaders should be aware of factors that may impede effectiveness of school improvement efforts and should act immediately and decisively to address them.

- 4. Basic structures to support a professional learning community model should be in place before moving to the model. These basic structures include ensuring that adequate time for collaboration is built into the schedule, establishing a shared focus and commitment to school improvement efforts among a core group of school leaders, assembling a staff that is willing to accept responsibility for learning and make a commitment to implement changes for the improvement of teaching and learning, developing shared values and vision among the staff, providing on-site resource personnel with expertise in major school initiatives, and gaining a long-term commitment to school improvement from system level leaders.
- 5. Any new initiatives should be gradually introduced into the culture and should be accompanied by appropriate scaffolding as school personnel implement them. Adequate professional development in new initiatives should be planned for all stages of the change process and plans for training of any newly hired personnel should be included.
- 6. All stakeholders should be committed to school improvement efforts so that both internal and external forces can be managed. This commitment should be long-

term so that improvement continues. System level leaders should recognize improvement efforts and allocate appropriate funding for their continuation.

7. Plans for leadership succession should be developed so that uncertainty about the future of the professional learning community can be minimized and that improvement efforts are not influenced by a loss of key personnel. Leadership should build capacity within the school so that the new culture continues as changes in leadership occur.

Recommendations

- Further research at all school organizational levels should be conducted to examine issues related to implementation and sustainability of a professional learning community model.
- 2. After the current principal leaves, further research in this school should be conducted to determine the effects of leadership change on sustainability of school improvement efforts.
- Additional studies devoted to collecting data on compelling and constraining forces affecting implementation and sustainability of the model should be conducted.
- 4. School leaders should be recruited as participant researchers to conduct long-term qualitative studies so that the transformation process of a school moving to a professional learning community model can be documented from the planning stages through the institutionalization phase.
- 5. Additional studies should include an in-depth examination of student achievement data to more fully understand the impact of school reform efforts on student

learning and should include data prior to implementation as well as during implementation.

Concluding Thoughts

The study affirms the researcher's belief that school improvement occurs only with the school leadership's endorsement and nurturing of a staff's collective efforts. Without support for implementation, school improvement efforts either fail to make the desired goals or do not meet their fullest potential. As more schools move to a professional learning community model to address public demands for accountability, additional data on the implementation process can provide meaningful guidance for those wanting to implement the model and promote a higher success rate. With this study, the researcher hopes to inspire others to add to available research so that other schools can more successfully implement a professional learning community model and enjoy the benefits of the model.

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APPENDICES

APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL

Georgia Southern University Office of Research Services & Sponsored Programs								
Institutional Review Board (IRB)								
Phone: 912								
Fax: 912-68	P.O. Box 8005 81-0719 Ovrsight@GeorgiaSouthern.edu Statesboro, GA 30460							
Тө:	Jana Underwood							
CC:	Dr. Barbara Mallory P.O. Box-8131							
From:	Office of Research Services and Sponsored Programs Administrative Support Office for Research Oversight Committees (IACUC/IBC/IRB)							
Date:	May 16, 2007							
Subject:	Status of Application for Approval to Utilize Human Subjects in Research							

After a review of your proposed research project numbered: <u>H07221</u>, and titled <u>"A Study of the</u> <u>Implementation of a Professional Learning Community in One Middle School in Georgia</u>", it appears that (1) the research subjects are at minimal risk, (2) appropriate safeguards are planned, and (3) the research activities involve only procedures which are allowable.

Therefore, as authorized in the Federal Policy for the Protection of Human Subjects, I am pleased to notify you that the Institutional Review Board has approved your proposed research.

This IRB approval is in effect for one year from the date of this letter. If at the end of that time, there have been no changes to the research protocol; you may request an extension of the approval period for an additional year. In the interim, please provide the IRB with any information concerning any significant adverse event, whether or not it is believed to be related to the study, within five working days of the event. In addition, if a change or modification of the approved methodology becomes necessary, you must notify the IRB Coordinator prior to initiating any such changes or modifications. At that time, an amended application for IRB approval may be submitted. Upon completion of your data collection, you are required to complete a *Research Study Termination* form to notify the IRB Coordinator, so your file may be closed.

Sincerely, Lice

N. Scott Pierce Director of Research Services and Sponsored Programs

APPENDIX B

PERMISSION TO USE SURVEY INSTRUMENT



Dear Dr. Dianne Olivier,

I am currently working on my dissertation as part of the requirements for the doctoral program in the **Department of Leadership, Technology, and Human Development** at Georgia Southern University.

The purpose of my research is to understand the implementation and sustainability of a professional learning community in a middle school. The information generated will be used in a dissertation on professional learning communities.

For this research study, I will be

- Administering a survey instrument to all certified faculty members in order to examine your school's current level of immersion in the basic dimensions of a professional learning community model;
- Interviewing the principal and taking written notes during the interview in order to determine compelling and constraining forces impacting implementation, and to identify factors which will lead to sustainability of the model;
- Facilitating, audio-taping, and taking written notes during a focus group discussion in order to determine compelling and constraining forces impacting implementation, and to identify factors which will lead to sustainability of the model;
- Observing and taking written notes during your professional learning community meetings; and,
- Reviewing school artifacts.

The data collection will be supervised by the course instructor: Name: Dr. Barbara Mallory, telephone # (912) 871-1428

For this project, I would like to use your *Professional Learning Community Assessment*. The citation for the *PLCA* is as follows:

- Olivier, D. F., Hipp, K. K., & Huffman, J. B. (2003). Professional learning community assessment. In J. B. Huffman & K. K. Hipp (Eds.).
 - Reculturing schools as professional learning communities. Lanham, MD: Scarecrow Press.

If you have any questions or concerns, my email address is and my phone number is Thank you very much for your help.

Sincerely, iderupped alall

Yana Underwood Dr. Barbara Mallory Assistant Professor, Educational Leadership

Please sign below if you agree to allow me to use the PLCA. You may return the form by mail to:

3/21/07 Ja Underwood 3/19/07 (1) ive lanne

^OSignature of Student/Researcher Date

Signature of PLCA Author

nor Date

APPENDIX C

INTERVIEW PROTOCOL

- 1. Organization of school as a Professional Learning Community:
 - a.. Describe leadership and how decisions are made in your school.
 - b. How important is leadership?
 - c. Describe the collaboration process in your school.
 - d. How important is collaboration?
 - e. Tell me about your school's professional development program.
 - f. How important is the professional development program?
 - g. What structures are in place to support school improvement efforts?
 - h. How important are these structures?

2. Why do you need a Professional Learning Community in your school?

3. What planning took place in setting up your school as a Professional Learning Community?

4. What has made it easy for your school to become a Professional Learning Community? Why?

5. What has made it difficult for your school to become a Professional Learning

Community?

- a. Were those difficulties anticipated?
- b. How did you or your school deal with those difficulties?

6. What do you anticipate happening in the next 5 years regarding your school's being a Professional Learning Community?

a. What goals do your Professional Learning Communities have for the next 5 years?

7. How might changes in leadership affect your school's Professional Learning Community?

8. How different would your school be if you didn't have a Professional Learning Community?

9. What suggestions or recommendations would you give to another school considering a Professional Learning Community model?

APPENDIX D

INFORMED CONSENT AND SURVEY INSTRUMENT



Dear Participant,

You are invited to participate in a research project conducted as part of the requirements for the doctoral program in the **Department of Leadership, Technology, and Human Development** at the Georgia Southern University. For this research study, I will be administering a survey instrument to all certified faculty members in order to examine your school's current level of immersion in the basic dimensions of a professional learning community model. The data collection will be supervised by the course instructor: Dr. Barbara Mallory - (912) 871-1428

The purpose of my research is to understand the implementation and sustainability of a professional learning community in a middle school. The information generated will be used in a dissertation on professional learning communities. All information obtained will be treated confidentially.

For this project, you are asked to voluntarily complete a *Professional Learning Communities Assessment*. You have the right to ask questions about this study or to decline to participate. By completing and returning the attached survey instrument, you are giving your informed consent to participate in this study.

You are free to withdraw your participation at any time should you become uncomfortable with it. If you have any questions or concerns, feel free to ask. Thank you very much for your help.

Sincerely, Jana Underwood

Please sign both copies, keep one copy and return one to the researcher.

Signature of Stude	ent/Researcher	Date	Signature of Par	Date	
For questions or proble Southern University, Bo ovrsight@georgiasouth	ox 8005, Statesboro, (,	, 5
Participant Demo	ographic Inform	nation:			
Gender:					
Male	Female				
Number of Years	of Teaching Exp	erience:			
0-56-	1011-15	16-20	21-25	_26-30	Over 30
Academic Area:					
ELA	Mathematics	Science	Social Stud	ies	_Connections

Professional Learning Communities Assessment

Directions:

This questionnaire assesses your perceptions about your principal, staff, and stakeholders based on the five dimensions of a professional learning community (PLC) and related attributes. There are no right or wrong responses. This questionnaire contains a number of statements about practices which occur in some schools. Read each statement and then use the scale below to select the scale point that best reflects your personal degree of agreement with the statement. Shade the appropriate oval provided to the right of each statement. Be certain to select only one response for each statement.

Key Terms:

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

Scale: 1 = Strongly Disagree (SD)

- 2 = Disagree(D)
- 3 = Agree(A)
- 4 =Strongly Agree (SA)

	STATEMENTS			SCALE				
	Shared and Supportive Leadership	SD	D	А	SA			
1.	The staff is consistently involved in discussing and making decisions about most school issues.	0	0	0	0			
2.	The principal incorporates advice from staff to make decisions.	0	0	0	0			
3.	The staff have accessibility to key information.	0	0	0	0			
4.	The principal is proactive and addresses areas where support is needed.	0	0	0	0			
5.	Opportunities are provided for staff to initiate change.	0	0	0	0			
6.	The principal shares responsibility and rewards for innovative actions.	0	0	0	0			
7.	The principal participates democratically with staff sharing power and authority.	0	0	0	0			
8.	Leadership is promoted and nurtured among staff.	0	0	0	0			
9.	Decision-making takes place through committees and communication across grade and subject areas.	0	0	0	0			

Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.	0	0	0	0	
STATEMENTS	SCALE				
Shared Values and Vision	SD	D	Α	SA	
A collaborative process exists for developing a shared sense of values among staff.	0	0	0	0	
Shared values support norms of behavior that guide decisions about teaching and learning.	0	0	0	0	
The staff share visions for school improvement that have an undeviating focus on student learning.	0	0	0	0	
Decisions are made in alignment with the school's values and vision.	0	0	0	0	
A collaborative process exists for developing a shared vision among staff.	0	0	0	0	
School goals focus on student learning beyond test scores and grades.	0	0	0	0	
Policies and programs are aligned to the school's vision.	0	0	0	0	
Stakeholders are actively involved in creating high expectations that serve to increase student achievement.	0	0	0	0	
STATEMENTS		SCALE			
Collective Learning and Application	SD	D	Α	SA	
The staff work together to seek knowledge, skills and strategies and apply this new learning to their work.	0	0	0	0	
Collegial relationships exist among staff that reflect commitment to school improvement efforts.	0	0	0	0	
The staff plan and work together to search for solutions to address diverse student needs.	0	0	0	0	
A variety of opportunities and structures exist for collective learning through open dialogue.	0	0	0	0	
The staff engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.	0	0	0	0	
Professional development focuses on teaching and learning.	0	0	0	0	
School staff and stakeholders learn together and apply new	0	0	0	0	
	accountability for student learning without evidence of imposed power and authority. STATEMENTS Shared Values and Vision A collaborative process exists for developing a shared sense of values among staff. Shared values support norms of behavior that guide decisions about teaching and learning. The staff share visions for school improvement that have an undeviating focus on student learning. Decisions are made in alignment with the school's values and vision. A collaborative process exists for developing a shared vision among staff. School goals focus on student learning beyond test scores and grades. Policies and programs are aligned to the school's vision. Stakeholders are actively involved in creating high expectations that serve to increase student achievement. STATEMENTS Collective Learning and Application The staff work together to seek knowledge, skills and strategies and apply this new learning to their work. 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26.	School staff is committed to programs that enhance learning.	0	0	0	0
	STATEMENTS	SCALE			
	Shared Personal Practice	SD	D	Α	SA
27.	Opportunities exist for staff to observe peers and offer encouragement.	0	0	0	0
28.	The staff provide feedback to peers related to instructional practices.	0	0	0	0
29.	The staff informally share ideas and suggestions for improving student learning.	0	0	0	0
30.	The staff collaboratively reviews student work to share and improve instructional practices.	0	0	0	0
31.	Opportunities exist for coaching and mentoring.	0	0	0	0
32.	Individuals and teams have the opportunity to apply learning and share the results of their practices.	0	0	0	0
	STATEMENTS	SCALE			
	Supportive Conditions - Relationships	SD	D	Α	SA
33.	Caring relationships exist among staff and students that are built on trust and respect.	0	0	0	0
34.	A culture of trust and respect exists for taking risks.	0	0	0	0
35.	Outstanding achievement is recognized and celebrated regularly in our school.	0	0	0	0
36.	School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.	0	0	0	0
	STATEMENTS	SCALE			
	Supportive Conditions - Structures	SD	D	Α	SA
37.	Time is provided to facilitate collaborative work.	0	0	0	0
38.	The school schedule promotes collective learning and shared practice.	0	0	0	0
39.	Fiscal resources are available for professional development.	0	0	0	0
40.	Appropriate technology and instructional materials are available to staff.	0	0	0	0
41.	Resource people provide expertise and support for	Ο	0	Ο	0

	continuous learning.				
42.	The school facility is clean, attractive and inviting.	0	0	0	Ο
43.	The proximity of grade level and department personnel allows for ease in collaborating with colleagues.	0	0	0	0
44.	Communication systems promote a flow of information among staff.	0	0	0	0
45.	Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.	0	0	0	0

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Source: Olivier, D. F., Hipp, K. K., & Huffman, J. B. (2003). Professional learning community assessment. In J. B. Huffman & K. K. Hipp (Eds.). *Reculturing* schools as professional learning communities. Lanham, MD: Scarecrow Press.

APPENDIX E

THEMES FROM INTERVIEW AND FOCUS GROUPS

Shared and Supportive Leadership

Principal-Selected Focus Group

- Very strong leadership.
- Interdisciplinary team.
- Rare, but, when the decisions we make are not carried through.
- [Principal] takes the suggestions [from everyone].
- Not only the school principal of the building, but also the other people.
- Like department chairs.
- Multiple committees: events, interdisciplinary.
- Faculty and the staff [have been given] the opportunity.
- [The principal] allows us to be leaders.
- We're gonna help solve the problem and [the principal] lets us do that.
- We'd like to pull other people up to that.
- Our principal has always been open to us. ..she is willing, she listens and then come back and say how can we fix this. She listens to our suggestions.
- She is a leader but it is also because she can also be a follower. That is one of her best qualities. She knows where her place is and she knows how to give everybody their task they are really good at.
- [More collaboration] makes even more leaders... everyone wants direction and we have that. Whether it comes from a peer, administration, a parent, a child, it is all over, it is multi-faceted.
- Communication has really helped us professionally.
- We model a lot of what [the principal] does.

Randomly-Selected Focus Group

- Very important.
- Very structured.
- You know where you stand here.
- I think the principal is a good leader because she kinda divvies out the work and trusts us to get it done.
- Friends to all and none at the same time.
- ...if you need something told to you, she is also your leader and will correct you on the spot. I admire that in her.
- [The principal] has been a major part of the progress here.
- We need to foster more teacher leaders. We need to get everybody involved. Principal
 - [The curriculum resource teacher and the technology specialist] are really the leaders in the school. The teachers go to them.
 - There are some things I let [the interdisciplinary team] make the final decision.
 - [Decisions I make as the principal include] budget. I would make final decisions about some things with discipline. They make some recommendations.

• [Leadership is] the number one key to running an instructional program. And I'm a strong believer that you have to have discipline. You can't teach without it because you have chaos. My number two thing is to provide a safe school where instruction, an environment where teachers can teach. Their job is to teach and my job is to provide an environment where they can teach.

Focus of Interdisciplinary Team meetings and Professional Learning Communities Principal-Selected Focus Group

- Discuss curriculum.
- Professional development.
- Standards, student needs, scores, units you are working on.
- Making sure you are covering the same standards.
- Turn out these independent thinkers.

Randomly-Selected Focus Group

- Discuss different, scheduling issues and how the different departments can work together.
- Department heads get together in the cross-curricular.

Principal

- We have our interdisciplinary team which the department chairs are all on that and they can bring concerns that come up from their collaborative meetings with their departments. And then as an interdisciplinary team, we either make a collaborative decision or I tell them I will have to make that decision and I tell them why.
- My teachers are used to shared leadership. I listen to what they say. They know I'm going to make the ultimate decision, but there are some things you can make the decision about. There are some things that I will take your opinion and I'll make the decision.

Collaboration

Principal-Selected Focus Group

- We not only collaborate with teachers in our department, we collaborate with the different departments. Then we collaborate with different schools.
- And within the different grades.
- Collaboratively works because everybody knows what everybody else is doing in their classroom.
- It is everybody still working for the betterment of the department.
- Wish that some people who are very soft-spoken, and will not speak up, will open up their mouth and say things and collaborate and give input.
- Vital to the success of our test scores-- And I think it is because everybody is on the same page.
- [Test scores] we steadily went up when we first started the collaboration.
- So having the collaboration planning is just very vital.
- We get very into the planning process.
- Once we went to academic teams, we went to collaborative plans.
- She builds "spider webs".

- Establishing a transition team for next year. For 5^{th} to 6^{th} and 8^{th} to 9^{th} .
- We had more collaboration with the high school this year than in the past.

- Discuss lesson plans and the needs of the department.
- Broken up in pairs and small groups and we each are in charge of different things and we work on it together and take it back to the whole.
- Department heads get together in the cross-curricular.
- Everybody does their lesson plans in the same format which is so the kids get a common thread throughout.
- Move in the right direction too, because we do it as a whole faculty so we can be on the same page.
- More like a training session.
- Well as far as getting us all on the same page with the same lesson plans and the same learning focus, I think it is real important. I think we probably can do more as far as cross-curricular.
- Very helpful because it gives me opportunities to be able to talk with other folks about what they're doing. And whether I decide to take that exact same avenue as my other science people take, as long as I get that same goal met, then we're okay, but it's good to have the ideas from other people.
- A first year teacher because I know, I always, where I know I can be have support to lean back on and I'm not going to be hung out to dry.
- Bring in everybody's expertise for the good of the group.
- It's overwhelming sometimes to try and plan for 3 different grades... we have to depend on collaborative planning to throw ideas around.
- I don't see how we could [teach effectively] in less time [than 90 minutes with block scheduling].
- It is very difficult to do a decent job with [planning] your lessons. The 90 minutes has been great.

- Each department planning collaboratively once a week... but they are required a minimum of 90 minutes a week.
- [The RESA consultant] came in close to about once a month and met once a month with each department.
- The high school teachers and met with our department and did some vertical alignment.... I've seen a big improvement in communication between the schools this year and I think that's going to get stronger and better.
- Our teachers go down and meet with their 5^{th} grade teachers.
- [Collaboration is] extremely important because if you don't have that, then everybody's just doing their own little thing and there is no sequence for the students, no building of skills.
- Regular ed teachers have said is that has been so helpful. Even if you don't have a special ed child, but you have a child who is having difficulty, it can be brought up at the meeting and the special ed teacher can make recommendations.

Shared Personal Practice

Principal-Selected Focus Group

• Collaboratively works because everybody knows what everybody else is doing in their classroom. If, even if there is a change, they bring that back. That is shared with the group.

Randomly-Selected Focus Group

- We are pretty open as far as...you don't go in your room and close the doors and not want somebody else to come in and see what you're doing. I don't mind people coming in or discussing it in a department meeting.
- We feel comfortable saying, this what I did and if someone says, are you sure that's the right way, you kinda talk about it and see maybe where you can change it.
- We are very comfortable when we get observed.

Principal

Need for Professional Learning Community

Principal-Selected Focus Group

- Communication.
- Is vital.
- To ensure the success of our students.
- To analyze our data, to make informed decisions for our instruction.
- The way we schedule just [lent] itself [to allow us to become a professional learning community].
- Time was in place.

Randomly-Selected Focus Group

- A more efficient way of staying on track and meeting your goals.
- Collaboration.
- We were a needs improvement school too. so we needed to do whatever we could to bring up the quality of teaching.
- Interpreting...I know with math GPS. it helps for all of us to sit down and say here's what the standard says.

- I guess [planning] goes back to when RESA first offered the Design Teams and we went to that training and since then we have continued... we have made the scope wider to include all content areas, not just the reading and the math which was the original focus of the Design Teams. And we have now what we call the interdisciplinary team that has replaced the design team which has a department chair from each department and we looked at our CRCT scores for every department not just reading and math and base changes based on that data.
- And we went [to the block scheduling meeting] about doing the math team and came back and we originally started with our math team and set that up across all 3 grades, 6 through 8.
- When I came back here in 2000, this school was on the failing schools list. And in one year we got off the failing schools list. When I came in, I said we can't use

that children are on poverty. We can't use that they don't have anybody at home. There are no excuses. We're on the failing schools list and we've got to do whatever it takes to get off of it.

Compelling Forces

Principal-Selected Focus Group

- The way we schedule just lent itself [to allow us to become a professional learning community].
- Time was in place.
- Block scheduling and common planning.
- The staff. The mindset of the staff.
- The knowledge of our staff resources.

Randomly-Selected Focus Group

- I remember attending a conference on block scheduling ...presented a plan that had just a math team and that is where we started. Then that was successful for math so the teams went to departments so that put us in the department communities.
- Leadership.
- Dedication of leadership towards the goals and they don't let go.
- Open-minded faculty maybe. It just seems like most people are pretty open to the idea of working together at this school.

Principal

• I think the willingness of my teachers because I can honestly say my teachers are here to do what's in the best interests of their students... And they are willing to go do whatever it takes.

Constraining Forces

- Buy in from everyone.
- Logistical things from the school.
- Things you have no real control over.
- We tried to minimize those things as much as possible and discuss them repeatedly in the interdisciplinary team to try what new has become a hindrance. Let's try to get that out. It is a continual dialogue.
- Don't think everything is broken because of this one thing, let's try to figure out how to fix it.
- Negativity.
- I don't think there's anything you can do about that [negativity].
- Time is a barrier.
- Students may be a barrier. (Population)
- Parental involvement is a barrier. [when the parents don't want to come to the school].
- It is the population of parents. A lot do not have the education to participate in a dialogue about school improvement plan...

- We have purchased the books *Framework for Poverty* and are planning to do a book study next year.
- We focus on the things we can change.
- It is hard to maintain excitement that you have when you first start.

- We have 3 preps which does help the committee because we are all working on the same thing, but it gives us that much more, worried about the prep rather than the quality of the lesson. So that's made it more difficult, but again it has added to our sense of community.
- Teacher turnover in years past has been.
- That some of the teacher leaders could do a better job at valuing other teachers' input
- People don't speak out because they have been shot down too many times in the past. Some leaders are strong.
- I am talking about school, teacher leaders.
- [One thing] is living [in other communities besides this one] I mean, there's not a whole lot of people that actually live here.
- I am amazed at the number of people who teach here who grew up here and went to school here.
- I don't think the overwhelming workload of 3 different preps was anticipated.
- And the workload of learning focused was anticipated.
- I keep thinking that next year it will be a lot easier.
- It's not a surprise, but it is overwhelming.
- Everything looks so great on paper and there's a lot more work sometimes. They question why would you even complain about having 3 grade levels because these are all the advantages, and sometimes the disadvantages are about 50-50.
- This is my 13th year teaching and, but my first year at the middle school, and learning more content in greater detail that I've had to teach before has been a challenge for me, and learning focused has been difficult.
- But you just don't know until you're actually into it.
- [In dealing with difficulties...] Divide and conquer.
- It's like this giant braid that we spend so much time trying to organize that that we don't really spend as a group much time actually doing what we're going to teach. I keep thinking next year, it's going to be better because we will know the various parts of it. Thus I feel like so much more of my time has gone into GPS, and to learning focused and framework than has actually gone into preparing for the lesson.
- Always not enough time.

Principal

• At the beginning when we started going to this, we had some who did not want to make the change. They wanted things to stay as it was. And I flat out told them we do not use any excuses. [In addressing those who did not want to change,] I said this is the way it's going to be and if you can't do this, you need to go somewhere else. Don't sign your contract for the following year.

- One thing I don't think we have as much [collaboration with other groups] as we should. That's a barrier. It is basically just the teachers doing this.
- [The way our schedule and teams are structured] almost cost us being certified by SACS five years ago. We were not a typical middle school set up on. We are set up on academic teams. And because of that they didn't want to do that. But then their comment to me was they couldn't argue with my scores.
- When I came in, I said we gotta at least have 55 minutes [of instructional time]. So that was the first thing we did was do that. I changed it to 55 minutes and I said we really need more than that. Then of course we went to block scheduling.

Shared Values and Vision

Principal-Selected Focus Group

- Share the same values that we focus on the children.
- And that 'want' [wanting to work together on units in the summer] goes back to that same vision and wanting the same thing.
- If you sit down and put all the good over here and all the bad over here, and really think about what is best for our students, the way we do it is really the best for our students. Even though it may be a little bit more work on all of us up front.
- Increase student achievement.
- Our focus was the success of our students in the real world.

Randomly-Selected Focus Group Principal

Supportive Conditions - Relationships and Trust

Principal-Selected Focus Group

• We value each other individually.

Randomly-Selected Focus Group

- We are pretty open as far as...you don't go in your room and close the doors and not want somebody else to come in and see what you're doing. I don't mind people coming in or discussing it in a department meeting.
- We feel comfortable saying, this what I did and if someone says, are you sure that's the right way, you kinda talk about it and see maybe where you can change it.
- We are very comfortable when we get observed.
- I think the principal is a good leader because she kinda divvies out the work and trusts us to get it done.

Principal

Supportive Conditions – Structure

- Our scheduling, the way we are set up for planning, that is the most beneficial.
- Schedule.
- Resources have always been there.
- All the different committees.

- We mean they give us the people we need, the money we need, and the time we need.
- Without them, we would not succeed.

- Well we are a needs improvement school, so the whole focus is on improving academics, improving cooperation, improving parent cooperation. It seems like everything we do is directed toward one of those areas
- EBIS (the school behavior plan)
- Based on a reward system catching them doing right and enforcing that as opposed to catching them doing wrong and punishing them.
- We have our acceleration classes to help our kids like previewing math skills or reading or SRA- those kinds of programs. The acceleration's helped a lot with our students who are lower in math.
- Study skills classes.
- It's overwhelming sometimes to try and plan for 3 different grades... we have to depend on collaborative planning to throw ideas around.

Principal

- We have scheduling in place for it. We have support from the central office which is very important.
- We do [acceleration] during connections. They are pulled 45 minutes for acceleration. Some of them are pulled for two. We also do SRA which is paid for locally.
- We do [study skills classes]...for our special ed students, during their connections class.
- [Transition teams] are where the math teachers from the high school come down and meet with our math department.... The same thing with the elementary and us.
- [These structures are] very important because if we didn't have these structures we wouldn't be able to provide the programs and the strategies that we provide now that our students really need. I would say acceleration for our at-risk children is the number one thing.
- If we didn't have the support of the central office, we couldn't do what we do.

Professional Development

- We decide on elements that we feel we need more professional development.
- Monday minds.
- Sometimes it is our certified staff members presenting what they learned at conferences. Other times, we have other people come in to share like RESA.
- weekly collaborative planning days, like on Wednesdays, we would have people come in and present to each department a piece of collaborative planning
- Tech Tuesdays.
- Focus on professional development is Learning-Focused Schools model as well as analyzing student work, teacher commentary, and implementing standards-based classrooms.

- Last year, basically, we discovered there were lots of new staff members who had not had that original training.
- We make sure we fill the gaps [for new teachers].
- It is all tied back to our needs.
- Absolutely important.
- It enables us to grow in areas we feel the need to grow.
- It is actually internal and external.
- It is what we need to achieve the goals we set for ourselves.
- When we write a school improvement plan, there's always a professional development piece to address the goals and actions that we want to accomplish.

- Faculty meetings where we talk about, like learning focused.
- [Faculty meeting is] a learning presentation.
- I student taught here and I started the [Learning-Focused] training when I was student teaching and I finished it when I was hired on.
- They do the [Learning-Focused] training every fall.
- We train from within [on Learning-Focused strategies].
- It's real important from the standpoint that the whole school is on the same page with learning-focused.
- Our faculty meetings usually always have some kind of learning focused review to try to review for those of us that took it a long time ago.
- We could use some professional development in the area of teacher leadership because we got all these different people, a very diverse population, who come from different backgrounds and beliefs, and sometimes people (teachers) are not willing to change.

Principal

- Monday Minds.
- Tech Tuesdays.
- We take feedback from teachers on where they think they need help.
- We do a lot with the data and we set benchmarks. We don't just give lip service to it. My teachers, they really do it. That is the reason for improving our scores.
- [Professional development is] very important because if you are going to improve your instruction, you have to look at where you're at, what you're needs are and then plan for staff development according to that information.
- [In providing training to new teachers, we] provide staff development. [The curriculum resource teacher] will provide the 4 day training at the beginning of the school year... we'll have support for them as we phase them in.
- And our teachers do a good job too of sharing with each department what they (students) are studying.

Turnover of Staff

Principal-Selected Focus Group

• We don't have a big turnover.

Randomly-Selected Focus Group

- Teacher turnover in years past has been.
- There's a couple of years we had quite a turnover. I don't think this year there's much of a turnover. That can be a problem.

Principal

• Well when I came in 2000, there were 14 vacancies. The whole 7th grade. I had nobody returning in the 7th grade at all. I didn't have enough teachers to have buddy teachers for everybody that first year.

School Improvement Plans

Principal-Selected Focus Group

- Probably the area in which our school could improve the most because I don't' think we involve the entire faculty enough in the school improvement process.
- When we write a school improvement plan, there's always a professional development piece to address the goals and actions that we want to accomplish.
- And that might go back to the leadership aspect of it because they're not thinking that this is their time to step up and become an essential part of the document.
- But they know the components that make it up. It wouldn't be strange to them.

Randomly-Selected Focus Group Principal

In five years

Principal-Selected Focus Group

- It will become even ... simpler, especially [with] ...transition teams.
- I think it will be instilled in them
- Transition teams will create a more seamless curriculum.
- I think you will see more excitement.
- More collaboration with the high school.
- Working more with the high school and the other middle school.
- Looking at how the demographics might change.
- Not get complacent.

Randomly-Selected Focus Group

- Our principal retiring.... Leadership changes.
- I think as time goes on, we'll embrace [GPS] more naturally.
- And five years from now it all ought to be more smoothly.
- We will have K-12 all on GPS.

Principal

• I see that it is going to continue and I think it will probably improve. Somewhere along the way we're going to find something that will get our parents and community more involved. Oh our community is involved.

Changes in Leadership and Leadership Succession

- Depends on how strongly the leadership is.
- It would be very, very frightening.

- We would need someone with our vision.
- We would not need a principal with a vision of their own.
- We would need input.
- I think the staff would want to be part of the interviewing

- Luckily we have some safety measures. We have a curriculum resource teacher and our tech specialist. They are really strong in the curriculum in the school and in leadership roles. I guess that kind of stuff.
- If we lost the top 4 people, it would be a disaster unless the other people came in with the same belief in the program. Principal, assistant principal, curriculum specialist, [and technology specialist].

• We need to foster more teacher leaders. We need to get everybody involved. Principal

- We don't discuss that.
- I tried to say to [one of the school leaders] you gotta do something. I can't go on forever. You gotta do something. I will try to convince her... I would hope that... the board would have a panel from here to interview if we were to...
- [One of the goals] I would think [would be] looking at where we're at and analyzing where we need to be and coming up with strategies to do that.
- My teachers are used to shared leadership. I listen to what they say. They know I'm going to make the ultimate decision, but there are some things you can make the decision about. There are some things that I will take your opinion and I'll make the decision... So if someone comes in and doesn't have that type of leadership, that it is going to be the way I say it or whatever, then in think... the learning communities would not be as strong as they are now. Morale would go down and I would see maybe some teachers leaving.

If did not have a professional learning community

Principal-Selected Focus Group

- A nightmare.
- We would still have 35% of our 8^{th} graders in math passing.
- Everybody would be teaching in their own little world.
- It would be chaos.
- I could not imagine without having collaborative planning.
- I think it would hinder our students.
- The professional learning community is essential.
- Randomly-Selected Focus Group
 - Every man for himself.
 - Scattered, disorganized.
 - Every individual's interpretation of what the GPS is supposed to be ... there's no continuity of the teaching or the method or the requirements or the standards the children have to adhere to.
 - You don't get that cohesion and morale with the faculty.

- I think we would go back to everybody living in their own world and dealing with their area of the curriculum and there would be no cross-grade cross curriculum communication.
- I don't think [our test scores] would have improved. I give professional learning communities and learning focused credit...

Suggestions and recommendations

Principal-Selected Focus Group

- It has to be mandatory for it to get off the ground.
- Take the good with the bad.
- Find the time to schedule it in and make it a consistent time.
- Resistance is futile.
- Have a focus and others' input so it is not directed by one person.
- [Any school that] makes it looks pretty [on paper] is really shooting themselves in the foot because they can have such a positive piece to their school.

Randomly-Selected Focus Group

- Pick your top people and get it all squared away before you present it to them.
- Train the leaders.
- Small pieces at a time.
- [Do] not expect them to be able to handle everything at once.
- Observing other schools. That would be something to a new school—seeing other people use it.

- I think the key is leadership. Leadership has got to be supportive of it... You have to have someone who is open to change and will listen to the teachers. You've just got to able to change. If you don't, you're going to get stagnant and nothing is going to improve.
- [Starting with small pieces] would be a recommendation... there is so much to learn.

APPENDIX F

LITERATURE REVIEW CHARTS

Review of Literature Topic Areas and Literature Resources

Studies Related to Leadership in Professional Learning Communities

Study	Purpose	Participants	Design/ Analysis	Outcomes
Emihovich & Battaglia (2000)	 Examined role of leadership in the change process Effects of collaboration Aspects of leadership that promotes success 	6 school leaders (4 women and 2 men: Elementary – 1 principal, 1 teacher Middle – 1 principal High – 2 teachers District – 1 staff developer) and previous leaders with whom researchers previously worked	Qualitative - interviews	 Forming strong collaborative cultures could provide the "scaffold to support reform" (p. 235) Most difficult hurdle: while not done smoothly, collaboration cannot be mandated Common thread - "not the job they signed up for" (p. 234) Leaders need to be participants in the learning to show support for collaborative learning Teachers "want and expect school leaders to do more that merely support their efforts in reconceptualizing practice" (p. 232)
Hipp & Huffman (2000)	To determine the effect of "shared and supportive leadership and shared vision and values" on "creating readiness for a professional learning community" (p. 4)	19 schools in 9 states – principals and teachers	Qualitative - interviews	 Findings: Shared leadership Interactive themes – "capacity building, creating conditions for participation, and empowered decision-making" (p. 13) Significant variance between high readiness and low readiness schools Shared vision Interactive themes – "purposeful visioning, embedded values,

Huffman & Hipp (2000)	 5 year national study Examine preliminary results of "study of creating communities of continuous inquiry and improvement" (p. 3) Report findings Analyze "importance of emerging characteristics of high-readiness and low-readiness schools" (p. 3) 	Year 1 • 25 "co- developers" • 20 schools Year 2 • 30 "co- developers" Year 3 • 20 principals • 20 teachers	Qualitative - interviews	 systematic structures, and monitoring processes" (p. 18) Emerging and focusing on student learning In low readiness schools – obstacles include lack of trust and unwillingness to change Empowered decision-making Interactive themes – "deep and focused governance structures, systematic processes, and embedded decision-making (p.24) Significantly varied in high and low-readiness schools In high-readiness schools, teachers worked collaboratively to improve student learning while principals monitored the collaborative processes and created "pathways for success" (p. 25) In high-readiness achools, structures were built for decision-making and decisions were based on school goals Both high-readiness and low-readiness schools, the principals were committed to student learning but low-readiness schools focused on improving test scores as opposed to developing a shared vision Role of principal is the key-facilitates teaching and learning "Decisions in high-readiness schools were most often tied to school goals" (p. 27) Looked for evidence of dimensions of a professional learning community High-readiness schools: Shared leadership – principals were proactive, supportive, intuitive, encouraging; teachers were constantly seeking information and sharing expertise, involved in meaningful change and taking responsibility Shared vision – staff able to express desired future, focused on student learning and knowledge application; teachers initiated change, took responsibility Supportive school culture – vision is nurtured, time available for expanding capacity, teachers and contributions were valued Low-readiness schools Shared leadership - viewed as suspicious, principals were reactive,
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	Discuss significance of "interaction of shared and supportive leadership, shared vision and values, and the supportive conditions necessary to develop" professional learning communities (p. 3)			 directive Shared vision – staff had limited buy-in, believed they had little input, nonexistent power, and inconsistent and unreliable involvement Supportive school culture – few people were involved with decision-making; principals were reactive, punitive, passive; principal was perceived by staff as uncaring "Shared leadership, shared vision, and supportive condition are interrelated and critical to the success of any learning community (p. 14)
Mort (2000)	Examine 1) mental models of principals 2) how mental models influence organization and support, and 3) barriers to implementing professional learning communities	Elementary, middle, and high school principals who were members of a five-district education collaborative	Qualitative - interviews	 "principals have a narrow view of what a learning community is" (p. 108); little attention was given to embedding the model into the culture; knew the focus was learning; few felt culture should include "inquiry, collegiality, and continuous learning"; believed parental and community was primary above student learning (p. 108) Staff development was traditional type with slight evidence of effectiveness "The faculty was perceived as both the greatest asset and greatest barrier to establishing a learning community (p. 109) Other barriers identified included: assess to resources (funding and time), for staff development a lack of time, money, goals was found. Teachers did not understand the need to change from what they were used to doing Reform efforts initiated by the state were identified as both a help and a hindrance Teachers perceived a disconnect in higher education courses and what was needed to improve learning at the school level. Communication on direction or expectations was lacking
Youngs and King (2002)	Examined how leadership addressed organizational capacity	4 urban elementary schools	Qualitative	 Effective principals are able to "sustain high levels of capacity by establishing trust, creating structures that promote teacher learning, and either (a) connecting their faculties to external expertise or (b) helping teachers generate reforms internally" (p. 665) Incoming principals should be knowledgeable about the shared

Huffman &	Identify and analyze core	83 educators	Quantitative –	 values and norms before "initiating new practices in curriculum, instruction or school organization" (p. 643) Professional development for principals can assist in the understanding of school capacity and the effects of professional development on school capacity Schools reflected all five of the core processes of a professional
Jacobson (2003)	 Identify and analyze core processes of professional learning communities and their perceived relationship to school effectiveness Determine the perceived relationship between the core processes and the leadership style of the principal 	(convenience sample)	questionnaire	 Schools reflected all five of the core processes of a processional learning community "at least some of the time" (p. 247) Greatest number of participants believed their school provided a safe environment and was a "democratic organization guided by positive principles, ethics, and values" (p. 248) Participants believe some characteristics make a positive impact on schools Leaders exhibiting "characteristics of a collaborative leadership or transformational style have greater opportunities for success in developing a professional learning community" (p. 248) Team is fundamental learning unit Model may not be sustainable over time.
Zimmerman (2005)	To document the experiences of principals during the change process	One junior high principal	Qualitative – case study – observations, interviews	 Each cluster has its own identity or culture focusing on instructional strategies and student learning School has moved to a collaborative school structure with increased teacher efficacy Transformation in the organization of the school and in the principal's leadership style Isolated teachers do view themselves as a learning community
Fink & Brayman (2006)	Drawing on the "Change Over Time?" study— Purpose was to study how rapid and/or repeated transitions of leadership affect school culture and staff commitment and school capacity to "achieve and sustain lasting improvement" (p. 67).	5 year study Purposive sample of 8 secondary schools in different communities (Ontario and New York) with varying structures and cultures	Qualitative – interviews, observations, and archival data	 Accelerating turnover rates of principals creates problems and challenges, as well as upset Sustainability is affected by turnover of principals is due to "aging of the baby boom generation, principals" mobility, and the pressures of the standardization agenda have created" (p. 83) "revolving door" principalship…subverts long-term, sustainable improvement" (p. 84) Other causes of turnover: rotation, mobility, retirements, unpopularity, difficulty to retain Succession plans can help sustain improvement Leadership succession plans should be mandatory "great changes in leaders and leadership" were noted over time

		Teachers and principals			(p. 86)
Giles & Hargreaves (2006)	Explored perceptions of teachers and of change over time Examining the sustainability of 3 innovative schools attrition of change , pressure and envy of other schools, and pressure of standardization	Focused on 3 of 8 innovative schools in a 5 year study Original study- Purposive sample of 8 secondary schools in different communities (Ontario and New York) with varying structures and cultures Teachers and principals	Qualitative – interviews, observations, and archival data	•	3 factors affecting sustainability of innovative schools: not perceived to be 'real schools', possessing a predictable life span, and "critical incidents or changes in the external context" (p. 125) 3 common forces of external forces: "envy and anxiety among competing institutions," life cycle or the organization, standardization (p. 127) One school experienced attrition of change due to aging staff, losing leaders, lack of resources, community mistrust , change in focus of the district One school resisted attrition of change because they anticipated and solved problems prior to them emerging – early involvement of the community, "planning ahead for two sets of leadership succession in 8 years, and by building process teams and multiple professional communities of learning and support" (p. 151) One school lost its identity but was able to withstand standardization for longer due to more stable leadership
Hargreaves & Goodson (2006)	Examined teachers' and administrators' perceptions and experiences of educational change Retrospective look at how change forces affected sustainability Participants worked in the schools over a 30 year period	5 year study Purposive sample of 8 secondary schools in different communities (Ontario and New York) with varying structures and cultures Teachers and	Qualitative – interviews, observations, and archival data	•	 5 change forces: policy reform, leadership change and succession, shifting student demographics, teacher generations, and school interrelations (p. 13) Teachers accepted or resisted reform based on generational missions "Leadership succession has been magnified by the accelerating pace and frequency of successions themselves" (p. 20) "white flight", more multicultural demographics Usually influenced by one dominating teacher generation At the expense of others Sustainability is "unlikely to occur without a theory and a strategy that is more historically and politically informed) (p. 35). "Changes in leaders and leadership that most directly and dramatically provoke change in individual schools" (p. 18).

principals	• Leadership needs to focus on
	• Deep learning
	 Plan for leadership succession
	• Deal with the strengths of "teacher generational
	missions" (p. 35)
	• "Make teaching and learning more vivid and real" for
	students of all cultures (p. 35)
	 Not over-investing in other initiatives at others' expense
	 Becoming a more activist professional learning
	community
	 "retaining standards but refraining from standardization"
	(p.35)
	 Respecting the value of history and experience
	• 3 types of knowledge needed during succession
	 Inbound – what is needed to make changes
	 Insider – what is gained once trusted and accepted
	 Outbound – what is needed to preserve the past but keep
	improving and leaving a legacy
	Dominant demographic groups define missions
	• Sustainability-more than maintaining over time-plan for the future

Study	Purpose	Participants	Design/ Analysis	Outcomes
Hord (1998)	To provide additional knowledge of how a school becomes a professional learning community	30 members of one school, current principal, and previous principal 3 parents, 1 central office person, and 1 university professor	Qualitative – case study - interviews	 Teacher aspirations, student needs, and school goals are realized Purpose must ultimately have student benefits Internal and external forces provide support and guidance Factors that allow for student growth and learning are the same ones that allow for teacher growth and development Democratic participation is the climate that allows goals to be reached Care and concern for students and each other are evident among all staff members Organizational learning provides focus for professional learning communities Administrators must allow time and structures for learning to occur Sharing classroom practices and feedback contributes to teacher learning and development "Supportive and shared leadership develops as the school's formal administrative leader" (p. 4) Sharing information is key to the development of a professional learning community Must be a purpose that will benefit students Support comes from external and internal forces Administration must provide structures for support "An undeviating focus on students, their needs and care, is the compelling motivator of the learning community of professionals" (p. 8)

Studies Related to Characteristics of Professional Learning Communities and Readiness Levels

Hipp & Huffman (2000)	To determine the effect of "shared and supportive leadership and shared vision and values" on "creating readiness for a professional learning community" (p. 4)	19 schools in 9 states – principals and teachers	Qualitative - interviews	 Findings: Shared leadership Interactive themes – "capacity building, creating conditions for participation, and empowered decision-making" (p. 13) Significant variance between high readiness and low readiness schools Shared vision Interactive themes – "purposeful visioning, embedded values, systematic structures, and monitoring processes" (p. 18) Emerging and focusing on student learning In low readiness schools – obstacles include lack of trust and unwillingness to change Empowered decision-making Interactive themes – "deep and focused governance structures, systematic processes, and embedded decision-making (p.24) Significantly varied in high and low-readiness schools In high-readiness schools, teachers worked collaboratively to improve student learning while principals monitored the collaborative processes and created "pathways for success" (p. 25) In high-readiness achools, structures were built for decision-making and decisions were based on school goals Both high-readiness and low-readiness schools focused on improving test scores as opposed to developing a shared vision Role of principal is the key-facilitates teaching and learning "Decisions in high-readiness schools were most often tied to school goals" (p. 27)
Hipp (2000)	 5 year national study Examine preliminary results of "study of creating communities of continuous inquiry and improvement" (p. 3) 	 25 "co- developers" 20 schools Year 2 30 "co- 	Qualitative - interviews	 High-readiness schools: Shared leadership – principals were proactive, supportive, intuitive, encouraging; teachers were constantly seeking information and sharing expertise, involved in meaningful change and taking responsibility Shared vision – staff able to express desired future, focused on

Office of	 Report findings Analyze "importance of emerging characteristics of high-readiness and low-readiness schools" (p. 3) Discuss significance of "interaction of shared and supportive leadership, shared vision and values, and the supportive conditions necessary to develop" professional learning communities (p. 3) 	developers" Year 3 • 20 principals • 20 teachers	Qualitating	 student learning and knowledge application; teachers initiated change, took responsibility Supportive school culture – vision is nurtured, time available for expanding capacity, teachers and contributions were valued Low-readiness schools Shared leadership - viewed as suspicious, principals were reactive, directive Shared vision – staff had limited buy-in, believed they had little input, nonexistent power, and inconsistent and unreliable involvement Supportive school culture – few people were involved with decision-making; principals were reactive, punitive, passive; principal was perceived by staff as uncaring "Shared leadership, shared vision, and supportive condition are interrelated and critical to the success of any learning community (p. 14) Lessons learned:
Office of Educational Research and Improvement (2000) (book)	 To determine: Available teacher opportunities How teachers in these school learn Professional development program structure Supporting human and financial resources Roles of principal, teachers, and districts In what context continuous improvement occurs 	8 schools award winning schools – received department awards for professional development programs 30 in-depth teacher interviews 64 brief teacher interviews 10 principal interviews	Qualitative – interviews 30 in-depth teacher interviews 64 brief teacher interviews 10 principal interviews	 Agreed upon student achievement goals are used as a focus for teacher learning Provide expanded selection of professional development opportunities Culture is embedded with ongoing, informal learning Cultural norms include high collaboration to solve problems and learn from peers Time must be provided to allow teacher learning to occur A wide range of student performance and achievement data must be constantly examined
Trimble & Peterson (2000)	To "investigate the relationship between a multiple team structure and student achievement in a high	59 certified personnel participating in 5 types of teams	Quantitative – questionnaires, school documents,	 Executive team modeled effective team work and influenced performance of other teams Stories written "revealed a positive attitude, a willingness to take risks, and pride and ownership" (p. 5)

	minority, low SES middle		state report	• Students were aware that the top priority was learning
	school" (p. 2)		card data	 High responses to whether innovative teaching was occurring in the classroom
			Qualitative –	• Observations showed objectives posted, content filled the board,
			interviews,	the purpose of the lesson was stressed repeatedly
			stories,	 Lesson plans, logs, and action plans indicated new skills were
			observations,	being implemented in the classroom
				• Substantial increases in test scores were noted for students in the lower quartile
				• Trend data showed achievement gains in reading comprehension, and mathematics
				• Increases in reading vocabulary, language arts, social studies, and
				science were noted in a one year period
				• Sustained improvement followed the gains
				"The results provide compelling evidence that a systemic alignment of
				district and administrative directives coupled with multiple teams at
				the school site and with teacher integration and learning in study teams
				result in changed classroom practice and increased student
TT 11 1		0 11 1 1		performance" (p. 7)
Holland	To "identify schools that were	8 small schools	Quantitative –	Highlighted importance of:
(2002)	made small by choice and		school	Professional community
	were using size as a whole-		demographics	Collegial trust
	school method to create,		Orralitations	Collaborative work
	develop, and/or improve the		Qualitative – 76 interviews,	
	teaching and learning		36 focus	Teachers
	environment" (p. 316)		groups, 137	 Collaborated to engage students by reinventing and revitalizing practices
			observations	• Understood and supported the mission, vision, and goals
			Grounded	• Had a shared commitment for student welfare, academic success
			theory	 Discussed curriculum, instructional practices, and policies daily
			approach	 Believed parents are partners
				 Had collective responsibility for student achievement
				 Shared ideas and provided feedback and constructive criticism on
				lesson plans, teaching practices, and student issues
				 Shared leadership
				- Sharea leadership

				 Concerns Teacher burnout Staff fragility and lack of buy-in Lack of skills for group decision making For school-within-a-school structures Benefits
				 Higher attendance rates
				Lower dropout rates
				Increase math and reading scores
				Safer environments
				Students are involved in learning process
Hipp &	5 year study (1995-2000) to	30 participants as	Quantitative:	Identified 6 schools exhibiting many of the characteristics of a
Huffman (2003)	find professional learning communities exhibiting the 5	co-developers	Survey Qualitative:	professional learning community as defined by Hord
(2003)	identified dimensions reflecting the essence of a	20 Schools - after phase 3	Interviews	Reported exemplars and non-exemplars
	professional learning community	only 12 remained		"Because each school is unique no absolute recipe for change" (p. 9)
				Success depends on how well the changes can be sustained and embedded in the culture
				Critical link between collective learning and personal practice
				Supportive conditions encompassed and impacted all dimensions
				"Institutionalization across the five [professional learning community] dimensions is essential for schools to engage in sustained improvement and for continuous learning to occur" (p. 5)
				Must have trust and respect along with structures to establish a professional learning community
				"preparation of school administrators is key" (p. 9) Leadership preparation programs must include:
				 Establishing processes for collaborative decision-making Developing a shared vision
				 Aligning diverse groups

Huffman & Jacobson (2003) Strahan (2003)	 Identify and analyze core processes of professional learning communities and their perceived relationship to school effectiveness Determine the perceived relationship between the core processes and the leadership style of the principal Examined "dynamics of school culture in 3 elementary schools" in "improving low-income and minority student achievement" (p. 127) 	83 educators (convenience sample) 3 elementary schools	Quantitative – questionnaire Qualitative: Case Studies	 Supporting interdependency of organization members Opportunities for sharing learning Schools reflected all five of the core processes of a professional learning community "at least some of the time" (p. 247) Greatest number of participants believed their school provided a safe environment and was a "democratic organization guided by positive principles, ethics, and values" (p. 248) Participants believe some characteristics make a positive impact on schools Leaders exhibiting "characteristics of a collaborative leadership or transformational style have greater opportunities for success in developing a professional learning community" (p. 248) Team is fundamental learning unit Model may not be sustainable over time. Successful reform: Agenda to address student needs Targeted areas to improve instruction, instructional strategies, student achievement Grade level meetings used for identification of needs, developing improvement strategies, linking staff development to practice Commitment to improving "quality of life" (p. 143) Reform spiral included examining data and dialogue
Peebles (2004)	 To "evaluate the perceptions of the PDS program operated by Peach State University held by teachers and administrators in the five participating high schools" (p. 74) toward: Training of pre-service teachers Professional growth of in- service teachers Research and inquiry Student achievement 	5 high schools: 402 teachers and 5 principals Surveys to all teachers, building coordinators, and principals at each school (excluding teachers new to the school)	Quantitative - surveys Qualitative - interviews	 "Thirty percent of respondents ranked developing collaborative learning communities as the number one benefit of the PDS" (p. 48) 71% agreed their school and PSU "shared a common goal of high expectations for students" (P. 92) 100% of those interviewed (19) "responded that PDS had no measurable impact on student achievement" (p. 111) "Teachers who were involved with apprentices and/or lab students were positive in their perceptions of the PDS and their own professional development." (p. 129) Teachers "who did not mentor apprentices or lab students did not realize any benefits from the PDS" (p. 129)

	The study also looked at advantages and disadvantages of being associated with PSU and PDS	Interviews with principal, building coordinator, 1 master teacher, 1 non-master teacher at each school		 "Nine, or 47%, of the interviewees described the mentoring experience as one that exposes them to new ideas and helps them update their teaching practices. The master teacher learns different teaching strategies and new ways of doing things from the apprentices. (p. 140) "Teachers gained more confidence in their own abilities as they reflected on teaching practices and mentored the PSU students" (p. 140)
Thompson, Gregg, & Niska (2004)	 To determine If teachers and principals believed the school was a learning organization If student learning was occurring 	Teachers and principals from 3 urban middle schools and 3 rural middle schools	Quantitative – survey Qualitative – interviews, case study, focus groups	 All schools considered themselves learning communities (using Senge's 5 principles) Principals believed they had re-cultured their schools Assessment data shows improved student achievement and positive trend data
Visscher & Witziers (2004)	To determine if there is a "relationship between practices in those departments characteristic of professional communities and student mathematics achievement levels" (p. 788)	39 mathematics departments 66% of teachers returned questionnaires	Quantitative – questionnaires and student test data	 Mathematics departments: Meet often Take 6 common tests per grade on average Teachers have a "certain degree of autonomy" which is determined by the agreed upon framework of the department (p. 793) Regulate teacher behavior "with respect to teaching goals, instructional content and the nature of testing" (p. 793) Role of school leader and department head are extremely limited if not in their subject area A positive relationship exists between departmental policy and student achievement A negative relationship exists between "the extent to which department heads act as team leaders and the degree of consultation and cooperation within mathematics departments" (p. 795)

				 Mathematics departments are cohesive, well-developed units Elements of de-privatized practice: Consultation among teachers Shared values Formal agreements Agreements and decisions are focused on educational goals Departments regulate teacher behavior, subject matter, evaluation of student progress Departments infrequently participate in reflective dialogue, observations, peer feedback, planning together Difficult to develop shared vision even within the same departments "Elements like shared goals, joint decision-making, shared responsibilities as well as consultation and advice may be important but insufficient to improve educational practice and, consequently, student achievement" (p. 798)
Leonard & Leonard (2005)	To ascertain perceptions of school administrators on teacher collaboration To determine if schools are evolving into professional learning communities	School administrators in 12 school districts (214 principals and assistant principals in 149 schools)	Quantitative - surveys	 Administrators reported: Support for but lack of collaboration Lack of care and trust among staff Inadequate levels of shared values and beliefs Dissatisfaction with collaborative conditions in the schools Empathy for insufficient time for regular collaboration Present conditions for not reflect desirable collaborative practice Substantial school improvement is still seriously deficient "Sustained student improvementmay only be realized when teacher themselves are heavily engaged in learning" (p. 36) Success depends on providing structures, resources, and expectations Barriers may include: commitment, resources, lack of commitment from significant participants, and an unwillingness of the principal to

Wheelan & Kesselring (2005)	To investigate the relationship between faculty groups and student achievement	61 Ohio elementary Title I schools 2245 (98.5%) faculty members	Quantitative – Questionnaire, 4 th grade student test data	 transform How faculty groups and how they work together is influential especially in high poverty schools Facilitating high-functioning faculty groups, grade level teams, and administrative teams could improve student achievement Successful intervention includes Identifying current developmental level Focuses on group as a system, how it functions, and what can be done to improve effectiveness and productivity

Study	Purpose	Participants	Design/ Analysis	Outcomes
Mort (2000)	Examine 1) mental models of principals 2) how mental models influence organization and support, and 3) barriers to implementing professional learning communities	Elementary, middle, and high school principals who were members of a five-district education collaborative	Qualitative - interviews	 "principals have a narrow view of what a learning community is" (p. 108); little attention was given to embedding the model into the culture; knew the focus was learning; few felt culture should include "inquiry, collegiality, and continuous learning"; believed parental and community was primary above student learning (p. 108) Staff development was traditional type with slight evidence of effectiveness "The faculty was perceived as both the greatest asset and greatest barrier to establishing a learning community (p. 109) Other barriers identified included: assess to resources (funding and time), for staff development a lack of time, money, goals was found. Teachers did not understand the need to change from what they were used to doing Reform efforts initiated by the state were identified as both a help and a hindrance Teachers perceived a disconnect in higher education courses and what was needed to improve learning at the school level. Communication on direction or expectations was lacking
Holland (2002)	To "identify schools that were made small by choice and were using size as a whole- school method to create, develop, and/or improve the teaching and learning environment" (p. 316)	8 small schools	Quantitative – school demographics Qualitative – 76 interviews, 36 focus groups, 137 observations Grounded theory approach	 Highlighted importance of: Professional community Collegial trust Collaborative work Teachers Collaborated to engage students by reinventing and revitalizing practices Understood and supported the mission, vision, and goals Had a shared commitment for student welfare and academic success Discussed curriculum, instructional practices, and policies daily

Studies Related to Constraining Forces and Concerns of Professional Learning Communities

Visscher & Witziers (2004)	To determine if there is a "relationship between practices in those departments characteristic of professional communities and student mathematics achievement levels" (p. 788)	39 mathematics departments 66% of teachers returned questionnaires	Quantitative – questionnaires and student test data	 Believed parents are partners Had collective responsibility for student achievement Shared ideas and provided feedback and constructive criticism on lesson plans, teaching practices, and student issues Shared leadership Concerns Teacher burnout Staff fragility and lack of buy-in Lack of skills for group decision making For school-within-a-school structures Benefits Higher attendance rates Lower dropout rates Increase math and reading scores Safer environments Students are involved in learning process Mathematics departments: Meet often Take 6 common tests per grade on average Teachers have a "certain degree of autonomy" which is determined by the agreed upon framework of the department (p. 793) Regulate teacher behavior "with respect to teaching goals, instructional content and the nature of testing" (p. 793) Role of school leader and department head are extremely limited if not in their subject area A positive relationship exists between departmental policy and student achievement A negative relationship exists between "the extent to which department heads act as team leaders and the degree of consultation and cooperation within mathematics departments" (p. 795)
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Leonard & Leonard (2005)	To ascertain perceptions of school administrators on teacher collaboration To determine if schools are evolving into professional learning communities	School administrators in 12 school districts (214 principals and assistant principals in 149 schools)	Quantitative - surveys	 Elements of de-privatized practice: Consultation among teachers Shared values Formal agreements Agreements and decisions are focused on educational goals Departments regulate teacher behavior, subject matter, evaluation of student progress Departments infrequently participate in reflective dialogue, observations, peer feedback, planning together Difficult to develop shared vision even within the same departments "Elements like shared goals, joint decision-making, shared responsibilities as well as consultation and advice may be important but insufficient to improve educational practice and, consequently, student achievement" (p. 798) Administrators reported: Support for but lack of collaboration Lack of care and trust among staff Inadequate levels of shared values and beliefs Dissatisfaction with collaborative conditions in the schools Empathy for insufficient time for regular collaboration Present conditions for not reflect desirable collaborative practice Substantial school improvement is still seriously deficient "Sustained student improvementmay only be realized when teacher themselves are heavily engaged in learning" (p. 36) Success depends on providing structures, resources, and expectations Barriers may include: commitment, resources, lack of commitment from significant participants, and an unwillingness of the principal to transform
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Fink & Brayman (2006)	Drawing on the "Change Over Time?" study— Purpose was to study how rapid and/or repeated transitions of leadership affect school culture and staff commitment and school capacity to "achieve and sustain lasting improvement" (p. 67).	5 year study Purposive sample of 8 secondary schools in different communities (Ontario and New York) with varying structures and cultures Teachers and principals	Qualitative – interviews, observations, and archival data	 Accelerating turnover rates of principals creates problems and challenges, as well as upset Sustainability is affected by turnover of principals is due to "aging of the baby boom generation, principals' mobility, and the pressures of the standardization agenda have created" (p. 83) "revolving door" principalshipsubverts long-term, sustainable improvement" (p. 84) Other causes of turnover: rotation, mobility, retirements, unpopularity, difficulty to retain Succession plans can help sustain improvement Leadership succession plans should be mandatory "great changes in leaders and leadership" were noted over time (p. 86)
Giles & Hargreaves (2006)	Explored perceptions of teachers and of change over time Examining the sustainability of 3 innovative schools attrition of change , pressure and envy of other schools, and pressure of standardization	Focused on 3 of 8 innovative schools in a 5 year study Original study- Purposive sample of 8 secondary schools in different communities (Ontario and New York) with varying structures and cultures Teachers and principals	Qualitative – interviews, observations, and archival data	 3 factors affecting sustainability of innovative schools: not perceived to be 'real schools', possessing a predictable life span, and "critical incidents or changes in the external context" (p. 125) 3 common forces of external forces: "envy and anxiety among competing institutions," life cycle or the organization, standardization (p. 127) One school experienced attrition of change due to aging staff, losing leaders, lack of resources, community mistrust, change in focus of the district One school resisted attrition of change because they anticipated and solved problems prior to them emerging – early involvement of the community, "planning ahead for two sets of leadership succession in 8 years, and by building process teams and multiple professional communities of learning and support" (p. 151) One school lost its identity but was able to withstand standardization for longer due to more stable leadership

Hargreaves & Goodson	Examined teachers' and	5 year study	Qualitative –	•	5 change forces: policy reform, leadership change and succession, shifting student demographics, teacher generations, and school
Goodson (2006)	administrators' perceptions and experiences of educational change Retrospective look at how change forces affected sustainability Participants worked in the schools over a 30 year period	Purposive sample of 8 secondary schools in different communities (Ontario and New York) with varying structures and cultures Teachers and principals	interviews, observations, and archival data	•	 Schange forces: poincy reform, leadership change and succession, shifting student demographics, teacher generations, and school interrelations (p. 13) Teachers accepted or resisted reform based on generational missions "Leadership succession has been magnified by the accelerating pace and frequency of successions themselves" (p. 20) "white flight", more multicultural demographics Usually influenced by one dominating teacher generation At the expense of others Sustainability is "unlikely to occur without a theory and a strategy that is more historically and politically informed) (p. 35). "Changes in leaders and leadership that most directly and dramatically provoke change in individual schools" (p. 18). Leadership needs to focus on Deep learning Plan for leadership succession Deal with the strengths of "teacher generational missions" (p. 35) "Make teaching and learning more vivid and real" for students of all cultures (p. 35) Not over-investing in other initiatives at others' expense Becoming a more activist professional learning community "retaining standards but refraining from standardization" (p. 35) Insolder – what is needed to make changes Insider – what is needed to preserve the past but keep
				•	improving and leaving a legacy Dominant demographic groups define missions
				•	Sustainability is more than maintaining over time – must also plan
					for the future

(2006) implementation of a standards- based instructional program ye im sta ins pra	middle schools a their second ear of nplementing randards-based astructional ractices in cience	 Though teachers had professional development, they still experienced barriers to implementation: technical, political, and cultural More support such as time, resources, and administrative buy-in are needed for successful implementation Professional development may not reveal existing beliefs Second year is more challenging Political barriers vary by school and community context while both schools had technical and cultural barriers in common Some barriers include: lack of teacher buy-in, lack of leader buy-in, teacher beliefs impacted instruction, lack teacher understanding of the content and process skills and how they were tested, lack of time to collaborate, lack of support for political and technical barriers Political barriers were most difficult to control so they need more support in this area Found that the success of the reform is related to importance of collaboration "Teacher beliefs must the be focus" (p. 160) Collaborative relationships must be formed
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Study	Purpose	Participants	Design/	Outcomes
Hipp & Huffman	5 year study (1995-2000) to find professional learning	30 participants as co-developers	Analysis Quantitative: Survey	Identified 6 schools exhibiting many of the characteristics of a professional learning community as defined by Hord
(2003)	communities exhibiting the 5 identified dimensions	Ĩ	Qualitative: Interviews	
	reflecting the essence of a	20 Schools - after phase 3	Interviews	Reported exemplars and non-exemplars
	professional learning community	only 12 remained		"Because each school is unique, there is no absolute recipe for change" (p. 9)
				Success depends on how well the changes can be sustained and embedded in the culture
				Critical link between collective learning and personal practice
				Supportive conditions encompassed and impacted all dimensions
				"Institutionalization across the five [professional learning community] dimensions is essential for schools to engage in sustained improvement and for continuous learning to occur" (p. 5)
				Must have trust and respect along with structures to establish a professional learning community
				"preparation of school administrators is key" (p. 9) Leadership preparation programs must include:
				Establishing processes for collaborative decision-making
				Developing a shared visionAligning diverse groups
				 Supporting interdependency of organization members Opportunities for sharing learning
Huffman & Jacobson (2003)	Identify and analyze core processes of professional learning communities and	83 educators (convenience sample)	Quantitative – questionnaire	 Opportunities for sharing learning Schools reflected all five of the core processes of a professional learning community "at least some of the time" (p. 247) Greatest number of participants believed their school provided a
	their perceived			safe environment and was a "democratic organization guided by

Studies Related to Sustainability of Professional Learning Communities

Leonard & Leonard (2005)	 relationship to school effectiveness Determine the perceived relationship between the core processes and the leadership style of the principal To ascertain perceptions of school administrators on teacher collaboration To determine if schools are evolving into professional learning communities 	School administrators in 12 school districts (214 principals and assistant principals in 149 schools)	Quantitative - surveys	 positive principles, ethics, and values" (p. 248) Participants believe some characteristics make a positive impact on schools Leaders exhibiting "characteristics of a collaborative leadership or transformational style have greater opportunities for success in developing a professional learning community" (p. 248) Team is fundamental learning unit Model may not be sustainable over time. Administrators reported: Support for but lack of collaboration Lack of care and trust among staff Inadequate levels of shared values and beliefs Dissatisfaction with collaborative conditions in the schools Empathy for insufficient time for regular collaboration Present conditions for not reflect desirable collaborative practice Substantial school improvement is still seriously deficient "Sustained student improvementmay only be realized when teacher themselves are heavily engaged in learning" (p. 36) Success depends on providing structures, resources, and expectations Barriers may include: commitment, resources, lack of commitment from significant participants, and an unwillingness of the principal to transform
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varying structures and cultures Teachers and principals	 At the expense of others Sustainability is "unlikely to occur without a theory and a strategy that is more historically and politically informed) (p. 35). "Changes in leaders and leadership that most directly and dramatically provoke change in individual schools" (p. 18). Leadership needs to focus on Deep learning Plan for leadership succession Deal with the strengths of "teacher generational
	 missions" (p. 35) "Make teaching and learning more vivid and real" for students of all cultures (p. 35) Not over-investing in other initiatives at others' expense Becoming a more activist professional learning community "retaining standards but refraining from standardization" (p.35) Respecting the value of history and experience 3 types of knowledge needed during succession
	 Inbound – what is needed to make changes Insider – what is gained once trusted and accepted Outbound – what is needed to preserve the past but keep improving and leaving a legacy Dominant demographic groups define missions Sustainability is more than maintaining over time – must also plan for the future