January 2012

Professional Learning Community Implementation: A Comparison Of General Educators' And Specialists' Perceptions

Jeffrey Roland Holm

Follow this and additional works at: https://commons.und.edu/theses

PROFESSIONAL LEARNING COMMUNITY IMPLEMENTATION:
A COMPARISON OF GENERAL EDUCATORS' AND SPECIALISTS'
PERCEPTIONS

by

Jeffrey Roland Holm
Bachelor of Science, Valley City State University, 1985
Master of Science, Northern State University, 1990
Specialist Degree, Chadron State College, 1998

A Dissertation

Submitted to the Graduate Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the degree of

Doctor of Education

Grand Forks, North Dakota
December
2012

This dissertation, submitted by Jeffrey R. Holm in partial fulfillment of the requirements for the Degree of Doctor of Education from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

Dr. Sherryl Houdek, Chair

Dr. Pauline Stonehouse

Dr. Gary Schnellert

Dr. Pamela Beck

Dr. Barbara Combs

This dissertation is being submitted by the appointed advisory committee as having met all of the requirements of the Graduate School at the University of North Dakota and is hereby approved.

Wayne Swisher
Dean of the Graduate School

Enter the Date

Title   Professional Learning Community Implementation: A Comparison of
                 General Educators' and Specialists' Perceptions

Department   Educational Leadership

Degree   Doctor of Education

       In presenting this dissertation in partial fulfillment of the requirements for a
graduate degree from the University of North Dakota, I agree that the library of this
University shall make it freely available for inspection. I further agree that permission
for extensive copying for scholarly purposes may be granted by the professor who
supervised my dissertation work or, in her absence, by the chairperson of the
department or the dean of the Graduate School. It is understood that any copying or
publication or other use of this dissertation or part thereof for financial gain shall not
be allowed without my written permission. It is also understood that due recognition
shall be given to me and to the University of North Dakota in any scholarly use which
may be made of any material in my dissertation.

                                              Jeffrey R. Holm
                                              November 20, 2012

TABLE OF CONTENTS

LIST OF TABLES

ACKNOWLEDGEMENTS

ABSTRACT

Do teachers assigned to specialized areas, such as special education, Title I, counseling, or other unique assignments feel empowered by efforts to implement professional learning communities (PLCs)? The purpose of this quantitative study was to examine differences in teachers' perceptions of PLC implementation in the Minot Public School District. The study addressed teachers' overall perceptions of PLC implementation; based on their assignment to general education or specialized teaching assignments, based on demographics, and based on which dimensions of PLC implementation may require more attention.

The Professional Learning Communities Assessments-Revised (PLCA-R) instrument was utilized to measure teachers' perceptions. Originally, the Professional Learning Communities Assessments (PLCA) instrument was developed by Olivier, Hipp, and Huffman. Later, the instrument was revised and renamed the PLCA-R (Olivier, 2009). The PLCA-R is used to measure teachers' perceptions of PLC implementation. The PLCA-R is an instrument, which has a Likert-like scale to measure six dimensions of PLCs. It includes opportunities for participants to offer comments, along with rating scales.

The study found there were not statistically significant differences in perceptions of PLC implementation between general education staff and those in specialized assignments. There were statistically significant differences in the

perceptions of high school teachers and teachers at other grade levels, and in the perceptions of teachers with sixteen or more years experience and less than five years experience.

CHAPTER I

INTRODUCTION

In recent decades, accountability has provided motivation for change or improvement of schools (Wei, Darling-Hammond, Andree, Richardson, & Orphanos, 2009). There is little doubt the No Child Left Behind (NCLB) Act of 2001 has impacted American educators' levels of concern, but do accountability measures ensure students receive a better education? According to Wei et al. the enhancement of all teachers' learning, through engagement in focused collaboration, impacts student learning positively.

The creation of a vision and opportunities for collaborative learning, have been more motivational to the people who comprise organizations than the fear of punishment for failure to meet specific measures (Fullan, 2006; Pankake & Moller, 2003; Rosenholtz, 1989; Senge, 2006). Development of professional learning communities (PLCs) has allowed teachers to be empowered and to focus on learning, the fundamental mission of schools (DuFour, 2004). "Professional learning community is defined by what the words state: learn deeply with colleagues about an identified topic, to develop shared meaning, and identify shared purposes related to the topic" (Hord, 2009, p. 41).

It is important for teachers and schools to be focused on learning and improvement because student success beyond the school setting is dependent on

1

effective teachers (Chetty, Friedman, & Rockoff, 2011; Hattie, 2009; Wood, 2007).

The effectiveness of schools is also dependent on the quality of teachers (Harris &

Jones, 2010). Marzano, Waters, and McNulty (2005) studied students enrolled in

highly effective schools versus students enrolled in highly ineffective schools and

described the differences in students' lives as a result of the school students attended.

Among the important qualities noted in effective schools were collegiality and

professionalism of teachers (Marzano et al., 2005). Collegiality and professionalism,

along with teacher desires to make a difference, were foundational to developing a

PLC.

PLCs in some form were found to exist more than forty years ago, but have

gained momentum since the late 1980s (Solution Tree, 2011). Rosenholtz (1989)

described the negative consequences of teachers operating without opportunities to

collaborate, including the reduced likelihood teachers would reflect and seek to

improve professional practices. PLCs, which included high levels of collaboration

among teachers, were described as powerful, and a means of changing schools for the

better (Southwest Educational Development Laboratory, 1997). The National

Association of Elementary School Principals (NAESP, 2001) described the

importance of creating a community of learners in schools, including professionals, as

well as students. Senge (2006) wrote, "Team learning is vital because teams, not

individuals, are the fundamental learning unit in modern organizations. This is where

the rubber meets the road; unless teams can learn, the organization can't learn" (p. 22).

Because educators have begun to understand the value of learning for adults (teachers,

administrative staff, and other employees of schools), PLCs have started to emerge in schools.

The moniker "PLC" has become very popular, and has been utilized to describe nearly any group of people who have worked together in schools (DuFour, Eaker, & DuFour, 2005; Fullan, 2006, Southwest Educational Research Laboratory, 1997). Fullan (2006) cautioned about the terminology arriving in school settings before the characteristics of PLCs were in place. Being a PLC school system involves more than simply declaring the school as such. True PLC schools are required to actually collaboratively engage in activities aimed at improving teacher as well as student learning.

Research on PLC implementation has been done by educators like Louis et al. (1995), who identified "characteristics of a school-based community"; Hord (1997), who wrote extensively about PLC "dimensions"; and DuFour, Eaker, and DuFour (2005), who wrote about three "big ideas" of PLCs. Louis' et al. (1995) characteristics, Hord's (1997) dimensions, and DuFour's et al. (2005) "big ideas of PLCs" were similar. Louis, Marks, and Kruse's (1995) characteristics of a learning community were: shared values, reflective dialogue, de-privatization of practice, focus on student learning, and collaboration (p. 25). Hord's (1997) PLC dimensions were: supportive and shared leadership, shared values and vision, collective learning and application of learning, supportive conditions, and shared practice (p. 7). DuFour et al. (2005) identified three big PLC ideas, which included ensuring that students learn, a culture of collaboration, and a focus on results (pp. 32-39).

In writing about educational change and reform, Fullan (2007) stated, "Reform is not just putting into place the latest policy. It means changing the cultures of classrooms, schools, districts, universities, and so on" (p. 7). Reeves (2006/2007) concurred stating, "In the last decade, the education standards movement has taught us that policy change without culture change is an exercise in futility and frustration" (p. 92). Establishment of a culture of collaboration, with a student focus, was the PLC creators' intent (Hord, 2009).

Vescio, Ross, and Adams (2008) conducted a research review regarding how PLC implementation changed teaching and student learning. In their review, they cited eleven studies. All the studies indicated culture had changed in schools, which had endeavored to create professional learning communities. Vescio et al. (2008) stated,

> Change in a professional culture of a school is a significant finding
>
> because it demonstrates that establishing a PLC contributes to a
>
> fundamental shift in the habits of the mind that teachers bring to their
>
> daily work in the classroom. (p. 84)

Creating the culture to support improvement of schools was essential to changing schools, and without the cultural improvement, structural changes would only result in wasted resources (Fullan, 2008b).

Significance of the Study

PLC implementation has impacted the culture and professional development processes of Minot Public School District (MPSD) in Minot, North Dakota. Since 2006, MPSD has invested significant resources, including money, time, and effort, in

creating a culture where PLCs could drive school improvement efforts. Book studies, hiring nationally recognized speakers, and supporting staff attendance at PLC conferences were included in the MPSD professional development plan (Appendix A). Several MPSD professional development days involved bringing all teachers at specific grade levels or curricular departments together to work on common learning expectations, common assessments, and development of intervention processes. During the 2009-2010 school year, Solution Tree was given a contract to provide six days of on-site PLC training for building leadership teams (Appendix B). Along with the professional development efforts aimed at cultural change, the district consisting of nineteen schools, worked on structural changes, such as schedule changes to support teacher collaboration, as well as interventions for students who experienced learning difficulties. The structural changes were designed and implemented by school level leadership teams and principals.

MPSD professional development was developed based on the essential questions associated with PLC development. Within the idea of focusing on student learning, DuFour et al. (2005) wrote about three crucial questions. The questions below directed collaborative teams in PLCs:

- What do we want each student to learn?

- How will we know when each student has learned it?

- How will we respond when a student experiences difficulty in learning? (p. 33)

With the focus on these crucial questions (from DuFour et al., 2005), MPSD teaching staff have been engaged in PLC work. There have been difficulties,

however, in engaging specialized teachers who do not work with an established curriculum. Special educators, for example, serve students with disabilities who have individualized education programs (IEPs). The specialist teachers have been engaged in collaboration with regular classroom teachers in examining the essential questions proposed by DuFour et al.. The specialists' role in answering the DuFour et al. essential questions has been suspect because specialists are not responsible for instruction of the core curricular standards, but are typically responsible to meet students' individual specific learning needs. As a result, district-wide professional development days have evolved into special education teachers meeting separate from regular classroom teachers, within groups of peers who have similar specialties.

Souris Valley Special Services is a multiple school district special education cooperative of which MPSD is a member. Souris Valley Special Services' coordinators facilitate meetings among "special" educators. The professional development activities for special education teachers have not been focused on collaboration; rather, their activities have been more reflective of traditional staff meetings in format, because essential questions by DuFour et al. (2005) appear less relevant to meeting special education student needs.

As MPSD schools have developed intervention strategies to address DuFour, Eaker, and DuFour's (2005) third essential question (How will we respond when a student experiences difficulty in learning?), specialist teachers have been assigned to collaborate with general education teachers. Whether or not the expertise of specialist teachers has been maximized in answering the third question is debatable, because specialists work with groups of students in small intervention groups, but the students

6

may not have been grouped according to needs, which match the expertise of the specialists. An example would be the assignment of a counselor to work with a group of students needing specific math interventions, not necessarily interventions a counselor has experience or knowledge to provide. The intent of assigning specialist teachers to small student groups has been to reduce student to teacher ratios, creating more targeted instruction. Not having specialists fully engaged in PLCs, relevant to their experience or knowledge, could lead to specialists being isolated from one another and from professionals in other disciplines. Rosenholtz (1989) described isolation as a condition, which had a negative impact on a teacher's willingness to seek feedback and strive for improvement. Because collaboration is identified as an important part of PLCs, isolation of a specialist teacher may result in the isolated teacher's failure to fully realize the potential power of PLCs. This may also result in the school district's failure to meet its potential as a PLC.

The purpose of this study was to determine whether or not specialists have been neglected in MPSD's PLC implementation. Hargreaves and Fullan (2009) described the importance of all professionals being involved in the PLC process. Also important, according to Hargreaves and Fullan, was the manner in which the team members cared for one another.

The MPSD administrative team, consisting of central office administrators as well as building principals, had numerous discussions about teachers' resistance to PLCs since the early stages of PLC implementation in MPSD. Many discussions centered on the possibility that teachers, who are in the late stages of their career, are more resistant to change, specifically PLC implementation, than are teachers in earlier

career stages. There has not been a district evaluation to determine whether length of tenure affects attitudes about PLCs.

Along with the move to become a PLC school district, MPSD engaged in the NCA AdvancED district accreditation process. A quality assurance review visit was conducted in April of 2010. The AdvancED team provided positive feedback regarding MPSD's efforts to implement PLCs and recommended an evaluation of the district's improvement plan. The MPSD strategic plan was based on the "Balanced Scorecard." The Balanced Scorecard is a model in which there is an emphasis on enhancing outcomes for stakeholders in the organization. The MPSD Balanced Scorecard AdvancED plans provided impetus to develop a PLC.

MPSD has been identified as a district in program improvement, as a result of adequate yearly progress (AYP) measures. To address MPSD improvement needs, based on AYP results, an annual program improvement plan was developed and submitted to the North Dakota Department of Public Instruction, to meet Title I regulatory requirements. The MPSD student subgroups, which have not made AYP, has included the special education and economically disadvantaged student subgroups. Specialist teachers play a critical role in supporting student achievement in both the special education and economically disadvantaged student subgroups.

In reviewing existing literature for this study, the researcher conducted an exhaustive search of journal articles available in the Chester Fritz Library at the University of North Dakota, as well as on the Internet. The researcher did not find studies, which compared teachers' perceptions of PLCs, based on their assignment to a general education setting or a specialized area of teaching. This study provides

8

research, which examines whether differences in perceptions of teachers in regard to PLC implementation, based on assignment to general education or a specialized teaching position, exist. Vescio, Ross, and Adams (2008) called for additional research to be conducted in the area of PLCs, including qualitative and quantitative studies of school culture and the nature of teachers' work as a result of PLC implementation.

Purpose of the Study

The purpose of the study was to examine teachers' perceptions regarding implementation of PLCs in MPSD. The study examined teachers' perceptions about PLC implementation based on discipline area (subject area in which a teacher specializes).

Research Questions

The research questions that guided the study were:

1. What perception differences exist about PLC implementation, based on teachers' demographics?

2. How do teachers perceive the effectiveness of the MPSD PLC implementation?

3. What perception differences exist about PLC implementation based on teachers' discipline?

Delimitations of the Study

The study has the following delimitations:

1. One North Dakota school district was included in the study.

2.   The number of participants assigned to general education positions, were

significantly larger than the number of potential participants assigned to

specialized positions.

Assumptions of the Study

The assumptions in this study include:

1.   The participants have some knowledge of PLC dimensions.

2.   Participants understood the survey statements and responded honestly.

3.   The participants completed the instrument individually and did not

engage in interactions with other participants while completing the

instrument.

Definitions of Terms and Acronyms

The following terms are found in the study. The definitions of terms are

intended to provide clarity and specificity regarding use of terminology, and acronyms

in the study. The terms include:

ANOVA: Analysis of Variance (ANOVA) is a statistical test comparing means

of three, or more, groups in which one independent variable and one dependent

variable are examined (Slavin, 2007).

AYP: "Adequate Yearly Progress (AYP) is the State's measure of yearly

progress toward state academic content standards. It sets a minimum level of

improvement that states, school districts, and schools must attain each year" (North

Dakota Department of Public Instruction, n.d., sect. 1, para. 1).

Collaboration: "A systematic process in which people work together, *interdependently,* to analyze and *impact* professional practice in order to improve individual and collective results" (DuFour, DuFour, Eaker, & Many, 2006, p. 214).

Dimensions of PLC: Hord (2004) identified five dimensions of PLCs. The dimensions were supportive and shared leadership, shared values and vision, collective learning and application of learning, supportive conditions, and shared practice (p. 7). Hipp and Huffman (2011) later divided supportive conditions into two; relationships and structures were divided into separate dimensions.

Discipline: A teacher's area of specialty, which is a reflection of a teacher's education, certification, and experience.

Essential learning: "The critical skills, knowledge, and dispositions each student must acquire as a result of each course, grade level, and unit of instruction. Essential learning may also be referred to as essential outcomes, or power standards" (DuFour et al., 2006, p. 215).

General educator: For purposes of the study, general educator is defined as a teacher who has a curriculum with defined learning standards held in common with other teachers in the same discipline.

MPSD: Minot Public School District (MPSD) is a school district located in north central North Dakota, which has nineteen school buildings serving approximately 7,000 students.

MPSD Leadership Team: Minot Public School District's central office administrators, including the superintendent, assistant superintendent, curriculum director, and student services director.

NCA AdvancED: An education accreditation organization, which provides, "comprehensive program of evaluation and external review, supported by research-based standards, and dedicated to helping schools, districts and education providers continuously improve" (AdvancED, 2012, para. 3).

NCLB: No Child Left Behind Act (NCLB) was an act of congress in 2001, which called for students in all subgroups to reach grade level proficiency in reading and mathematics by 2014 (No Child Left Behind Act of 2001, 2008).

PLC: A "professional learning community (PLC) is defined by what the words state: learn deeply with colleagues about an identified topic, to develop shared meaning, and identify shared purposes related to the topic" (Hord, 2009, p. 41).

PLCA-R: Professional Learning Communities Assessment-Revised (PLCA-R) is a survey utilized to determine "effectiveness" of a school as a PLC, as well as to determine quality practices, which enhance and sustain schools' efforts as PLCs.

Solution Tree: A professional development company that provides publications, events, consultants, speakers, and online courses, with the goal of improving schools (Solution Tree, 2012).

Specialists: Teachers whose assignments relate to meeting individual needs of students rather than following a scope and sequence of curricular standards. Special education teachers, for example, work with students' individual plans, rather than following curriculum standards for a grade level.

Researcher's Experience

The researcher has been a professional educator since 1985, having worked for six years as an elementary teacher in two rural North Dakota schools, fifteen years as an elementary school principal, and six years as a central office administrator in Minot Public School District (MPSD). During his six years of teaching, the researcher worked in schools with small faculties, who were courteous and cooperative, but did not function as a PLC. The researcher's experience as an elementary principal took place in schools where teachers were also courteous and cooperative, but did not function as a PLC.

After being hired as a central office administrator in MPSD, the researcher attended a number of PLC trainings, sponsored by Solution Tree, and the researcher embraced the potential for PLCs to enhance the MPSD education improvement and strategic planning effort. The researcher led numerous elementary principals' book studies on PLCs, as well as supported teacher-training efforts in MPSD. All formal PLC training the researcher had was based on the DuFour, DuFour, and Eaker (2008) framework. The investment of the researcher's time in PLC implementation efforts in MPSD may present potential for bias to impact the study.

Organization of the Study

This dissertation study is organized into five chapters. Chapter I includes the introduction, need for the study, purpose of the study, research questions, delimitations of the study, assumptions of the study, definitions of terms and acronyms, and experience of the researcher. Chapter II includes sections addressing the history of school reform, change theory, professional development, PLC history, PLCs today,

PLC frameworks, and the effectiveness of PLCs, which includes school culture and student learning. Chapter III includes a review of the purpose of the study and research questions, as well as descriptions of the population, Minot Public School District, MPSD's PLC implementation, the survey/data collection instrument, collection of data, data analysis, and a conclusion. Chapter IV includes results of the study. Chapter V includes a summary of the findings, conclusions, limitations, recommendations, and recommendations for additional study.

CHAPTER II

LITERATURE REVIEW

Introduction

PLCs have been identified as a promising approach to school improvement (DuFour, Eaker, & DuFour, 2005). If the promise of school improvement is to be realized, all professionals need to feel connected and engaged in the PLC process. The literature reviewed for this dissertation emphasized the following, including four aspects of PLC implementation:

- history of school reform,

- change theory,

- professional development,

- PLC history,

- PLCs today,

- PLC frameworks, and

- PLC effectiveness.

The history of school reform is examined in the first section of this literature review, and is focused on how school reform efforts evolved. The school reform history section describes how PLCs evolved, and how accountability became more prevalent in school reform. The implementation of PLCs requires schools to change, and change theory is examined in the next portion of the literature review.

15

The section of the literature review, which addresses the history of professional development, begins with an overview of professional development. The history of PLCs and how they evolved is found following the history of professional development. Finally, present-day PLCs are examined.

Literature was reviewed to examine the PLC frameworks. An understanding of the PLC frameworks is essential to determine whether PLCs have been implemented with fidelity, which relates to the purpose of the study. There are a number of PLC frameworks in existence, and PLC frameworks' similarities and differences are explored.

The final section of this chapter examined the literature for evidence of PLC effectiveness. There are two subsections in the PLC effectiveness section. The first portion addresses school culture as it is impacted by PLCs, and the final section addresses the impact of PLCs on student learning.

History of School Reform

American elementary and secondary education systems came under increasing scrutiny in the past three decades, because there has been a heightened sense that American public schools are falling behind global competition (Schleicher, 2009; Zhao, 2009). Globalization resulted from the technological advances of the last few decades, and required organizations to change rapidly to maintain a competitive edge (Kotter, 1996). Fullan (2007) attributed America's schools falling behind global competitors, to a lack of authentic school reform.

Reform has impacted America's schools for many years. Ravitch (2010) wrote about the New York Superintendent of Schools, William Chandler Bagley, as

expressing his unhappiness in 1907 with the "fads and reforms that sweep through the educational system periodically" (p. 10). As early as 1915, Dewey (2001) wrote about the need to view educational changes in a social context to avoid changes being viewed as transitory trends, which would go away in favor of new ideas. Many of the early twentieth century reforms reflected a factory model, which focused on teachers being told what to do by centralized authorities, who were perceived as having greater knowledge about the processes associated with teaching and learning (DuFour, DuFour, & Eaker, 2008).

American public schools were subjected to reform movements for several decades, and the efforts seemed to change focus rapidly during the later years of the twentieth century (Olivier, 2003). Reform in the late 1950s was fueled by concern over national security and global competition resulting from Sputnik (DuFour et al., 2008). The concern for equality and decreasing poverty led to 1960s reform efforts (Hord & Tobia, 2012). The 1960s and 1970s reform efforts resulted in a focus on curricular creativity in an attempt to resolve poverty issues (Fullan, 2007; Hargreaves, 2007). The mid-twentieth century reform efforts were unsuccessful because they failed to impact instructional methods (Fullan, 2007). Accountability-based reform efforts emerged in the 1980s as a result of previous failed reforms.

A Nation at Risk, a report to the nation and the Secretary of Education (The National Commission on Excellence in Education, 1983), was released in 1983, and was a reaction to the reforms of the 1960s and 1970s. The reforms of these decades were described as highly experimental and aimed at decentralized authority (Ravitch, 2010). Hipp and Huffman (2011) described the results of *A Nation at Risk* stating,

17

"This bureaucratic top-down approach succeeded in alienating teachers and administrators, thus widening the gap between decision making of policy makers and the real work in schools and classrooms" (p. 2). The reforms resulting from *A Nation at Risk*, however, only seemed to set the stage for calls for greater accountability.

Responses to *A Nation at Risk* included allocations of inadequate resources to schools to meet the demands of the accountability reforms (Darling-Hammond & McLaughlin, 1995; Hipp & Huffman, 2011). The scarcity of resources resulted in little benefit to students, but the "excellence" movement generated from *A Nation at Risk,* also failed because it didn't include innovation, but created a movement to add more curriculum, student time on-task, and testing and assessment, to which DuFour, et al. (2008) referred as "intensification of existing practices" (p. 35). After concern from this period ebbed, Goals 2000 was the next reform effort.

Goals 2000 was an effort to liberate teachers from centralized authority, and to improve literacy, readiness, school safety, math skills, and citizenship (DuFour et al., 2008). The specific goals of Goals 2000 according to Pankake and Moller (2003) included:

> 1) getting students ready to learn; 2) increasing graduation rates; 3) expanding student competency in crucial subject areas; 4) increasing emphasis in math and science; 5) increasing adult literacy; 6) decreasing drugs and violence on campuses; 7) providing opportunities for professional development; and 8) boosting parental involvement. (p. 3)

According to DuFour et al. (2008), the Goals 2000 movement created a focus on small incremental differences in the way teachers and schools operated. Again a reform agenda failed to make a significant difference in the lives of students.

A Nation at Risk and the Goals 2000 measures, which followed *A Nation at Risk*, did not result in improved education for students, and the drive for accountability continued, resulting in the No Child Left Behind (NCLB) Act in 2002 (Fullan, 2007; Hipp & Huffman, 2011; Hord & Tobia, 2012). These accountability based reform measures were developed based on the belief that students would benefit from improved schools. The improvements were thought to be the likely result of increased competition among schools, even though competition is an external motivator, the effectiveness of which is not supported by human development research (Clark & Astuto, 1994; Ravitch, 2010).

Americans have long been deeply concerned about schools meeting needs of students who were least likely to successfully achieve in schools (Louis, Marks, & Kruse, 1996). NCLB was an accountability-based reform, which required schools to examine student achievement data, and reach proficiency for students regardless of the students' demographic status (Hipp & Huffman, 2011; Kilbane, 2009). Results were to be determined by results of an annual high stakes test. The high stakes tests are state level reading and math assessments given to students, with the results being interpreted to directly reflect the quality of instruction the students received (Zhao, 2009).

Muhammad (2006-2007) pointed out positive intentions of NCLB stating, "This NCLB demand for disaggregated data can be particularly beneficial in schools

where past experiences, stereotypes, and unquestioned assumptions have perpetuated the belief that some groups of students are incapable of learning at high levels" (p. 15). NCLB created improvements in some schools, which were previously performing poorly (Hord & Tobia, 2012). Along with the benefits, schools experienced some challenges from implementation of NCLB.

Even though intentions of NCLB may have been sincerely aimed at improving outcomes for all students, there were divergent opinions about the results of the NCLB accountability measures. The sanctions levied against schools not meeting annual goals of NCLB have resulted in more regulation of schools (Darling-Hammond, 2009; Doolittle, Sudeck, & Rattigan, 2008; Zhao, 2009). The additional regulation and oversight, which resulted from NCLB sanctions, had a negative effect on innovative practices in schools (Giles & Hargreaves, 2006).

Among the negative consequences of failure to meet NCLB accountability goals was the potential of the regulation and bureaucracy to distract from focus on teaching and learning (Doolittle et al., 2008). Darling-Hammond (2009) stated:

Ironically, prescriptive policies created in the name of public accountability ultimately reduce schools' responsiveness to the needs of students and the desires of parents. Faceless regulations became the scapegoats for school failure, since no person in the system takes responsibility for their effect on students. (p. 48)

Reform measures imposed upon schools seemed to lack the ability to engage and motivate teachers (Clark & Astuto, 1994; Hord & Tobia, 2012; Levin, 2009). High levels of accountability often created feelings of failure, and lack of autonomy

20

by teachers, and forced schools to react to test results at a rapid pace (Talbert, 2010). Human development research has determined punishment and reward based systems as ineffective in changing behavior (Fullan, 2008a). The motivation from the link between high stakes test results to judgments about the success or failure of schools has driven change, but not enhanced learning. Hargreaves and Shirley (2008) wrote:

> When policy makers turn up the heat; define reading, writing, and math as core subjects to be tested; and threaten to close struggling schools that can't make AYP and to disperse their pupils, educators respond-and with a vengeance! They slash social studies at the same time the country is internationally isolated; they skimp on science, when there is unprecedented global competition for technological breakthroughs; and they decimate the arts, foreign languages, and physical education with the prospect that America's next generation will be uncouth, uncultured, and unfit. (p. 136)

So how could education be reformed to improve outcomes for students? The development of trusting relationships among, and between, staff and students were more likely to have resulted in authentic and sustainable education improvement, than traditional accountability-based reforms (Bullough, 2007). Fullan (2006) wrote, "In the panoply of rewards and sanctions that attach to accountability systems, the most powerful incentives reside in the face-to-face relationships among people in the organization, not in external systems" (p. 12). Engagement of teachers in professional learning communities (PLCs) has resulted in teaching being considered more of a profession (Hord & Tobia, 2012). PLCs represented a change in the accountability-induced operation of schools.

21

Change Theory

Change is inherent in reform, and change is recognized as difficult (Hughes & Kritsonis, 2006). Fullan (2007) explained the challenges associated with educational change writing, "Socially meaningful change in complex times will always be intrinsically difficult to accomplish" (p. 11). Often the challenges presented in change processes weren't fully comprehended (Kotter, 1996).

Change efforts have naturally created resistance (Reeves, 2009). Without garnering an understanding and support from stakeholders on why change is necessary, changing an organization can be nearly impossible. Hargreaves and Goodson (2006) studied educational change over a thirty-year period and found change efforts often failed to recognize the impact of political and historical aspects of change efforts, especially the political aspects related to culture.

Organizational change has often required changes in culture and structure (Bolman & Deal, 2008; Fullan, 2007; Kotter, 1996; Louis et al., 1996). Reeves (2009) provided a definition of culture writing, "In the context of school change, we might define culture as simply the way we do things around here" (p. 37). According to Louis et al. (1996), culture rarely received the appropriate level of attention in the change process. Fullan (2007) described culture as more challenging to change than structure. The cultural change in schools required teacher input and involvement.

Why was it important for organizations to recognize the role of stakeholder involvement in implementing change? Patterson, Grenny, Maxfield, McMillan, and Switzler (2008) called for the development of teams and the maximization of social capital in setting the stage for change. Successful change processes involved members

22

within organizations because of the way change impacted the social structure of the organization itself (Bolman & Deal, 2008; Kotter, 1996). The need for stakeholder engagement in successful change has also applied to schools.

Bryk and Schneider (2003) conducted a longitudinal study, the results of which demonstrated the importance of trust within schools that had improved academically in efforts to reform, because trust reduced the threatening nature of change. The lack of trust inhibited the development of teamwork; and without teamwork, change was virtually impossible (Kotter, 1996).

Reeves (2009) attributed successful school change efforts to establishment of stakeholder networks working to implement change processes. A lack of team learning in schools negatively impacted change associated with reform efforts (Hipp & Huffman, 2011). Teacher involvement in change processes, therefore, was essential to schools implementing changes.

Professional Development

If implementation of improvements required teachers to change, and change required shifts in culture and enhanced teacher capacity, then development of teachers' collective capacity to improve was a necessity (Sparks & Hirsch, 1997). Professional development was intended to improve teachers' education. Hord (2009) wrote, "We can all agree that the purpose of schools is student learning, and that the most significant factor in whether students learn well is teaching quality. Further, teacher quality is improved through continuous professional learning. . . ." (p. 40). It made sense that professional development was the avenue to teacher learning.

Professional development has existed in American education since the late 1800s, and became more prevalent as more students were enrolled in public schools, and was necessary because most teachers were poorly prepared and had little education (Orlich, 1989). With the evolution of normal schools and summer programs to prepare teachers, workshops emerged in the early 20th century as a means of providing teachers with additional opportunities to learn, according to Orlich. Drake and Roe (1986) reported the increasing enrollments in American schools continued into the first half of the twentieth century, with less than half of American teachers having a college degree.

From the late 1940s through the early 1960s, professional development of teachers changed. Orlich (1989) described the changes as "subtle" and reflective of "personal and curriculum development" (p. 3). These changes required teachers to gather new technical information about the changing curricula. The recognition of the relationship between teachers' professional development and student achievement seemed to be ignored until the 1990s (Darling-Hammond, 1998). Professional development, as a result, seemed ineffective.

Fullan (2008a) identified the focus on improving skills of individuals as an ineffective means of sustaining learning and implementing change in organizations, but this wasn't the only problem with traditional professional development in schools. Schmoker (2006) described professional development as "bad beyond hope" (p. 109), because it lacked a connection to the daily work of teachers. Wei, Darling-Hammond, and Adamson (2010) seemed to confirm Fullan's (2008a) and Schmoker's (2006)

assessment of professional development, writing about the current state of professional learning in schools as "poorly conceived and deeply flawed" (p. 2).

Improvement of teachers' professional development required an examination of the overall purpose of professional development. Guskey (2003) identified high level learning for students as the primary purpose of professional development. If the reason for the existence of schools was student learning and critical to student learning was the skills and abilities of teachers, the importance of teachers' learning must be kept as a focus (Darling-Hammond, 1998; Hord, 2009; Webster-Wright, 2009). How could teacher learning be maximized to ensure students benefit?

Teachers seem to learn best when they are engaged in professional development tied to their daily work with students (Darling-Hammond & McLaughlin, 1995; Hattie, 2009; Webster-Wright, 2009). Little (2007) described the value of utilizing teachers' experience in professional learning. McLaughlin and Talbert (2006) stated teachers learned best from activities which:

- focus on instruction and students' learning specific to settings in which they teach;

- are sustained and continuous, rather than episodic;

- provide opportunities for teachers to collaborate with colleagues inside and outside the school;

- reflect teachers' influence about what and how they learn;

- help teachers develop theoretical understanding of the skills and knowledge they need to learn. (p. 9)

These activities improve in situations allowing teachers to apply what they have learned to their work with students, assess the results of that application, and make adjustments as necessary (Schmoker, 2006). Professional learning communities (PLCs) were developed to meet teachers' needs in learning.

History of Professional Learning Communities

Rosenholtz (1989) studied teacher interactions in schools and found that teachers functioned best in an environment which allowed them to feel comfortable in examining, as well as making adjustments to, their practices. About the same time, Senge (2006) wrote about the creation of learning organizations and systems thinking in the business world. Senge (2006) recognized that it was critical for members of an organization to function as a team when engaged in learning. Educators began to explore the possibility of changing school culture to reflect the trends in organizational thinking.

The 1990s attempts to change cultural practices in schools provided the foundation for PLCs (The Center for Comprehensive School Reform and Improvement, 2009). The application of early 1990s contemporary thinking from human relations and organizational theory led to the use of the label, professional learning communities (Hipp & Huffman, 2011). The emergence of business-related literature about how organizations function, such as the work of Senge (2006), set the stage for school leaders to examine the potential for schools to function differently.

Louis, Marks, and Kruse (1996) wrote about teachers' desires to make a difference for children and be viewed as professionals as the primary motivation for operating in a community. As organizational theory began to impact schools, the role

of teachers was examined. Prior to the emergence of PLCs, most teachers, as well as members of the public, thought teachers could do their best for students by simply engaging in the practice of teaching, without consideration for improving the skills used in the practice (Southwest Educational Development Laboratory, 1997).

Louis, Marks, and Kruse (1996) found that learning communities were gaining a foothold in schools, but there were vast differences in implementation from school to school. High schools are generally more challenging environments than elementary schools to implement learning communities (McLaughlin & Talbert, 2010). The difficulty implementing PLCs in high schools may be related to the level of isolation inherent among high school teachers (Hughes & Kritsonis, 2006; McLaughlin & Talbert, 2010). Meister (2010) conducted qualitative research with experienced high school teachers and found the high school teachers' identification with their discipline warranted consideration in order to avoid isolation and to develop PLCs effectively. McLaughlin and Talbert (2010) wrote, "Traditional norms of high school teaching – teaching subjects, rather than students – shape teachers' conceptions of their professional responsibilities and attitudes toward students" (p. 152).

Sparks and Hirsch (1997) added it was not beneficial to improve individual teachers' skills in isolation, taking a one teacher at a time approach. Collaborative teams were a hallmark of PLCs and reflected Senge's (2006) identification of a team as the smallest unit of an organization capable of making improvement. Fullan (2007) noted the need for teachers, teams, schools, districts, and states, to recognize the value of interaction as networks to improve the whole education system.

PLCs Today

The increasing popularity of Professional Learning Communities led to the term "PLC" being used to describe numerous activities in schools, many of which did not reflect any sense of fidelity to the conceptual frameworks associated with PLCs (DuFour et al., 2008; Fullan, 2007; Hargreaves, 2007). The kidnapping of PLC language threatened to cause PLCs to lose focus and relevance. The overuse of the language was not the only concern about contemporary development of PLCs.

A concern for sustaining the teaching and learning focus inherent in PLCs has risen in the age of high-stakes testing. Hargreaves (2007) described the accountability reform-driven view of data utilization in schools as threatening to PLCs, because the collaborative efforts of teachers often became concerned with raising test scores, which diminished focus on teaching and learning. Raising test scores can result in diminished focus on learning, which may be leveraged for other learning, in favor of students simply memorizing and repeating facts (Caine & Caine, 2010). The present day focus on test scores was a product of the standards movement in education. Hord and Tobia (2012) wrote about the impact of standards development on teachers, stating that the organizations that established standards "identified what students are expected to achieve, and significantly, what educators are responsible to teach so that students learn and actually achieve the standards in a high-quality way" (p. 23). The standards movement, as a result, compelled PLCs to focus on learning standards, but the shift in focus distracted from a study of instructional practices, and considerations for learning beyond tested subject matter.

PLC Frameworks

A single definition of PLC doesn't seem to exist (Stoll & Louis, 2007). In fact, there have been a variety of definitions and frameworks for PLCs. The definition of PLC used for this study was Hord's (1997) who wrote: "Professional learning community is defined by what the words state: learn deeply with colleagues about an identified topic, to develop shared meaning, and identify shared purposes related to the topic" (p. 41). DuFour et al. (2006) provided a similar definition, but also included student benefits as a goal of PLCs, in their definition of PLCs.

Regardless of the definition of PLCs, the overall purpose behind PLC development was to improve outcomes for students by improving teachers' practices (DuFour et al., 2006; Muhammad, 2006-2007; Stoll, Bolam, McMahon, Wallace, & Thomas, 2006; Vescio, Ross, & Adams, 2008). The key to improvement of teaching was found in engagement of teachers in learning related to their work (Huffman & Hipp, 2003). Stoll et al. (2006) stated, "It is not insignificant the word 'learning' appears between 'professional' and 'communities,'" (p. 224). When people learn, their sense of meaning and motivation are enhanced (Fullan, 2008a). Furthermore, learning organizations were identified as most likely to adapt to changes and reach their overall vision (Senge, 2006). Efforts to create learning organizations through development of PLCs required schools to recognize the characteristics of PLCs.

A number of frameworks for PLCs have been developed. Louis et al. (1996) conducted research in urban settings and identified establishment of communities of teachers as beneficial. Louis et al. found five characteristics of these communities, which included:

29

- Shared values;

- Reflective dialogue;

- Deprivatization of practice;

- Focus on student learning; and

- Collaboration. (p. 28)

Bryk, Camburn, and Louis (1999) identified core practices in schools, which also included reflective dialogue, deprivatization of practice, and collaboration. Many characteristics identified by Louis et al. (1996), and core practices described by Bryk et al. (1999), are also present in other frameworks.

Hord (2004) identified PLC dimensions. These dimensions included:

- Supportive and shared leadership,

- Shared values and vision,

- Collective learning and application of that learning,

- Supportive conditions,

- Shared practice.

Hord's (2004) dimensions were utilized in the development of assessments of PLCs, such as the PLCA survey. Hipp and Huffman (2011) conducted additional research, which led to the identification of critical attributes of each of Hord's (1997) dimensions, which included:

- Shared and supportive leadership

  o Nurturing leadership among staff.

  o Shared power, authority, and responsibility.

- Broad-based decision making that reflects commitment and accountability.
- Sharing information.

- Shared values and vision

  - Espoused values and norms.

  - Focus on student learning.

  - High expectations.

  - Shared vision guides teaching and learning.

  - Collective learning and application.

- Collective learning and application

  - Sharing information.

  - Seeking new knowledge, skills, and strategies.

  - Working collaboratively to plan, solve problems, and improve learning opportunities.

- Shared personal practice

  - Peer observations to offer knowledge, skills, and encouragement.

  - Feedback to improve instructional practices.

  - Sharing outcomes of instructional practices.

  - Coaching and mentoring.

- Supportive conditions – Structures

  - Resources (time, money, materials, people).

  - Facilities.

  - Communication systems.

31

- Supportive Conditions – Relationships

  o   Caring relationships.

  o   Trust and respect.

  o   Recognition and celebration.

  o   Risk-taking.

  o   Unified effort to embed change. (pp. 24-25)

Fullan (2007) expressed concern that the concepts associated with PLCs were certainly important, but were more a reflection of intentions rather than a practical guide to PLC development. According to Fullan (2007), DuFour and his associates offered practical guidance on how to create and sustain PLCs. To maximize the guidance on and experience with PLC development, understanding the DuFour et al. (2006) framework was valuable.

The six PLC characteristics DuFour, DuFour, and Eaker (2008) offered included:

- Shared mission (purpose), vision (clear direction), values (collective commitments), and goals (indicators, timelines, and targets), all focused on student learning.

- A collaborative culture with a focus on learning.

- Collective inquiry into best practice and current reality.

- Action orientation: Learning by doing.

- A commitment to continuous improvement.

- Results orientation. (pp. 15-17)

Additionally, ensuring that students learn, a culture of collaboration, and a focus on results comprised three big PLC ideas as established by DuFour et al. (2008). This framework has provided many American schools with resources to develop PLCs.

Collaboration seemed to be a very common theme among the PLC frameworks. Why was collaboration so important? In a study of teacher workplaces, Rosenholtz (1989) identified the importance of teachers working together because isolated teachers become uncertain about their abilities and defensive rather than reflective about instructional practices. Bolman and Deal (2008) connected teacher isolation to the teachers having excess freedom in instructional practices. The collaborative approach was critical to allowing teachers to access additional resources (Newman, 1994), and participation in PLCs prevents teacher isolation.

PLC Effectiveness

The primary goal of PLC development was improved student learning. Stoll et al. (2006) wrote, "A key purpose of PLCs is to enhance teacher effectiveness as professionals for students' ultimate benefit" (p. 229). PLCs, however, were recognized as effective in creating improvements for teachers and students (Buffum & Hinman, 2006; Goddard, Goddard, & Tschannen-Moran, 2007; Kilbane, 2009, Stoll et al., 2006). In fact, PLCs were recognized as among the most effective methods of improving schools (DuFour et al., 2008; Schmoker, 2006). Accepting statements about the level of PLC effectiveness required an examination of research that supported PLCs as impacting culture and student achievement.

Effectiveness of PLCs on School Culture

Whether improvements in culture were a product of PLCs, or a product of the process of a school becoming a PLC was not easily determined. Changes in structure and culture were necessary in development of a PLC (Fullan, 2007; Wells & Feun, 2007). Several aspects of culture have improved in schools that have engaged in PLC development.

Reduced teacher isolation is a cultural benefit of PLC development (Hord, 1997). Teacher isolation has been recognized as a barrier to improved instruction (Rosenholtz, 1989). The collaborative nature of PLCs has proven effective in reducing teacher isolation (Astuto & Clark, 1995; Bryk, Camburn, & Louis, 1999; DuFour et al., 2008; Garrett, 2010; Wei, Darling-Hammond, & Adamson, 2010). When teachers were less isolated, they were more inclined to be reflective about instructional practices. Rosenholtz (1989) also found isolated teachers' conversations with colleagues were less likely to be oriented toward improvement of their skills, and more likely to be focused on the wrong issues to improve students' learning.

A second way PLCs improved culture was PLCs represented a systems approach to improvement. A systems approach was identified as a powerful means of organizational improvement (Senge, 2006). While PLCs recognized the importance of the skills of individual teachers, in PLCs, collaborative teacher teams were leveraged to maximize the improvement of individual teachers' skills (DuFour et al., 2006). Engagement in collaborative teams connected teachers to the mission and vision of the school, because they developed a greater understanding of being part of a bigger system (Hord, 1997).

Another beneficial aspect of PLCs was a sense of mutual responsibility for students (Hord, 1997). When teachers engaged in studies of students' needs, they had a greater sense of responsibility for the students assigned to other classrooms. This was a departure from the traditional view of students being assigned to, and the responsibility of, individual teachers (Buffum, Mattos, & Weber, 2009).

Teacher morale improved in PLC schools (Hord, 1997). Buffum and Hinman (2006) identified an improvement in teacher morale after PLC implementation in schools in San Clemente, California. The increased morale related to the enhancement of the level of trust in PLC schools (Bryk & Schneider, 2003). Trust was an essential component to effective implementation of sustainable change (Giles & Hargreaves, 2006; Kotter, 1996).

Leadership in PLC schools is distributed among all professionals. The distribution of leadership was beneficial in connecting teachers to decisions about their area of expertise (Fullan, 2006; Hall, 2006-2007; Hargreaves & Shirley, 2008). The succession of new leaders in a PLC school was offset by the distribution of leadership to teachers. Rosenholtz (1989) wrote about the challenges presented in having a veteran faculty in a school, but stated teachers earlier in their career may encourage the more veteran staff to engage in professional growth. Hord and Tobia (2012) described teachers with a professional attitude as willing to mentor newer teachers. The distribution of leadership to veteran teachers was beneficial to the veterans, as well as newer teachers.

There was a connection between teacher learning and student learning (The Center for Comprehensive School Reform and Improvement, 2009; DuFour et al.,

2008; Goddard et al., 2007; McLaughlin & Talbert, 2006; Stoll et al, 2006). It was important to identify the specific student learning outcomes resulting from improved school culture. Vescio et al. (2008) wrote about developing an understanding of the connection between PLC culture and student learning as, "crucial, particularly in today's era of scarce resources and accountability" (p. 81). So what were the effects of PLC on student learning?

Impact of PLCs on Student Learning

The overall purpose of developing PLCs was to improve results of students. Hord (1997) wrote about several improved outcomes for students in PLC schools. These included better graduation and attendance rates; more equitable distribution of learning; better math, science, and history achievement gains; and reduced achievement gaps among students from different demographic categories. Hughes and Kritsonis (2006) identified the importance of all school staff having the belief that students of all types could learn.

McLaughlin and Talbert (2006) identified evidence of the students' benefits in PLC schools including:

- Positive effects of teacher learning community measures on student achievement for both regional and nationally representative school samples,
- Strong correlation of teacher learning community with teaching practices that predict students learning gains, and
- Strong correlations of teacher learning community and student experience in their school and class.

McLaughlin and Talbert (2006) conducted research in settings in which strong teacher learning communities existed. They found the daily business of the strong learning community schools was centered on students' learning.

Vescio et al. (2008) reviewed literature related to PLCs and found eight studies, which examined the student achievement relationship to PLCs; all the studies noted improvements in student learning. The benefits included improved achievement test scores for students who had some learning difficulties. Vescio et al. (2008) summarized the findings stating:

> Although few in number, the collective results of these studies offer an unequivocal answer to the question about whether the literature supports the assumption that student learning increases when teachers participate in PLCs. The answer is a resounding and encouraging yes. (p. 87)

Conclusion

Chapter II provided a review of literature relative to PLC implementation. This review was aimed at increasing the researcher's knowledge of various frameworks and results of PLC implementation, and supported the study which explored teachers' perceptions of PLC implementation based on their demographic categories and discipline. Specifically, Chapter II examined the history of school reform, change, professional development, PLC history, PLCs today, PLC frameworks, and the effectiveness of PLCs. The effectiveness of PLCs was examined in two subsections; one relating to student achievement, and the other relating to school culture. The results of the literature review indicated initiating and implementing reform challenged schools to change. Change was difficult, and

required development of culture; and PLCs, if developed with fidelity, had more

potential to create the culture changes, and positively impact student learning, than

traditional privatized practice.

CHAPTER III

METHODOLOGY

Purpose of the Study and Research Questions

The purpose of the study was to examine teachers' perceptions regarding
Minot Public School District's implementation of Professional Learning
Communities. The study examined teachers' perceptions about PLC implementation
based on discipline areas.

The research questions included:

1. What perception differences exist about PLC implementation, based on
    teachers' demographics?

2. How do teachers perceive the effectiveness of the MPSD PLC
    implementation?

3. What perception differences exist about PLC implementation based on
    teachers' discipline?

Description of the Population

The research population included MPSD teachers. According to the *2010-
2011 North Dakota Educational Directory* (North Dakota Department of Public
Instruction, 2010), MPSD employed 380 classroom teachers, and 140 "other" teachers
during the 2010-2011 school year. The MPSD faculty could be described as
experienced and well educated, which reflects the availability of master's degree

programs at Minot State University. At the time of this report, the MPSD faculty was comprised of 426 females and 94 males. Survey data from this research is MPSD property. MPSD faculty responses remained anonymous to the researcher, as well as MPSD.

The teacher participants in this study were asked to express their opinions through a rating system provided by the PLCA-R survey, which also afforded participants the opportunity to offer written comments.

Minot Public School District

MPSD is located in Minot, North Dakota, in the Souris River Valley. At the time of this study, Minot had a population of approximately 40,000 people, and was a regional trade center in northwest North Dakota. The economy of Minot has been impacted by agriculture, a United States Air Force Base, Minot State University, and also, an oil boom that occurred around the time of the study. In the summer of 2011, Minot was impacted by a significant flood, which caused an estimated $75 million in damages to school buildings. An estimated 4,000 homes in Minot were damaged by this natural disaster. Six school buildings were damaged; two of which had damage beyond repair.

MPSD had a student enrollment of 7,148 students during the 2010-2011 school year. At the time of this report, MPSD had 19 school buildings. MPSD has had a unique configuration of high school grades, with two campuses for one high school. Central Campus is a building, which serves Grades 9 and 10, while Magic City Campus serves Grades 11 and 12. MPSD has two middle schools in the city of Minot, which serve Grades 6 through 8, and one middle school on Minot Air Force Base,

which serves Grades 7 and 8. There are ten elementary schools, which serve kindergarten through Grade 5, and three elementary schools, which serve kindergarten through Grade 6.

The researcher sought permission from Minot Public School District to conduct research in the school district (Appendix C). He filled out a Request to Conduct Research Permission Form (Appendix D), which was signed by the appropriate authority and returned to the researcher.

MPSD's PLC Implementation

MPSD has engaged in implementation of PLCs for approximately five years. MPSD contracted with Solution Tree for speakers on the subject of PLC implementation, and to conduct a PLC building leaders' academy (Appendix B). MPSD has invested time, effort, and financial resources in PLC implementation. The MPSD AdvancED accreditation process, the Balanced Scorecard strategic plan, and the MPSD Title I program improvement plan provided motivation to pursue PLC implementation.

Survey/Data Collection Instrument

The Professional Learning Community Assessment – Revised (PLCA-R; Appendix E) was utilized to determine perceptions of teachers in regard to PLC implementation. The researcher found the PLCA-R on the SEDL (2012a) website by reviewing literature related to PLC implementation. The PLCA-R was a refined version of the PLCA instrument. The PLCA instrument was developed to gather more accurate perceptions of PLC development than an even earlier survey, Hord's survey, a questionnaire titled the *School Staff as a Professional Learning Community*

Questionnaire, which was developed at the Southwest Educational Development Laboratory to assess schools' efforts to become PLCs (Olivier, 2003).

The PLCA was a 44-statement survey, which utilized a four point Likert-like scale to assess perceptions of Hord's (1997) PLC dimensions. These dimensions included: supportive and shared leadership, shared values and vision, collective learning and application, shared personal practice, and supportive conditions. The PLCA was field tested and found to have internal reliability (Olivier, 2003). Olivier, in reference to the PLCA, stated, "The results of testing indicated that this instrument is very useful as a measurement tool to assess perceptions based on the six dimensions of a PLC" (p. 74). The PLCA was revised by Olivier, Hipp, and Huffman, to add statements related to the utilization of data (Olivier, 2009).

In a presentation to the Louisiana Education Research Association in 2009, Dr. Dianne Olivier presented a revised version of the PLCA survey called the Professional Learning Communities Assessment – Revised (PLCA-R). The PLCA-R contained eight additional statements for gathering information related to the examination of data in PLC processes and related to the utilization of data in PLCs. The PLCA-R has undergone several statistical tests in many school districts across the United States (Olivier, 2009).

Instrument Reliability/Validity

The PLCA-R was tested statistically and has shown continuous confirmation as a reliable and valid tool for assessment of PLC implementation. Olivier (2009) wrote:

Our most recent analyses of this diagnostic tool has confirmed internal consistency resulting in the following Cronbach Alpha reliability coefficients for factored subscales (n=1209): Shared and Supportive Leadership (.94); Shared Values and Vision (.92); Collective Learning and Application (.91); Shared Personal Practice (.87); Supportive Conditions-Relationships (.82); Supportive Conditions-Structures (.88); and a one-factor solution (.97). This latest analysis also provided an opportunity to review descriptive statistics for each item. Mean scores for the measure resulted in a high of 3.27 within the Collective Learning and Application dimension (*School staff is committed to programs that enhance learning*) to a low of 2.74 within the Shared Personal Practice dimensions (*The staff provide feedback to peers related to instructional practices*; p. 5).

The researcher gathered demographic information, which provided a foundation for comparisons among perceptions of teachers based on the assignment in which the teachers served. The PLCA-R had five dimensions, with supportive conditions being divided into relationships and structures (Table 1), as defined by Hord (1997).

Table 1. Dimensions or Groupings of the PLCA-R Questionnaire.

Dimensions	Grouping of Survey Statements by Number
Shared and Supportive Leadership	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
Shared Values and Vision	12, 13, 14, 15, 16, 17, 18, 19, 20
Collective Learning and Application	21, 22, 23, 24, 25, 26, 27, 28, 29, 30
Shared Personal Practice	31, 32, 33, 34, 35, 36, 37
Supportive Conditions – Relationships	38, 39, 40, 41, 42
Supportive Conditions – Structures	43, 44, 45, 46, 47, 48, 49, 50, 51, 52

The PLCA-R was chosen because the researcher desired to utilize an instrument that reflected frameworks found in PLCs, rather than utilizing a PLC rubric as defined by DuFour et al. (2006), which did not include statistical data on validity and reliability.

The PLCA-R was subjected to further review by a panel of experts, who examined the relevance of the newly added survey items (Olivier, 2009). There was strong support for the additional items as a result of the experts' review (Olivier, 2009). The rigorous testing the instrument has undergone made it a valuable tool for MPSD and the purposes of this study. The PLCA-R survey used in this study can be seen in Appendix E.

The PLCA-R is available online through the SEDL (formerly Southwest Educational Development Laboratory, 2012a) website. The survey can be customized, and included a section to gather demographic data such as participants' number of years teaching, number of years employed by MPSD, level of education, gender, grade level of teaching assignment, and discipline. The demographic questions were developed by the researcher, from the literature review, to allow for comparisons of participants' responses based on demographic classifications.

The researcher sought and received permission to utilize the PLCA-R, and also considered utilizing the PLCA-R predecessor, the Survey of Professional Staff as a Learning Community Questionnaire (SPSLCQ), and a PLC rubric from the book, *Learning by Doing: A Handbook for Professional Learning Communities at Work* (DuFour et al., 2006) as was suggested in a July 22, 2010, correspondence from DuFour (Appendix F). In deciding which instrument would support this study, the researcher opted to use the PLCA-R. The rationale for this decision related to

statistical testing of the instrument as well as an informal survey of ten members of a doctoral cohort in K-12 Educational Leadership from the University of North Dakota, in March of 2011. The cohort members unanimously supported the use of the PLCA-R over the SPSLCQ, and most cohort members noted the length of statements in the SPSLCQ as being excessive. Furthermore, the PLCA-R was developed with the intent of better measuring PLC implementation than the SPSLCQ.

The PLC rubric suggested by DuFour (Appendix F) is found in *Learning by Doing: A Handbook for Professional Learning Communities at Work* (DuFour et al., 2006), but did not seem to have statistical data to support reliability and validity, so the researcher opted to utilize the PLCA-R rather than the DuFour rubric. The lack of supporting statistical evidence for the DuFour rubric, when compared with the significant level of testing of the PLCA-R was the impetus for selecting the PLCA-R, and while the PLCA had supporting statistical evidence, the PLCA-R provided enhancements to the PLCA. Thus the researcher chose the PLCA-R, rather than the PLCA.

Data Collection

Data collected for this study was secondary data generated from MPSD teacher participation in the PLCA-R, which occurred between May 3, 2012 and June 1, 2012. The MPSD PLCA-R data was gathered on the SEDL (2012a) website. The researcher wrote to the district superintendent asking for permission to use data received from PLCA-R respondents (Appendix G) and received in return a letter of permission from the MPSD superintendent (Appendix H) to utilize the data for the purposes of this

study. The researcher downloaded the MPSD PLCA-R data from the SEDL (2012a) website in the form of a tab-delimited file.

The MPSD participants were assured of their anonymity in completing the PLCA-R survey. SEDL provides statistical analyses of PLCA-R responses including providing information about standard deviations and mean scores.

Data Analysis

The Statistical Package for Social Sciences 22 (SPSS 22) was utilized by the researcher to conduct a more thorough analysis of the MPSD PLCA-R, than the data available from the SEDL (2012a) website. The use of the online PLCA-R through SEDL ensured greater accuracy in transferring responses, than would entry of data from a paper survey. The survey data was entered into SPSS 22 by the researcher in July, 2012, for statistical analysis. Descriptive data was related to teachers' years of experience, highest degree earned, grade level taught, and primary assignment or discipline. SPSS software was utilized to analyze differences in perceptions of participants based on their survey responses. Comparisons were made to determine differences in perception of PLC implementation between teachers assigned to general education classrooms and specialized assignments, between teachers early in their careers compared to those in late stages of their careers, the differences of perceived implementation of PLC among the six dimensions of PLC implementation, and which dimensions of PLC implementation would require additional professional development.

To determine statistically significant differences in participants' perceptions based on their assignment to regular and special education classrooms, as well as

based on relative experience, an ANOVA test and independent samples t-test was utilized. The ANOVA and independent samples t-tests are tests, which analyze data when there are multiple independent variables. In this study, the independent variables are defined as the teachers' assignments to regular or special education classrooms, and whether the teachers are in early stages of their careers or near the end of their careers.

Conclusion

The methodology used to conduct this study was described in Chapter III. Chapter IV contains results gathered for the study, and Chapter V includes a summary and discussion of the findings of the survey, as well as an analysis of the relationship of the study to the literature review found in Chapter II.

CHAPTER IV

RESULTS

Purpose of the Study

The purpose of this study was to examine teachers' perceptions regarding

MPSD's PLC implementation. The study examined teachers' perceptions about PLC

implementation based on discipline area (subject area in which a teacher specializes).

The research questions included:

1. What perception differences exist about PLC implementation based on
   teachers' demographics?

2. How do teachers perceive the effectiveness of the MPSD PLC
   implementation?

3. What perception differences exist about PLC implementation based on
   teachers' discipline?

The survey used in this study was the PLCA-R (Appendix E) which included

fifty-two statements and a four point Likert type scale, which allowed survey

respondents the opportunity to rate their level of agreement or disagreement on a four-

point scale. The scale ranged from 1 (*strongly disagree*) to 4 (*strongly agree*). The

statements reflected Hord's (2004) dimensions of a PLC. An alpha level of .05 was

set for all statistical tests. Of the approximately 520 MPSD teachers asked to take the

survey, 370 completed it. This represented a response rate of 71%. The MPSD

PLCA-R will be reported in narrative and table form in Chapter IV.

Table 2 depicts a summary of descriptive data related to the survey

respondents' demographics. It includes frequencies and percentages of respondents

for gender, years of experience, primary assignment, and highest degree earned.

Table 2. Number of Respondents ($N = 370$) by Demographic Grouping.

Characteristics	n	%
Gender		
Female	288	78
Male	82	22
Years of Experience		
0 to 5	70	19
6 to 10	69	19
11 to 15	52	14
16 or more	179	48
Grade Level		
Elementary	190	51
Middle School	65	18
High School	115	31
Primary Assignment		
General Educators*	257	69
Specialized Educators**	113	31
Highest Degree Earned		
Bachelor's	200	54
Master's Plus	170	46

* General Educators teach Arts, Elementary, English/Language Arts, Math, Music, Physical Education, Science, and Social Studies
** Specialized Educators cover Career and Technical Education (CTE), Counseling, Library/Media, Special Education, and Title I.

The respondents ($N = 370$) to the survey were 78% female and 22% male. At the time

of this study, females represented 82% and males represented 18% of the total MPSD

faculty. Of the respondents, 19% were in the first five years of teaching, 19% had six

to ten years of teaching, 14% had eleven to fifteen years of experience, and 48% had

over sixteen years in teaching. In the total MPSD population (at the time of this

report), 22% of teachers were in the first five years of teaching, 21% of teachers had

six to ten years teaching experience, 22% of teachers had eleven to fifteen years of

experience, and 35% of teachers had sixteen or more years experience. In the

demographic comparison of grade level assignment, 51% of respondents were

assigned to elementary schools, 18% of respondents were assigned to middle schools,

and 31% of respondents were assigned to high schools, while elementary teachers

were 50% of the total MPSD faculty, middle school teachers represented 20% of the

total faculty population, and 30% of MPSD teachers were assigned to high schools.

In the demographic comparison of highest degree earned, 54% of respondents

had a bachelor's degree and 46% of respondents had a master's or doctorate degree.

In the total MPSD population, 56% of teachers had bachelor's degrees and 44% of

teachers had master's or doctorate degrees.

In the demographic area related to assignment, respondents ($N = 370$) were

grouped into general education ($n = 257$) or specialists ($n = 113$). Table 3 indicates

the number of respondents in each group by discipline and the totals and percentages.

The general educators are 63% of the total MPSD faculty, with the specialists being

37% of the total population.

Table 3. Number of Respondents (*N* = 370) by Primary Assignment.

General Educators	*n*	Specialists	*n*
Arts	4	Career & Technical Ed.	28
Elementary Classroom	125	Counseling	14
English/Language Arts	31	Library/Media	2
Math	20	Special Education	47
Music	13	Title I	23
Physical Education	19		
Science	23		
Social Studies	22		
Total (*n*) / Percent (%)	257 / 69%	Total (*n*) / Percent (%)	113 / 31%

Research Question 1

Research Question 1 asked: What perception differences exist about PLC implementation based on teachers' demographics? The one-way ANOVA and independent samples *t*-tests in SPSS were utilized to determine whether there was a statistical difference in MPSD teachers' mean responses based on the PLCA-R. Results are also reported in this section for highest degree earned, grade level taught, and years of teaching experience. The responses were analyzed based on the six PLC dimensions, as established by PLCA-R.

Gender

An independent samples *t*-test was conducted to compare mean responses based on gender. At the $p < .05$ level there were no statistically significant differences in the mean responses between; females ($M = 3.03$, $SD = .59$) and males ($M = 3.06$, $SD = .58$) when examining the dimension, shared and supportive leadership; females ($M = 3.05$, $SD = .48$) and males ($M = 3.08$, $SD = .52$) in the shared values and vision

dimension; females ($M = 3.12$, $SD = .47$) and males ($M = 3.11$, $SD = .51$) in the collective learning and application dimension; females ($M = 2.91$, $SD = .50$) and males ($M = 3.00$, $SD = .52$) in the shared personal practice dimension; females ($M = 3.12$, $SD = .54$) and males ($M = 3.10$, $SD = .54$) in the supportive conditions/relationships dimension; and females ($M = 3.06$, $SD = .45$) and males ($M = 3.16$, $SD = .43$) in the supportive conditions/structures dimension.

Highest Degree Earned

In the category, highest degree earned, there were three respondents who indicated they had doctorate degrees. The doctorate and master's degree categories were combined and relabeled as "master's plus" ($n = 170$), with the other category being bachelor's degree ($n = 200$). An independent samples t-test was conducted to compare MPSD teachers' mean responses based on highest degree earned. At the $p < .05$ level there were no statistically significant differences in the mean responses between: bachelor's degree respondents ($M = 3.06$, $SD = .58$) and master's plus degree respondents ($M = 3.01$, $SD = .58$) in the shared and supportive leadership dimension; bachelor's degree respondents ($M = 3.09$, $SD = .50$) and master's plus degree respondents ($M = 3.02$, $SD = .47$) in the shared values and vision dimension; bachelor's degree respondents ($M = 3.13$, $SD = .50$) and master's plus respondents ($M = 3.10$, $SD = .45$) in the collective learning and application dimension; bachelor's degree respondents ($M = 2.97$, $SD = .54$) and master's plus respondents ($M = 2.89$, $SD = .46$) in the shared personal practice dimension; bachelor's degree respondents ($M = 3.14$, $SD = .53$) and master's plus respondents ($M = 3.09$, $SD = .55$) in the supportive conditions/relationships dimension; and bachelor's degree respondents

(M = 3.11, SD = .42) and master's plus respondents (M = 3.06, SD = .47) in the supportive conditions/structures dimension.

Grade Level Taught

An analysis of variance (ANOVA) test was conducted to compare MPSD teachers' (N = 370) mean responses based on their assignment to elementary grades (n = 190), middle school (n = 65), or high school (n = 115). There were no statistically significant differences in mean scores in the shared and supportive leadership dimension at the p < .05 value when comparing the teachers working in elementary schools, middle schools, and high school [$F(2,367)$ = 2.36, p = .096].

There was a statistically significant difference at the p < .05 value, in MPSD teachers' mean responses in the shared values and vision dimension when comparing responses from elementary schools, middle schools, and high schools [$F(2,367)$ = 5.35, p = .005]. Post hoc analyses using the Scheffe post hoc criterion for significance indicated elementary teachers' responses (M = 3.11, SD = .49) were significantly higher than high school teachers' responses (M = 2.94, SD = .46).

There was a statistically significant difference at the p < .05 value in MPSD teachers' mean responses in the collective learning and application dimension, when comparing responses from elementary schools, middle schools, and high schools [$F(2,367)$ = 5.92, p = .003]. Post hoc analyses using the Scheffe post hoc criterion for significance indicated that both elementary teachers' (M = 3.16, SD = .47), and middle school teachers' responses (M = 3.20, SD = .49) were significantly higher than high school teachers' (M = 2.99, SD = .47) responses.

There were no statistically significant differences at the $p < .05$ value, in

MPSD teachers' mean responses in the shared personal practice dimension, when

comparing elementary teachers, middle school teachers, and high school teachers

$[F(2,367) = 2.02, p = .134]$.

There was a statistically significant difference at the $p < .05$ value, in the

MPSD teachers' mean responses in the supportive conditions/relationships dimension,

when comparing responses from elementary schools, middle schools, and high schools

$[F(2,367) = 8.38, p = .000]$. Post hoc analyses using the Scheffe post hoc criterion for

significance indicated that both elementary teachers' ($M = 3.13$, $SD = .55$), and middle

school teachers' responses ($M = 3.31$, $SD = .51$), were significantly higher than high

school teachers' ($M = 2.98$, $SD = .51$) responses.

There were no statistically significant differences at the $p < .05$ value, in

MPSD teachers' mean responses in the shared personal practice dimension, when

comparing teachers working in elementary schools, middle schools, and high school

$[F(2,367) = 3.14, p = .731]$.

Years of Experience

An analysis of variance (ANOVA) test was conducted to compare MPSD

teachers' ($N = 370$) mean responses, based on teachers' years of experience, with

years of experience broken down into five or fewer years experience ($n = 70$), six to

ten years experience ($n = 69$), eleven to fifteen years experience ($n = 51$), and sixteen

or more years experience ($n = 180$).

There were no statistically significant differences at the $p < .05$ value, in

MPSD teachers' mean responses in the shared and supportive leadership dimension,

when comparing the teachers with five or fewer years, six to ten years, eleven to fifteen years experience, and sixteen or more years experience [$F(3,366) = 1.89$, $p = .132$].

There were no statistically significant differences at the $p < .05$ value, in MPSD teachers' mean responses in the shared values and vision dimension, when comparing responses from teachers with five or fewer years, six to ten years, eleven to fifteen years experience, and sixteen or more years experience [$F(3,366) = 1.35$, $p = .257$].

There were no statistically significant differences at the $p < .05$ value, in MPSD teachers' mean responses in the collective learning and application dimension, when comparing the teachers with five or fewer years, six to ten years, eleven to fifteen years experience, and sixteen or more years experience [$F(3,366) = 1.42$, $p = .238$].

There was a statistically significant difference at the $p < .05$ value, in MPSD teachers' mean responses in the shared personal practices dimension, when comparing responses from teachers with five or fewer years, six to ten years, eleven to fifteen years experience, and sixteen or more years experience [$F(3,366) = 3.10$, $p = .027$]. Post hoc analyses using the Scheffe post hoc criterion for significance indicated that teachers' with five or fewer years experience ($M = 3.09$, $SD = .59$) responses, were significantly higher than teachers' with sixteen or more years experience ($M = 2.88$, $SD = .50$) responses.

There were no statistically significant differences at the $p < .05$ value, in MPSD teachers' mean responses in the supportive conditions/relationships dimension,

when comparing the teachers with five or fewer years, six to ten years, eleven to fifteen years experience, and sixteen or more years experience [$F(3,366) = 1.74$, $p = .159$].

There were no statistically significant differences at the $p < .05$ value, in MPSD teachers' mean responses in the supportive conditions/structures dimension, when comparing the teachers with five or fewer years, six to ten years, eleven to fifteen years experience, and sixteen or more years experience [$F(3,366) = 1.80$, $p = .146$].

Research Question 2

Research Question 2 asked, "How do teachers perceive the effectiveness of the MPSD PLC implementation?" The PLCA-R survey was designed to measure perceptions of PLC implementation in six dimensions; shared and supportive leadership (Statements 1-11), shared values and vision (Statements 12-20), collective learning and application (Statements 21-30), shared personal practice (Statements 31-37), supportive conditions/relationships (Statements 38-42), and supportive conditions/structures (Statements 43-52). The PLCA-R utilized a four point Likert type of scale in which the responses were 1 (*strongly disagree*), 2 (*disagree*), 3 (*agree*), and 4 (*strongly agree*). Any mean score greater than 2 indicated general agreement, while any mean score less than 2 indicated general disagreement with the statements.

The results of the PLCA-R by PLC dimension were: shared and supportive leadership (*M* = 3.04, *SD* = .58), shared values and vision (*M* = 3.06, *SD* = .49), collective learning and application (*M* = 3.12, *SD* = .48), shared personal practice (*M*

56

= 2.93, *SD* = .50), supportive conditions/relationships (*M* = 3.11, *SD* = .54), and

supportive conditions/structures (*M* = 3.08, *SD* = .45). The highest mean score was in

the collective learning and application dimension, and the lowest mean score was in

the shared personal practice dimension.

Research Question 3

The third research question was, "What perception differences exist about PLC

implementation based on teachers' discipline?" Respondents were asked to identify

their primary assignment (discipline) in the demographic portion of the survey.

MPSD teachers who identified themselves as arts, elementary classroom,

English/language arts, math, music, physical education, science, and social studies,

were identified as general educators (*n* = 257). Specialists (*n* = 113) included career

and technical education, counseling, library/media specialist, special education, and

Title I. An independent samples *t*-test was conducted to compare the mean responses

to the PLCA-R based on six PLC dimensions.

An independent samples *t*-test was conducted to compare MPSD teachers'

mean responses based on primary assignment. There were no statistically significant

differences at the *p* < .05 value, in the mean responses between: general educators

(*M* = 3.00, *SD* = .60) and specialists (*M* = 3.12, *SD* = .53) in the shared and supportive

leadership dimension; general educators (*M* = 3.04, *SD* = .49) and specialists (*M* =

3.10, *SD* = .47) in the shared values and vision dimension; general educators (*M* =

3.11, *SD* = .49) and specialists (*M* = 3.13, *SD* = .45) in the collective learning and

application dimension; general educators (*M* = 2.93, *SD* = .52) and specialists (*M* =

2.92, *SD* = .47) in the shared personal practice dimension; general educators (*M* =

57

3.09, SD = .55) and specialists (M = 3.16, SD = .52) in the supportive conditions/

relationships dimension; and general educators (M = 3.07, SD = .45) and specialists

(M = 3.11, SD = .45) in the supportive conditions/structures dimension.

Summary

The results indicated statistical significance at a p < .05 value, when comparing

the MPSD teachers' mean responses to the PLCA-R from elementary teachers and

high school teachers in the shared values and visions dimension, with elementary

teachers indicating a higher mean level of agreement. In the collective learning and

application dimension both the elementary teachers and middle school teachers mean

responses were higher than high school teachers' mean responses, at the p < .05 value.

In the supportive conditions/relationships dimension the mean responses of elementary

teachers and middle school teachers were higher than high school teachers. The

results were statistically significant at the p < .05 value.

The only other statistically significant results found at the p < .05 value were in

a comparison of MPSD teachers' mean responses from teachers with sixteen or more

years experience, in the shared personal practice dimension, when comparing teachers

with five or fewer years of experience. The less experienced teachers indicated a

higher level of agreement with PLCA-R statements in the shared personal practice

dimension.

Chapter V provides a discussion, summary, and conclusion, regarding PLC

implementation in MPS.

CHAPTER V

DISCUSSION

Chapter V is divided into five sections; a summary of the findings,

conclusions, limitations, recommendations, and recommendations for additional study.

Summary of Findings

The purpose of the study was to determine MPSD teachers' perceptions of

MPSD's PLC implementation. The study was based on three research questions.

MPSD used the PLC framework offered by DuFour et al. (2006) to provide a strategy

for PLC implementation. The PLCA-R survey appeared to provide a valid

measurement of MPSD teachers' perceptions, based on six PLC dimensions as

identified by Hord (1997). Quantitative data generated from MPSD teachers'

responses to the PLCA-R were analyzed to examine whether there were differences in

teachers' perceptions based on their demographic classifications relative to gender,

highest degree earned, and grade level taught, which related to Research Question 1.

The overall perceptions of teachers about the MPSD PLC implementation were

examined, which related to Research Question 2. The differences in MPSD teachers'

perceptions of PLC implementation were examined based on teachers' disciplines, and

this was relative to Research Question 3.

Research Question 1

Research Question 1 asks: What perception differences exist about PLC implementation based on teachers' demographics?

The PLCA-R responses were examined by dimension, and relative to the demographic categories of gender, highest degree earned, grade level taught, and years of experience. According to SEDL (2012b), "Scores of 3 or higher indicate general agreement with the attribute" (PLCA-R Interpretation Steps, Item 1).

Gender.

The gender demographic category was divided into females ($n = 288$) and males ($n = 82$). An independent samples t-test was utilized to compare mean levels of response in each dimension. A $p < .05$ value was used to determine significance. In the shared and supportive leadership, shared values and vision, collective learning and application, supportive conditions/relationships, and the supportive conditions/structures dimensions, females' and males' responses to survey statements indicated general agreement. Only in the shared personal practices dimension did females' ($M = 2.91$) responses not indicate general agreement with the shared personal practices PLCA-R statements, but males' ($M = 3.00$) did indicate general agreement with shared personal practices PLCA-R statements. There were no statistically significant differences between females' and males' responses, in any of the dimensions.

It appears teachers' gender does not impact their perceptions about PLC implementation. The MPSD female teachers' responses in the shared personal practices dimension did not indicate agreement with the PLCA-R statements, but the

shared personal practices dimension consistently had the lowest level of agreement from all groups.

Highest degree earned.

The highest degree earned demographic category was initially divided into three categories; bachelor's degree, master's degree, and doctorate. The demographic portion of the PLCA-R survey asked teachers to indicate the highest degree they had earned. Only three teachers indicated having earned a doctorate, so their responses were combined with the master's degree participants' responses and labeled "master's plus," for purposes of data analysis. An independent samples t-test, with a $p < .05$ value, was used to determine statistical differences in mean responses from MPSD teachers' with bachelor's degrees ($n = 200$) and master's plus degrees ($n = 170$). The MPSD teachers' responses in the shared and supportive leadership, shared values and vision, collective learning and application, supportive conditions/relationships, and supportive conditions/structures dimensions all indicated general agreement with PLCA-R statements. Bachelor's degree teachers' ($M = 2.97$), and master's plus degree teachers' ($M = 2.89$) responses indicated general disagreement with PLCA-R statements in the shared personal practice dimension. There were no statistically significant differences, at the $p < .05$ value, between MPSD bachelor's degree teachers' and MPSD master's plus degree teachers' PLCA-R responses in any of the PLC dimensions.

Considering teachers' levels of education, the shared personal practices dimension had the lowest level of agreement. As PLCs become a more prominent aspect of education, it would be interesting to study undergraduate and graduate

education programs to determine whether students are exposed to PLC concepts in their studies, and whether such exposure would impact the teachers' perceptions of PLC implementation.

Grade level taught.

The demographic portion of the PLCA-R asked teachers to indicate whether they teach primarily at an elementary school ($n = 190$), middle school ($n = 65$), or high school ($n = 115$). A one-way Analysis of Variance (ANOVA) was conducted to compare responses of teachers from the three grade level categories, at the $p < .05$ value. Both the mean responses of MPSD's elementary teachers and middle school teachers indicated general agreement with PLCA-R statements in the shared and supportive leadership, shared values and vision, collective learning and application, supportive conditions/relationships, and supportive conditions/structures dimensions. The high school teachers' ($M = 3.10$) responses to the PLCA-R statements in the supportive conditions/structures dimension indicated general agreement. MPSD high school teachers' mean responses indicated general disagreement with PLCA-R statements in all other dimensions.

The MPSD high school teachers' ($M = 3.10$) relatively high level of agreement in the supportive conditions/structures dimension may relate to the adjustments to scheduling made in the MPSD high schools in recent years. Schedules were developed to support common schedules for teachers to collaborate, which is directly noted in PLCA-R statements in the supportive conditions/structures dimension. Because of PLC implementation, MPSD high schools purchased technology programs to analyze common assessment data, which was reflected in PLCA-R statements in the

supportive conditions/structures dimension. The literature review in Chapter II

indicated the need to change structure and culture to make change, with structure

being more easily changed (Fullan, 2007; Wells & Feun, 2007). MPSD high schools

seem to have some of the important structural pieces in place for PLC implementation,

but should continue to work on also improving culture.

Statistically significant differences at the $p < .05$ value were found in MPSD

teachers' PLCA-R mean responses, when comparing elementary teachers, middle

school teachers, and high school teachers, in the shared values and vision dimension.

Post hoc testing indicated elementary teachers' ($M = 3.11$) responses were

significantly higher than high school teachers' ($M = 2.94$) responses. There were no

statistically significant differences between elementary and middle school teachers'

responses in the shared values and visions dimension.

PLCA-R statements in the shared values and vision dimension reflected the

existence of collaborative processes to develop school values and vision, as well as

school policies and procedures. It seems that individual schools might have different

values, visions, policies, and procedures, but the processes should be similar. Since

the supportive conditions/ structures dimension had a relatively high level of

agreement from MPSD high school teachers, MPSD may wish to leverage the

structures in improving the shared values and vision dimension. Directing teachers to

utilize collaborative time, already built into their schedules, could pay dividends in

improving the sense of shared values and visions.

Statistically significant differences at the $p < .05$ value, were found in MPSD

elementary teachers' ($M = 3.16$), middle school teachers' ($M = 3.20$), and high school

teachers' ($M = 2.99$) mean responses to PLCA-R statements in the collective learning and application dimension. Post hoc testing indicated the both elementary and middle school teachers' mean responses were significantly higher than high school teachers' responses. There were no statistically significant differences found between MPSD elementary teachers' and middle school teachers' mean PLCA-R responses in the collective learning and application dimension.

The MPSD high school teachers' perceptions of the collective learning and application dimension may be hampered by high school teachers' close identification with their subject matter. The PLCA-R statements in the collective learning and application dimension reflect teachers working together and engaging in open dialogue to solve problems related to student learning. It seems unlikely that content area experts would naturally engage with colleagues who have different areas of expertise to solve problems. Elementary and middle school teachers often are less subject specific in their assignments, and could have more colleagues with common circumstances than high school teachers.

Statistically significant differences at the $p < .05$ value were found when comparing both elementary teachers' ($M = 3.13$) and middle school teachers' ($M = 3.31$) responses to high school teachers' ($M = 2.98$) responses in the supportive conditions/relationships dimension. Both the elementary and middle school teachers' responses indicated a greater level of agreement with PLCA-R statements in the supportive conditions/relationships dimension. There were no statistically significant differences between MPSD elementary teachers' and middle school teachers' mean responses in the supportive conditions/relationships.

64

The PLCA-R statements in the supportive conditions/relationships dimension reflect the need to build trust, honesty, respect, and risk-taking. It is difficult to determine why the MPSD high school teachers indicated lower levels of agreement than MPSD's elementary and middle school teachers in the supportive conditions/relationships dimension. MPSD high school leaders may wish to conduct additional school climate research to better identify the potentially difficult aspects of relationships at the high school grade levels.

The statistically significant differences in high school teachers' perceptions of PLC implementation, when compared to elementary teachers' and middle school teachers' perceptions, are reflective of research identified in Chapter II. McLaughlin and Talbert (2010) indicated high schools were more challenging environments in which to develop learning communities, with Hughes and Kristonis (2006) indicating isolation is normal in high schools. The isolation of high school teachers was related to their connection to their subject matter, rather than a student-centered view of their work (McLaughlin & Talbert, 2010; Meister, 2010). MPSD has a unique grade configuration at the high school level, with freshman and sophomore students attending Central Campus and juniors and seniors attending Magic City Campus. Each campus has its own administrative team and faculty, which creates greater challenges in having a unified vision for the schools.

Years of experience.

A one-way Analysis of Variance (ANOVA) with $p < .05$ value, was utilized to compare MPSD teachers' responses to PLCA-R statements in PLC dimensions, when considering teachers' number of years teaching. The demographic portion of the

PLCA-R asked teachers to indicate whether they had five or fewer years of teaching experience ($n = 70$), six to ten years ($n = 69$), eleven to fifteen years ($n = 51$), or sixteen or more years teaching experience ($n = 180$).

The shared and supportive leadership, shared values and vision, collective learning and application, supportive conditions/ relationships, and supportive conditions/structures dimensions yielded no statistically significant differences among MPSD teachers with five or fewer, six to ten, eleven to fifteen, or sixteen or more years of experience. There was general agreement with PLCA-R statements among all four groups in the shared values and vision, collective learning and applications, supportive conditions/relationships, and supportive conditions/structures dimensions.

In the shared values and vision dimension, MPSD teachers with eleven to fifteen years of experience did not indicate a general agreement with PLCA-R statements. All other MPSD teachers' mean responses to PLCA-R statements in the shared values and vision dimension indicated agreement with PLCA-R statements.

Statistically significant differences at the $p < .05$ value, were found in the MPSD teachers' mean responses to PLCA-R shared personal practices dimension, when comparing MPSD teachers with different levels of experience. Post hoc testing indicated responses from teachers with less than five years experience ($M = 3.09$), were significantly higher than responses from teachers' with sixteen or more years of experience ($M = 2.88$). Only the MPSD teachers with five or fewer years of experience indicated general agreement with PLCA-R statements in the shared personal practices dimension, the other MPSD teachers' responses indicated general disagreement with PLCA-R statements in the shared personal practice dimension.

66

The commitment of veteran teachers to mentor newer teachers was identified by Hord and Tobia (2012) as a reflection of veteran teachers' level of professionalism. Rosenholtz (1989) wrote about the possibility of novice teachers positively impacting veteran teachers' attitudes with the enthusiasm they demonstrated. The distribution of leadership to veteran staff, who provide support to novice staff, was identified as valuable to schools efforts in PLC implementation (Fullan, 2006; Hall, 2006-2007; Hargreaves & Shirley, 2008).

The statistically significant findings, when considering teachers' years of experience, confirm the MPSD leadership team's suspicion about veteran teachers' perceptions of PLCs. MPSD may benefit from leveraging the connection between veteran and less experienced teachers in the PLC processing. Enhancement of MPSD's mentoring system would be beneficial in sustaining PLCs. PLCA-R Statement 35 was "Opportunities exist for coaching and mentoring." MPSD has only recently begun work on improving its mentoring process. Such enhancements would only be beneficial to veteran and novice teachers if coaching processes were well-defined, and professional development was planned to support coaching. MPSD has potential to strengthen its PLC implementation by creating structures and culture to support mutual coaching among its faculty.

Research Question 2

Research Question 2 asked: How do teachers perceive the effectiveness of the MPSD PLC implementation?

The PLCA-R was designed to measure perceptions about PLC implementations in six dimensions; shared and supportive leadership, shared values

and vision, collective learning and application, shared personal practice, supportive conditions/relationships, and supportive conditions/structures. A Likert type of scale was utilized with responses of 1 indicating *strong disagreement*, 2 indicating *disagreement*, 3 indicating *agreement*, and 4 indicating *strong agreement*. Determining the overall perceptions of MPSD faculty in regard to PLC implementation is important to the MPSD leadership team because it indicates to leaders dimensions perceived as effectively implemented, and helps leaders identify dimensions, which may need further attention and development. The PLCA-R was developed to meet school districts' needs in sustaining and improving PLC implementation (SEDL, 2012a).

SEDL (2012a), developed the online version of the PLCA-R, and has a website with a page designed to support schools in the interpretation of the PLCA-R. SEDL (2012b) recommended steps in interpreting the PLCA-R, including scanning PLCA-R statements individually and in dimensions to look for mean scores of three or higher. Scores above three indicate general agreement with items or dimensions. SEDL (2012b) recommended examination of standard deviations, with large standard deviations indicating less agreement among responses.

Considering the SEDL (2012b) recommendations, the MPSD teachers' responses indicated general agreement in: the shared and supportive leadership dimension ($M = 3.04$, $SD = .58$); the shared values and vision dimension ($M = 3.06$, $SD = .58$); the collective learning and application dimension ($M = 3.12$, $SD = .48$); the supportive conditions/relationships dimension ($M = 3.11$, $SD = .50$); and the supportive conditions/structures dimension ($M = 3.08$, $SD = .45$). The dimension with

the highest general agreement was the collective learning and application dimension, which included nine statements, related to the staff members working together to learn collegially and exploring teaching and learning related topics.

The shared personal practice dimension was the lowest rated based on the MPSD teachers' mean PLCA-R responses ($M = 2.93$, $SD = .50$). Since mean responses lower than 3.0 are not considered generally in agreement with the PLCA-R statements, the shared personal practice dimension indicated a weakness in the MPSD PLC implementation. There were seven statements in the shared personal practices dimension of the PLCA-R, which related to teachers' opportunities to coach, mentor, and provide feedback to one another, as well as examine students' work and improve instruction. The shared personal practice dimension of PLC implementation has not been emphasized in MPSD's implementation, and was based on the DuFour et al. (2008) framework.

Teacher collaboration which has taken place in MPSD's PLC implementation has involved examining learning standards, identifying common assessments, and creating interventions for struggling learners, but little attention has been paid to the benefits of teachers coaching teachers by observation and feedback. Professional development in teacher peer coaching could improve PLC implementation in MPSD.

Research Question 3

Research Question 3 asked: What perception differences exist about PLC implementation based on teachers' discipline?

Research Question 3 relates to a major purpose of the study; to determine whether teachers assigned to general education roles perceive PLC implementation

69

differently than specialists. General educators held curricular standards and scopes and sequences in common. Specialists were defined as teachers who base their work on students' individual needs, rather than a defined curricular scope and sequence.

The MPSD teachers ($N = 370$) were asked to identify their primary teaching assignment (Table 3). In the demographic portion of the PLCA-R the teachers who selected arts, elementary classroom, English/language arts, math, music, physical education, science, and social studies, were sorted into the general educator variable. The specialist variable included teachers who selected on the PLCA-R their primary assignment included career and technical educators, counseling, library/media, special education, and Title I. An independent samples t-test, with a $p < .05$ value, was conducted to determine whether there were statistically significant differences in MPSD teachers' mean responses based on their assignment as general educators ($n = 257$), or specialists ($n = 113$).

No statistically significant differences at the $p < .05$ value, were found in mean responses of MPSD general educators ($n = 257$), and specialists ($n = 113$) in any of the PLC dimensions. MPSD teachers' mean responses indicated general agreement with PLCA-R statements in all dimensions except the shared personal practice dimension. The general education teachers' ($M = 2.93$) responses, and specialists ($M = 2.93$) responses in the shared personal practice dimension did not indicate general agreement. In Chapter II, in the framework offered by Hipp and Huffman (2011), the PLCA-R shared personal practice dimension included the following components:

- Peer observations to offer knowledge, skills, and encouragement.
- Feedback to improve instructional practices.

- Sharing outcomes of instructional practices.

- Coaching and mentoring (p. 25).

The shared personal practice dimension PLCA-R components offer guidance for MPSD's leadership team in sustaining and improving MPSD's PLC implementation. The shared personal practice dimension consistently generated the lowest mean responses in the PLCA-R, considering demographics, as well as teachers' primary assignment.

Conclusions

There were no statistically significant differences found between MPSD's female and male teachers' perceptions in any PLC dimensions based on the PLCA-R responses. The MPSD PLC implementation was perceived as proceeding well by females and males alike. There were also no statistically significant differences in MPSD teachers' perceptions of PLC implementation based on the PLCA-R, when considering the highest degree earned. There were statistically significant differences in MPSD teachers' perceptions based on the PLCA-R, when considering grade level taught and years of experience.

The statistical analysis in the study indicated high school teachers have a lower level of agreement with statements in the shared values and vision, collective learning and application, and the supportive conditions/relationships dimensions. The lower level of agreement is reflected in PLC literature, but may also be related to the unique grade configuration in MPSD's high schools. Not only are high school teachers potentially isolated because of the level of recognition with their chosen subject area (Meister, 2010, McLaughlin & Talbert, 2010), but MPSD high school teachers are

also isolated based on freshman and sophomore students attending Central Campus, and juniors and seniors attending Magic City Campus. This grade configuration presents challenges for disciplinary teams to collaborate. This may relate to each campus having its own administrative staff and faculty, which creates challenging circumstances in creating a common vision and schedule.

MPSD teachers with less than five years of experience indicated a higher level of agreement with PLCA-R statements in the shared personal practice dimension, than did MPSD teachers with sixteen or more years of experience. Rosenholtz (1989) described teachers, who were new to the profession, as more enthusiastic than teachers with more experience. MPSD would benefit from enhancing the relationships between veteran and less experienced teachers through improved mentoring systems.

Teachers' overall perceptions of the MPSD PLC implementation were positive. The mean responses to the PLCA-R were above 3.0, which SEDL (2012b) indicated was the cutoff for a general sense of agreement, in five of six dimensions. Only the shared personal practice dimension received mean responses below 3.0. The shared personal practice dimension consistently received the lowest mean responses. The shared personal practices dimension is the most ripe for MPSD improvement efforts, and an examination of the component parts of the shared personal practices dimension would be prudent. PLCs emphasize continuous improvement, and MPSD should examine the weakness in the shared personal practices dimension to make improvements. The MPSD utilization of the PLC framework offered by DuFour et al. (2008) has not emphasized the elements of shared personal practice. Enhancement of

structures and professional development aimed at enhancing teachers observing and coaching peers would be beneficial to the district.

There were no statistically significant differences found in MPSD teachers' mean PLCA-R responses when considering teachers' assignment to general education duties, or specialist duties. The lack of statistically significant differences indicated MPSD's general education faculty and specialists perceive the MPSD PLC implementation similarly.

Limitations of the Study

- The study was conducted in one school district.

- The sample size, while representing a large percentage of MPSD teachers, was not large.

- The MPSD teachers have not previously completed the PLCA-R.

- Researcher bias may have impacted the conclusions of the study.

- There were some differences in the number of respondents per demographic categories.

- The stress caused by flooding may have impacted MPSD teachers' attitude toward PLC implementation.

- A $p < .05$ value was utilized to determine statistical significance in all of the study's statistical testing.

Recommendations

1. Particular attention should be paid to the potential for accountability and data-driven instruction to distract from further development of

73

collaborative culture in MPSD. All schools, in the age of accountability,

have potential to forget the importance of viewing teaching as an art, as

well as a science. Teaching is a social activity, and the temptation to

attempt to view only statistical outcomes, such as high stakes test scores,

diminishes teaching as an art and fails to recognize the benefits of

developing relationships among teachers. Reverting to methods that

isolate teachers harms efforts to empower teachers as professionals

capable of high-level educational discussions and decisions. Isolation

also creates resistance to change, and should be viewed as a threat to the

students' educational well being. Teacher isolation must be avoided.

2. MPSD should make specific efforts to diminish the norm of isolation
   found in high schools. The unique grade configuration in MPSD's high
   schools should be reconsidered in planning for further PLC
   implementation.

3. MPSD should continue to conduct the PLCA-R survey on an annual
   basis to allow for longitudinal analysis of the perceptions of PLC
   implementation.

4. A needs assessment, based on the six PLC dimensions, should be
   conducted to determine professional development activities to further
   bolster PLC implementation efforts. The shared personal practice
   dimension should be the focus of future PLC professional development.

5. MPSD should explore utilizing the teachers with more than sixteen years
   of experience to mentor teachers with less than five years experience, in

an effort to harness the enthusiasm of the newer staff members as identified by Rosenholtz (1989), and enhance the skills of the new teachers by allowing them to learn from veteran faculty. MPSD's mentoring systems should be reviewed and improved to support the connection of veteran and less experienced staff.

Recommendations for Further Study

Additional research in PLC implementation should include:

1. Additional quantitative and qualitative studies to compare teacher perceptions of PLC implementations in similar school systems, which have used different PLC frameworks;

2. Qualitative study of the MPSD PLC implementation to further examine teachers' perceptions, including utilizing the comments submitted by teachers who completed the PLCA-R;

3. Qualitative and quantitative studies comparing administrators' perception of PLC implementation with teachers' perceptions;

4. Studies examining student achievement in schools, which used different PLC implementation frameworks; and

5. Longitudinal comparisons of PLCA-R results in MPSD.

APPENDICES

APPENDIX A

MINOT PUBLIC SCHOOL DISTRICT (MPSD)
PROFESSIONAL DEVELOPMENT PLAN

Minot Public School District #1

Professional

Development Plan

2010-2011

North Dakota Professional Development Report

Minot 1

215 2ⁿᵈ St SE

Minot, ND 58701

701-857-4400

See guidance form for completing the plan.

To complete this form:

1. **Enter your responses**
2. **Click "Save" at the bottom of the form to save your responses.**
3. **To submit your report, return to the dashboard, go to the Required Reports section, and click the North Dakota Professional Development Report "submit" button.**

Note: Please review your responses if you are copying and pasting from Word. There may be some compatibility issues that will need to be edited.

COMPONENTS OF THE PROFESSIONAL DEVELOPMENT PLAN
1. **Vision and Beliefs**
2. **Using Data and Results**
3. **Teaching and Learning**
4. **Leadership and Guidance**
5. **Resources, Support and Environment**
6. **Evaluation of the Professional Development Plan**

Complete each of the following:

District Authorized Representative completing this form:

First Name, Last Name:

Steve Joyal

Email:

steve.joyal@sendit.nodak.edu

Phone:

701- 857-4457

Fax:

701- 857-4432

REA:

MDEC

Professional Development Writing Team
(Select "Repeat" to open more entry fields to add additional team members)

Enter team member:

First name, Last name, Position:
Steve Joyal, Curriculum Director

Enter team member:

First name, Last name, Position:
Shawneen Voiles, Reading Professional Development Coordinator

Enter team member:

First name, Last name, Position:
Stephanie Drovdal, Math Professional Development Coordinator

Enter team member:

First name, Last name, Position:
Jeff Holm, Student Services Director

Enter team member:

First name, Last name, Position:
Mark Vollmer, High School Principal

Enter team member:

First name, Last name, Position:
Pam Stroklund, Career and Technology Coordinator

1. **Vision and Beliefs**

    1.1 **State your district's vision and belief statements:**

    Our vision is to ensure that Minot Public School District becomes "the premier school system in the state of North Dakota as measured by the North Dakota Assessment and ACT. We will focus on our students' academic performance and personal development. All graduates will have the foundation to become productive members of society, who convey pride in their identification as Minot Public School alumni."

    Our mission statement is "Empower all Learners to succeed in a changing world"

    1.2 **Describe how the vision and beliefs guide professional development within the district.**

    In 2006 the board decided to adopt the Balanced Scorecard, which has a strategy map with five perspectives—each with objectives, or targets, linked to performance measures. The measures identified by the Scorecard represent a tool for leadership to use in communicating to employees and stakeholders the outcomes by which the district will achieve its mission and vision.

    The Balanced Scorecard contains measures and targets that track the progress of the district towards its identified goals. The Balanced Scorecard model – with the five perspectives linked to objectives and tracked by results – is perfectly aligned to support the district's efforts to promote student achievement and district vision. The Balanced Scorecard model coincides with the NCA/AdvancED standards: 1) in providing the district with a unified mission and vision, 2) a structure for the leadership to track the progress toward the commitment to the improvement in student performance, 3) a focus on student learning as the "bottom line" of the district, 4) as measured by identified results, 5) as a means of tracking support and resource services, 6) as a communication tool to share with stakeholders, and 7) as tool to annually track the identified measures of growth and improvement.

    Each school is responsible for developing its own goals that are aligned with the district perspectives of the balanced scorecard. The philosophy of Professional Learning Communities is the means to achieve the district's vision by "Focusing on Student Learning."

    Every school within the district has developed their school improvement plan, which is aligned to the district mission, vision, and the district's

balanced scorecard perspectives and objectives. Performance measures are identified for each objective and SMART goals written to achieve each objective.

Professional learning communities are viewed by Minot Public Schools, as the vehicle to meet many of the district's objectives in student learning. The PLC process involves collaboration that answers three critical questions:

1. What do we want our students to learn?

2. How will we measure whether they reach our expectations?

3. What interventions will we provide to ensure students do learn the expected standards?

With this in mind, and keeping student achievement as the focus of our efforts, each school will engage in the collaborative process to answer these three critical questions. By establishing the "essential learning" standards, common formative assessments, and systematic interventions, Minot Public Schools will attain a strategic focus on enhanced reading and math results. The commitment to the PLC process has guides the districts professional development.

2. **Using Data Results**

   2.1 **Identify data sources and how they are used to create or modify professional development goals.**

   The performance measures of the Balanced Scorecard are linked to the NDSA, ACT, and MAP scores as measures of student growth. Each school completes a Report of Adequate Yearly Progress (AYP) that is published in the district's annual report. In addition, the schools complete data dashboards that use charts and graphs that look like fuel gauges. The dashboards provide a transparency and commitment to accountability. The data dashboards and more complete school profiles show current realities of the school's progress toward meeting student achievement goals and provide a guidepost of accountability on the journey of school improvement.

   One of the big ideas of PLC is a focus on results. This is linked both to the performance measures in the Balanced Scorecard as well as standard four in the accreditation process. Analyzing data and making decisions at the district, school, and classroom levels have been a major focus for the Minot Public Schools in the past several years.

The district has made an investment in improving student performance by using assessment data to improve instruction. In order to accomplish this, training and resources have been committed to provide teachers and administrators with the tools they need to use data effectively. All students in reading and math in grades 2 through 10 with the Measures of Academic Progress (MAP). This computerized assessment is given in the spring and fall and provides immediate results so that teachers, parents, and students can identify learning connected to specific benchmarks and can set learning goals.

The Data Manager helps the schools gather and display the achievement data so that it can be communicated and utilized throughout the district. Other assessments are used at various grade levels to identify student learning needs or readiness.

The additions of a data manager and a data warehouse have aided in the effectiveness of the district's efforts to transform data into information. Recent efforts have focused on improving classroom assessments with professional development of formative assessments. The district has initiated pilot studies with two programs to help teachers with the implementation of common formative assessments (Mastery Manager, LS Test Builder).

DIBELS (K-1) and Rigby Benchmark (grades 3-5) assessments are administered to help identify and monitor reading progress.

2.2 Describe how professional development needs are addressed from the perspective of teachers, school administrators, school board members, and parents (NDCC 15.1-18.2, Section 13, requirement)

In order to help the schools examine their data, each school has an assigned data coach who is trained with Viewpoint. The district's Data Manager assists the school data leader(s) with using Viewpoint and pulling data from the warehouse to create a school profile and a data dashboard. A data dashboard is developed by each school to provide a graphic display of student achievement in NDSA and MAP scores. The data dashboard provides information to enable staff to set SMART goals and track progress in meeting their identified goals. The Viewpoint program can be a valuable tool, for staff to compare various forms of data and track this data longitudinally.

3. **Teaching and Learning**

3.1A **Based on your data, identify district professional development goals and initiatives (NCA AdvancED or State Education Improvement Process [SEIP] goals).**

School Improvement Goal #1 (SEIP or NCA/AdvancED):

The district focus for professional development for 2010-2011 is in the fourth year of orienting the staff in the "big ideas of PLC." The focus this year is "what are we doing for students who haven't learned or if they have already learned."

A NCA Quality Assurance Review (QAR) conducted last spring reinforced this direction in the written response to the standard of Teaching and Learning. The report indicated the district was "emerging" in this area and thus not meeting accreditation requirements. The document provided opportunities for improvement in this area. The visitation team identified a need for growth in the research, implementation and expansion in the area of "what students have not learned" and students "who already know it." These areas directly relate to two of the four questions of professional learning communities and also to implementation of Response to Intervention (RTI).

Goal #1: To continue the district's growth and development in becoming a Professional Learning Community.

Professional Development Goal #1 (Aligned to School Improvement Goal #1 – state in S.M.A.R.T Goal format):

All staff will participate in professional development activities supporting the development of the four questions of PLC. Specific emphasis in 2010/2011 will be in assessment and interventions.

List strategies or activities to carry out the goal:

To meet these challenges and continue the growth in becoming a professional learning community, the district has implemented the following initiatives:

- During the 2009-2010 school year, Solution Tree provided a PLC Academy training for building leaders in Minot Public Schools. This academy involved six days of train-the-trainer professional development, which enabled all schools to have their principal and school improvement team leaders competent in directing the PLC process in each school. The district's 10% set aside funds from Title I ARRA for professional

development were utilized to pay the costs of the PLC Academy. The 100 staff trained at the academy will become PLC leader/trainers in their schools.

- PLC administrative leadership teams have been developed. There are four administrative leadership teams. Each focuses on a key component of the PLC process including, development of the PLC culture, definition of essential learnings, common formative assessments, and interventions. These teams will engage in a collaborative process to determine professional development needs, and then recommend professional development activities to meet those needs. The goal of this training was to develop leaders to increase the knowledge of the PLC development in the district.

- Title I district professional development set aside funds will continue to be utilized to hire two professional development coordinators. Reading will be the focus for one coordinator, and math the other coordinator. These coordinators will work closely with the curriculum director in determining professional development needs in math and reading literacy among faculty. Upon completion of a needs assessment, the coordinators will facilitate formulation of a staff development plan, respective to their area of specialty. This plan will include implementation schedules and evaluations of the professional development activities. Specific areas of examination may include determination of levels of fidelity to adopted curriculum, teachers' understanding of reading and math data, teachers' understanding of assessment as it informs instruction, and teachers' understanding of best practices in reading or math instructional strategies.

  A book study will be conducted with elementary and middle school staff with the book *Pyramid Response to Intervention* by Buffum, Mattos, and Weber. This book will be an introduction to RTI and a prelude to the coming of one of the book's authors on February 21, 2011.

- Minot Public Schools will utilize district staff development resources to contract with Solution Tree to bring Austin Buffum to speak about creating an RTI program in conjunction with the PLC efforts. This will help establish the direction for schools in their ongoing work to design intervention programs for struggling students.

  High school staff will host a presenter from Solution Tree to present on the Effectiveness of Assessment and Student Learning with the focus on common formative assessments.

- Professional development focused on Ruby Payne's Foundations of Poverty will be available throughout the 2010-2011 school year. Minot Public Schools has several Foundations of Poverty trainers, who will offer this training to assist the district in meeting the needs of students in some of the subgroups, which failed to meet adequate yearly progress goals.

Instructional activities: The district will develop curricular and instructional activities that are directly related to the identified goals.

In development of the PLC process, Minot Public Schools will identify the essential learnings (standards) in the areas of math and reading. This will occur through collaboration among the faculty at grade levels within each building, as well as across the district to ensure standard expectations for the students.

Once these learnings are defined, the collaborative process will be utilized to develop common assessments of the standards. These common assessments provide faculty members with the opportunity to make comparisons about their students' progress toward meeting the expectations. These comparisons afford the teachers the chance to examine best practices based on action research conducted locally.

The final piece of the PLC process involves the development of intervention for students who are not mastering the identified standards at the expected rate. These interventions will be standardized in an RTI format, which will allow students to access assistance in the classroom, with supplemental assistance, or on an individualized basis.

Minot Public Schools will implement instructional techniques related to enhancing students' test taking strategies. This may include instruction related to common testing vocabulary. Research indicates that students who understand testing vocabulary, such as compare and contrast, are more successful in demonstrating proficiency on tests.

Timeline for goal completion:

Professional development activities will be completed by May, 2011.

List who will participate in the activity (NDCC 15.1-18.2, Section 13 requirement):

All staff will participate in professional development activities to support this goal.

Describe how participation will be documented (NDCC 15.1-18.2, Section 13 requirement):

Documentation by attendance at the scheduled activities.

3.1B Based on your data, identify professional development goals and initiatives (NCA/AdvancED or State Education Improvement Process [SEIP] goals.

School Improvement Goal #2 (SEIP or AdvancED):

All students will demonstrate proficiency in math as measured by NDSA.

Professional Development Goal #2 (Aligned to School Improvement Goal # 2 – state in S.M.A.R.T. Goal format):

Grade levels K-6 will continue the development of essential learnings for Mathematics.

List strategies or activities to carry out the goal:

Teachers will develop the math essential learnings in collaborative groups. The District Math Coordinator will compile the grade level documents.

Timeline for goal completion:

Essential learnings for mathematics in grades K-6 will be completed by February of 2011.

List who will participate in the activity (NDCC 15.1-18.2, Section 13 requirement):

All K-6 grade level teachers working in collaborative groups.

Describe how participation will be documented (NDCC 15.1-18.2, Section 13 requirement):

Participation is documented by teacher attendance in the PLC collaborative groups.

Select "Repeat" to open another set of 3.1C fields for each additional School Improvement Goal. Scroll down to the bottom of the 3.1C section to find the newly-added blank fields.

Optional:

3.1C **Based on your data, identify district professional development goals and initiatives. (This could be a goal other than NCA/AdvancED or State Education Improvement Process [SEIP] goals.)**

Indicate goal # (3,4,…)

Goal #3

School Improvement Goal (This could be goal other than NCA/AdvancED or SEIP):

Goal #3 All students will demonstrate grade level reading proficiency as measured by NDSA.

Professional Development Goal (aligned to a goal other than NCA/AdvancED or SEIP.):

Teachers will be trained to identify student reading levels, monitor growth in reading, and deliver interventions to improve student reading skills.

List strategies or activities to carry out this goal:

Teachers in grade K-1 will be trained to administer DIBELS assessment.

Teachers in grades 2-5 will be trained in Rigby benchmark reading assessment.

Seven instructional strategists have been hired to work directly with K-3 teachers to model instructional strategies and support staff with ongoing professional development.

Training in two reading interventions: Read 180 and System 44 will be conducted for teachers at middle schools and selected elementary schools.

Reading coordinator conducts scheduled meetings with Literacy Advisory Committee to evaluate progress.

Timeline for goal completion:

Although this goal will be monitored each year, it will be an ongoing initiative evaluated on a regular basis.

List who will participate in the activity (NDCC 15.1-18.2, Section 13 requirement):

Participation will involve the teachers involved in implementation of the reading interventions.

Describe how participation will be documented (NDCC 15.1-18.2, Section 13 requirement):

Participation will be documented by teacher attendance in the activity.

3.2 **Describe how professional development goals encourage a collaborative culture across the district. (Refer to all S.M.A.R.T. goals in 3.1 in your collective summary response.)**

All Minot Public Schools are expected to follow the principles of professional learning communities. One of the three "big ideas" of PLC is a collaborative culture. As schools identify their school-based goals aligned with the district goals is an expectation that this is done in collaborative groups.

3.3 **Describe how the district will ensure that professional development addresses the needs of all adult learners and provides support to teachers at all career stages, including first-year teachers and those who are new to the district. (Refer to all S.M.A.R.T. goals in 3.1 in your collective summary response.)**

The following activities will support the goal to improve reading:

Title I district professional development set aside funds will continue to be utilized to hire two professional development coordinators. Reading will be the focus for one coordinator, and math the other coordinator. These coordinators will work closely with the curriculum director in determining professional development needs in math and reading literacy among faculty. Upon completion of a needs assessment, the coordinators will facilitate formulation of a staff development plan, respective to their area of specialty. This plan will include implementation schedules and evaluations of the professional development activities. Specific areas of examination may include determination of levels of fidelity to adopted curriculum, teachers' understanding of best practices in reading or math instructional strategies.

3.4 Describe how activities will support academic achievement for all students (e.g. Title I, Special Education, Gifted and Talented). (Refer to all S.M.A.R.T. goals in 3.1 in your collective summary response.)

Title I district professional development set aside funds will continue to be utilized to hire two professional development coordinators. Reading will be the focus for one coordinator, and math the other coordinator. These coordinators will work closely with the curriculum director in determining professional development needs in math and reading literacy among faculty. Upon completion of a needs assessment, the coordinators will facilitate formulation of a staff development plan, respective to their area of specialty. This plan will include implementation schedules and evaluations of the professional development activities. Specific areas of examination may include determination of levels of fidelity to adopted curriculum, teachers' understanding of best practices in reading or math instructional strategies.

4. Leadership and Governance

4.1 Describe how district and school leadership will be engaged in the facilitation of the professional development plan.

Minot Public Schools has engaged in a strategic planning process known as the "Balanced Scorecard." The philosophy associated with this type of plan involves the recognition that strategically focused organizations examine data across a number of perspectives, and make decisions based on needs. This is a business model that recognizes that profit is the overarching goal for business organizations, but it is a model that has been successfully adopted by a number of schools. The distinction between a business using this process, and a school using the Scorecard is that schools' overall goals relate to student learning.

In preparing for the current strategic planning process the school board, superintendent, and the superintendent's cabinet recognized the current research from Douglas Reeves, Mike Schmoker, and others, which identifies a correlation between extensive strategic plans and decreased student achievement. With this in mind, the group explored processes, which were concise and focused. This led to the adoption of the Balanced Scorecard. The Minot Public School's strategy map is attached. Each individual school has developed a strategy map that is directly aligned to the district's strategy map.

Further refinement has occurred and the processes involved with professional learning communities (PLCs) have become the vehicle by which the critical perspectives from the district strategy map will be met. The PLC philosophy engages staff members in collaboration and relates to the three big ideas.

- Focus on Learning- we believe that the fundamental purpose for our school is student learning and therefore, we should be willing to examine the impact of all practices which effect learning

- Collaborative Culture- high level learning for all students can only happen through the development of high performing teams.

- Focus on Results- we assess our effectiveness based on results rather than intentions.

All building level administrators are part of a leadership team in one of four areas related to PLC concepts. These four concepts are:

1. Creating a collaborative culture, and to encourage understanding of the PLC process.

2. Identifying essential learning/power standards including:

   - Leverage-How does an essential learning relate to other expectations?
   - Endurance- Is the essential learning lasting?
   - Readiness for the next level- Is this necessary to prepare students for the next level?

3. Common formative assessments

4. Interventions.

5. Resources, Support, and Environment

5.1 Describe how the district will utilize its resources to support professional development activities.

The district supports the professional development of research-based instructional strategies through a variety of delivery models. A train-the-trainer model is used as a cost effective way to build local expertise in a strategy or concept and to offer graduate classes of job-embedded training to staff. The district's six professional development days for all certified staff include presentations from nationally known presenters, workshops by trained staff members utilizing the train-the-trainer model or job-embedded department or grade-level collaboration. Each school ahs a site-based professional development fund to support travel and registration costs to learn about strategies and innovations aligned with school and district goals. The following is a list of staff and activities provided by the district to support teacher growth and promote student achievement for all students:

- Professional Development (6 days)
- Graduate Classes
- Book Studies directly tied to district PLC goal
- PLC Academy
- Teacher/Mentor Program
- District Data Manager- individual Building Level Data Managers
- Reading Interventionists
- Curriculum Technology Partners
- Site-based Staff Development Funds
- Teach Camp (Best practices for teaching and learning through technology integration)
- Arts Coordinator
- Gifted & Talented Staff
- Instructional/Performance Strategists
- PLC Big Idea Concept Teams (Focus on Learning, Collaborative Culture, Focus on Results)
- Math and Reading Professional Development Coordinators

The Minot Public School District program improvement plan will be evaluated using a mixed methods approach. This approach will examine the qualitative and quantitative data. The qualitative measures will include evaluation surveys related to the professional development activities associated with the staff development coordinators' plans and the Foundations of Poverty training. My Learning Plan will be utilized to track professional development activities.

The quantitative data that will be examined for the purposes of evaluation will include formative assessment data based on the common assessments developed through collaboration. The MAP test data are tracked for purposes of meeting school improvement (Balanced Scorecard) goals. The North Dakota Assessment data for all subgroups will be examined to determine progress toward meeting the goals established within this plan.

Results of this evaluation will be shared with the Minot Public School District's board of education, and will be included in the Minot Public School District's annual report.

6. **Evaluation of the Professional Development Plan**

   6.1 **Districts should review the results of their professional development S.M.A.R.T. Goals annually to determine effectiveness of the plan and determine if modifications are needed.**

**IF THE PLAN IS MODIFIED, THE DISTRICT MUST SUBMIT THE
REVISED PROFESSIONAL DEVELOPMENT PLAN ONLINE THROUGH
NDMILE.**
NO WRITTEN RESPONSE IS REQUIRED.

North Dakota Professional Development Report Submitted on:

10/29/2010 1:06:20 PM

APPENDIX B

SOLUTION TREE CONTRACT FOR PLC PD

Solution Tree
555 North Morton Street
Bloomington, IN 47404
812.336.7700, 866.300.3135 FAX
www.solution-tree.com

HOST CONTRACT

THIS CONTRACT entered into by and between Solution Tree Inc., (formerly National Educational Service), an Indiana Corporation whose principle place of business is located at 555 North Morton Street, Bloomington, Indiana 47404, and the Minot Public Schools, 215 2nd St. SE, Minot, ND 58701 (hereinafter referred to as "Host.")

WITNESSETH

WHEREAS, Consultant is engaged in the business of organizing and promoting educational consultancies and workshops and of meeting the needs of educators;

WHEREAS, Consultant is desirous of providing the personal services of Solution Tree Associates to make presentations and provide consulting for the host on the following educational topic – Professional Learning Communities at Work™, through a Professional Learning Communities at Work Coaching Academy.

WHEREAS, Consultant is a nationally recognized leader in the field of staff development and is desirous of offering such services to the host;

NOW THEREFORE, in consideration of the mutual promises and covenants contained herein, the sufficiency of which consideration is hereby acknowledged, the parties now agree as follows:

1. **Nature of Contract**. The parties acknowledge that the host is engaging Consultant's services as an independent contractor.

2. **Compensation**. As compensation for services to be provided hereunder, Consultant will be paid according to the agreed upon conditions further detailed in this contract.

3. **Duties of Solution Tree**. Consultant agrees to provide a facilitator to disseminate information for the Minot Public Schools Professional Learning Communities at Work™ Coaching Academy.

4. **Travel Arrangements and Expenses**. The facilitator shall make all travel arrangements in conjunction with the host. Travel and lodging expenses for the facilitator are included in the design cost.

5. **Payment**. Consultant shall submit an invoice for the total honorarium for each coaching academy session. Resources purchased in conjunction with the academy are included in the total cost of the academy. The host will provide a purchase order for the entire amount of the contract prior to the commencement of Consultant duties; payment terms are net 30 from date of invoice. Payments not made within one week on due date are subject to Finance Charge of 1.5% monthly.

6. **Nonperformance Arising From Events Out of Control of Parties**. In the event Consultant fails to perform under the terms of this Contract as result of events or circumstances outside of contractor control, such as illness, acts of nature, etc., Consultant agrees to offer services at a later date, provided such can be rescheduled with

93

1

the host. Solution Tree shall have an affirmative duty to notify the host immediately of any circumstance or event that will prevent Solution Tree from performing under this Contract. Should Host cancel for any reason at any time prior to ninety (90) days before scheduled event, Host agrees to pay 20% of the total honorarium fee. In the event that Host cancels this agreement with 90 days or less of the scheduled event, Host shall be liable to pay 20% of the total honorarium fee plus any additional expenses incurred by Consultant in performance of this agreement.

7. **Remedies**. In the event Solution Tree breaches this Contract, the host may immediately terminate this Contract, and in addition may recover compensatory and consequential damages and costs arising from the breach, and may seek all legal and equitable remedies available under law. In the event the host breaches the contract, Solution Tree may do the same.

8. **Attorney Fees**. In the event of a breach of this Contract, the nonbreaching party may recover, in addition to any damages or other remedies, reasonable attorney fees and costs incurred in the enforcement of this Contract.

9. **Nonassignability**. This is a personal services Contract, and the obligations under this Contract are not assignable by Solution Tree without the prior written consent of the host.

10. **Notices**. All notices to be given under this Contract shall be sent by certified mail to Consultant at: Solution Tree, 555 North Morton Street, Bloomington, IN 47404, and to host at Minot Public Schools 215 2nd St. SE, Minot, ND 58701, or to such address as may be given by either party in writing. Notice shall be deemed given on the date of mailing.

11. **Severability**. The unenforceability, invalidity, or illegality of any provision of this Contract shall not render the other provisions unenforceable, invalid, or illegal.

12. **Governing Laws/Exclusive Jurisdiction**. This Contract shall be construed and interpreted in accordance with the laws of the State of Indiana, and the parties agree that the courts of the State of Indiana shall have exclusive jurisdiction over any legal proceedings commenced in connection with this Contract.

13. **Entire Contract**. This contract constitutes the entire Contract of the parties. No waiver or modification of any of the terms of the Contract shall be effective unless made in writing and signed by the party or parties. This Contract consists of:

2

Minot Public Schools PLC Coaching Academies	
Dates & Associates	**Academy 1** Session 1: October 5 – 6, 2009 Ginny Mahlke Session 2: November 16 – 17, 2009 Ginny Mahlke Session 3: March 15 – 16, 2010 Ginny Mahlke **Academy 2** Session 1: October 7 – 8, 2009 Paul Farmer Session 2: November 18 – 19, 2009 Paul Farmer Session 3: March 17 – 18, 2010 Paul Farmer
Participants	Total of 100 Teachers and Administrators (50 per Academy)
Content	**"Minot Public Schools PLC at Work Coaching Academy":** Content: • What do we want students to learn? • How will we know if they have learned it? • What are we going to do if they have not learned it? • What are we going to do if they have learned it? Objectives: • Understand the concept and attributes of a professional learning community. • Examine research-based best practices and standards for becoming a professional learning community. • Experience and create sample processes and products reflective of professional learning communities. • Acquire strategies and tools for designing, implementing, and evaluating a school's journey towards becoming a professional learning community. • Design a plan of action for implementing the professional learning community concept at your school. • Apply new learning to daily work. • Participate actively by engaging in conversations and teamwork. • Reflect on and self-assess personal knowledge, skills, and beliefs.
Resources	Each participant will receive the following: PLC Coaching Academy Binder: 100 Total (50 per Academy) *Learning By Doing*: 100 Total (50 per Academy) *Revisiting Professional Learning Communities at Work*: 100 Total (50 per Academy) Each participating school team will receive: *The PLC Toolkit*: 20 Total (10 per Academy)

3

Minot Public Schools PLC Coaching Academy Total Cost

Solution Tree will provide the Minot Public Schools two PLC Coaching Academies, with all stated services and resources, for $ 150,000.00 ($ 75,000.00 per Academy) to a maximum of 100 participants (50 participants per Academy). If the number of participants exceeds 50 per Academy, a one-time fee of $1,500 plus $250 per additional participant will be due. If the number of participants exceeds 75 per Academy, the addition of a second coach necessitates a revised contract.

IN WITNESS WHEREOF, the parties have executed this document on this day, July 30, 2009. Pricing contained in this Contract will expire 30 days after date of issue unless signed and returned with a valid purchase order and deposit.

SOLUTION TREE, INC

_____   _____
                                        Shannon R. Ritz
Minot Public Schools   Solution Tree, Inc

Date: 8/26/09   Date: 8/28/09

Please Provide the Following Information in all three sections:

Who will be the contact person for the work?

Contact: Steve Joyal
Title: Curriculum Director
Phone: 701 857-4426
E-mail: steve.joyal@sendit.nodak.edu
Fax: 701.857.4432

Who will receive and pay the invoices?

Contact: Jeff Holm
Title: Student Services Director
Phone: 701-857-4457
E-mail: jeff.holm@minot.K12.nd.us
Fax: 701-857-4432

Shipping Information (required):
Shipping Contact: Steve A Joyal
Shipping Address: 610 Burdick Expy East
City, state, zip: Minot, ND 58701
Phone: 701-857-4426
Delivery Date: 7:30 M-F
Delivery Times: 7:30-8:30

Choose one:

☑ Do you have a Delivery Dock?
☑ Do you have double doors (for pallet)?
☐ Do you require inside delivery?

4

APPENDIX C

REQUEST TO CONDUCT RESEARCH IN MPSD

April 17, 2012

Kim Slotsve, Curriculum Director
Minot Public School District
215 2ⁿᵈ St SE
Minot, ND 58701

Dear Kim:

As you know, I am currently working under the supervision of Dr. Sherryl Houdek from the University of North Dakota to complete my dissertation in support of my efforts to earn my doctorate in educational leadership at the University of North Dakota. It is my plan to study the differences in teachers' perceptions PLC implementation, based on their assignment to general education, or specialized teaching assignments. I will also explore teachers' perceptions of PLC implementation based on their years of experience in education.

I plan to utilize data generated from the PLCA-R survey, which Superintendent Vollmer has decided to implement to assess Minot Public School District efforts to implement PLCs. Since the district will implement the use of the PLCA-R, I am requesting to use secondary data generated from the survey. All teachers who participate will remain anonymous, so there are no foreseeable harmful effects to the participants as a result of this study. The PLCA-R is a statistically reliable survey, which utilizes a Likert-like scale to measure perceptions across the dimensions of a PLC. The PLCA-R will be conducted online through SEDL, and there will be useful information provided to Minot Public School District for assessment and planning purposes. I will be happy to share results of my study with the district upon completion.

If you have questions about my use of the district's PLCA-R data, or any questions about my dissertation study, you may contact me at 857-4457. You may also direct questions to Dr. Sherryl Houdek, at the University of North Dakota. Her office phone number is 701-777-2394. Dr. Houdek may also be contacted via email at: sherryl.houdek@email.und.edu. If there are any complaints or concerns about my use of the data, the University of North Dakota Institutional Review Board may be contacted at 701-777-4279. I have attached the Minot Public School District form for conducting research. Please let me know if you have questions.

Sincerely,

Jeff

97

APPENDIX D

MPSD REQUEST TO CONDUCT RESEARCH PERMISSION FORM

Minot Public Schools
Minot, ND 58701

Request to Conduct Research in the Minot Public Schools Procedure
(October, 2001)

1. Individuals who request to conduct graduate educational research in the Minot Public Schools must complete this form and obtain signatures of the Minot Public Schools building principal(s), curriculum coordinator, and the graduate advisor.

2. Individuals conducting graduate research in the Minot Public Schools are affiliated with a university and will also have the permission of the university Institutional Review Board (IRB).

3. Copies of this form will be on file at the Minot Public Schools Curriculum Office, school(s) where research is conducted, and the university.

****

Describe the research to be conducted including the research instruments to be used. Please attach any copies of cover letters to be sent with data collecting instruments or letters used to explain research to parents and students.

My request is to utilize secondary data generated from the

district's implementation of the PLCA-R survey. My

dissertation study will analyze differences in Teachers'

perceptions of PLC implementation, based on their

assignments to general education or specialized teaching

assignments. None of the research will subject teachers

to harmful situations, and no teachers will be identified

in the process of completing the survey.

Signatures

Student conducting research: _____
Principal(s): _____

Curriculum Coordinator: _____
University Advisor: _____
Date: _____

98

APPENDIX E

PLCA-REVISED SURVEY

Professional Learning Communities Assessment - Revised

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

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

Scale: 1 = Strongly Disagree (SD)
2 = Disagree (D)
3 = Agree (A)
4 = Strongly Agree (SA)

	STATEMENTS	SCALE			
	Shared and Supportive Leadership	SD	D	A	SA
1.	Staff members are consistently involved in discussing and making decisions about most school issues.	0	0	0	0
2.	The principal incorporates advice from staff members to make decisions.	0	0	0	0
3.	Staff members have accessibility to key information.	0	0	0	0
4.	The principal is proactive and addresses areas where support is needed.	0	0	0	0
5.	Opportunities are provided for staff members to initiate change.	0	0	0	0
6.	The principal shares responsibility and rewards for innovative actions.	0	0	0	0
7.	The principal participates democratically with staff sharing power and authority.	0	0	0	0
8.	Leadership is promoted and nurtured among staff members.	0	0	0	0
9.	Decision-making takes place through committees and communication across grade and subject areas.	0	0	0	0
10.	Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.	0	0	0	0
11.	Staff members use multiple sources of data to make decisions about teaching and learning.	0	0	0	0

COMMENTS:

	STATEMENTS	SCALE			
	Shared Values and Vision	SD	D	A	SA
12.	A collaborative process exists for developing a shared sense of values among staff.	0	0	0	0
13.	Shared values support norms of behavior that guide decisions about teaching and learning.	0	0	0	0
14.	Staff members share visions for school improvement that have undeviating focus on student learning.	0	0	0	0
15.	Decisions are made in alignment with the school=s values and vision.	0	0	0	0
16.	A collaborative process exists for developing a shared vision among staff.	0	0	0	0
17.	School goals focus on student learning beyond test scores and grades.	0	0	0	0
18.	Policies and programs are aligned to the school=s vision.	0	0	0	0
19.	Stakeholders are actively involved in creating high expectations that serve to increase student achievement.	0	0	0	0
20.	Data are used to prioritize actions to reach a shared vision.	0	0	0	0

COMMENTS:

	Collective Learning and Application	SD	D	A	SA
21.	Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work.	0	0	0	0
22.	Collegial relationships exist among staff members that reflect commitment to school improvement efforts.	0	0	0	0
23.	Staff members plan and work together to search for solutions to address diverse student needs.	0	0	0	0
24.	A variety of opportunities and structures exist for collective learning through open dialogue.	0	0	0	0
25.	Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.	0	0	0	0
26.	Professional development focuses on teaching and learning.	0	0	0	0
27.	School staff members and stakeholders learn together and apply new knowledge to solve problems.	0	0	0	0

12

28.	School staff members are committed to programs that enhance learning.	0	0	0	0
29.	Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.	0	0	0	0
30.	Staff members collaboratively analyze student work to improve teaching and learning.	0	0	0	0

COMMENTS:

	STATEMENTS	SCALE			
	Shared Personal Practice	SD	D	A	SA
31.	Opportunities exist for staff members to observe peers and offer encouragement.	0	0	0	0
32.	Staff members provide feedback to peers related to instructional practices.	0	0	0	0
33.	Staff members informally share ideas and suggestions for improving student learning.	0	0	0	0
34.	Staff members collaboratively review student work to share and improve instructional practices.	0	0	0	0
35.	Opportunities exist for coaching and mentoring.	0	0	0	0
36.	Individuals and teams have the opportunity to apply learning and share the results of their practices.	0	0	0	0
37.	Staff members regularly share student work to guide overall school improvement.	0	0	0	0

COMMENTS:

	Supportive Conditions – Relationships	SD	D	A	SA
38.	Caring relationships exist among staff and students that are built on trust and respect.	0	0	0	0
39.	A culture of trust and respect exists for taking risks.	0	0	0	0
40.	Outstanding achievement is recognized and celebrated regularly in our school.	0	0	0	0
41.	School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.	0	0	0	0
42.	Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.	0	0	0	0

COMMENTS:

13

	Supportive Conditions – Structures	SD	D	A	SA
43.	Time is provided to facilitate collaborative work.	0	0	0	0
44.	The school schedule promotes collective learning and shared practice.	0	0	0	0
45.	Fiscal resources are available for professional development.	0	0	0	0
46.	Appropriate technology and instructional materials are available to staff.	0	0	0	0
	STATEMENTS	**SCALE**			
		SD	D	A	SA
47.	Resource people provide expertise and support for continuous learning.	0	0	0	0
48.	The school facility is clean, attractive and inviting.	0	0	0	0
49.	The proximity of grade level and department personnel allows for ease in collaborating with colleagues.	0	0	0	0
50.	Communication systems promote a flow of information among staff members.	0	0	0	0
51.	Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.	0	0	0	0
52.	Data are organized and made available to provide easy access to staff members.	0	0	0	0

COMMENTS:

Source: Olivier, D. F., Hipp, K. K., & Huffman, J. B. (In progress). Assessing and analyzing schools as PLCs. In K. K. Hipp & J. B. Huffman (Eds.). *Professional learning communities: Purposeful Actions, Positive Results*. Lanham, MD: Rowman & Littlefield.

APPENDIX F

DUFOUR CORRESPONDENCE

Search Results | Delete

Forward | Forward as Attachment | Reply | Reply All

Subject: Re: Question from Minot, North Dakota
From: "Richard DuFour" <rdufour@d125.org>
Date: Thu, July 22, 2010 8:25 am
To: jeff.holm@minot.k12.nd.us
Priority: Normal
Options: View Full Header | View Printable Version

HI Jeff,

I am not aware of any surveys that have asked teachers for what they value
about the PLC philsophy. We have created both a brief survey about where
teachers feel their school is on the PLC journey and a more extensive
rubric for exploring a school's position on the PLC journey is available
in the second edition of Learning by Doing.

Will your study explain the elements of PLCs and ask people to react to
how much they value that element regardless of whether or not their school
is doing it, or will you attempt to determine their perceptions of PLCs
based on their actual experience with the process. If it is the later,
then you will need one instrument for determining the extent to which the
school is funtioning as a PLC (like the rubric in Learning by Doing) and a
second to assess their attitudes. Your hypotheses would be, the more
deeply the process is embedded in their schools, the more favorable they
will be toward it. One other caution. Particularly in middle and high
schools, people in different departments can have very differeent
perceptions based on the progress of their department, so it might also be
beneficial if your survey asks people to indicate not only their school
but also their departments to identify those differences.

Rick

Download this as a file

Attachments:

untitled-[2]   2.6 k   [text/html]   Download | View

103

APPENDIX G

REQUEST LETTER FOR
USE OF MPSD PLCA-R DATA

April 17, 2012

Mark Vollmer, Superintendent
Minot Public School District
215 2nd St SE
Minot, ND 58701

Dear Mark:

Recently we discussed the PLCA-R survey, which was designed to measure teacher perceptions of PLC implementation. When I showed you the PLCA-R, you decided it should be implemented by our district for ongoing assessment and planning as we continue our journey to become a PLC. I am writing to request permission to utilize the data generated from responses from our teachers for my dissertation as I pursue my doctorate in education from the University of North Dakota. I am conducting my study under the supervision of Dr. Sherryl Houdek, and plan to study differences in perception about PLC implementation between general education faculty and teachers in specialized assignments (i.e., special education, counseling, Title I). I also plan to analyze the perceptions of teachers based on their years of experience in education. I am requesting your permission, in writing, to conduct my research utilizing Minot Public School District's PLCA-R data.

It is my understanding you are expecting all faculty members to complete the survey. I can assure that my use of the data would not be harmful to any of the participating faculty. None of the participating faculty members will be identified in the process of completing my study. I feel the analysis of the PLCA-R results from Minot Public School District will be utilized to make general recommendations about the district's ongoing efforts to improve through PLC implementation. I will be happy to share my study with Minot Public School District upon completion.

If you have questions or concerns about my use of the PLCA-R data, please contact me. Or you may contact Dr. Sherryl Houdek at the University of North Dakota. Her office phone number is 701-777-2394. You may also contact Dr. Houdek via email at: sherryl.houdek@email.und.edu. If there are any complaints or concerns about my use of the data, the University of North Dakota Institutional Review Board may be contacted at 701-777-4279. Thank you for your consideration.

Sincerely,

Jyll Holm

APPENDIX H

PERMISSION LETTER FROM MPSD SUPERINTENDENT

Minot PUBLIC SCHOOLS
"Empower all learners to succeed in a changing world"

Mark Vollmer, Superintendent
mark.vollmer.1@sendit.nodak.edu

215 2nd St SE • Minot, ND 58701
Phone 701-857-4422 • Fax 701-857-4432

May 11, 2012

Jeff Holm, Assistant Superintendent
Minot Public School District #1
215 2nd St. SE
Minot, North Dakota 58701

Mr. Holm:

I am writing to give you permission to use data from the PLCA-R Survey we recently implemented in Minot Public Schools. The responses from this survey, and your dissertation study, will likely provide our district with valuable information as we move ahead as a PLC district. As you know, the efforts to become a PLC have already paid dividends to our district in terms of improved results for students and staff.

I look forward to the opportunity to visit with you about the results of your study upon its completion. There is real value in ensuring all faculty members are as engaged in PLCs as possible, and your comparison of general educators with those in specialist assignments will help establish our level of engagement in all disciplines. Good luck with your dissertation.

Sincerely,

Mark Vollmer

Mark Vollmer, Superintendent
Minot Public School District #1

REFERENCES

AdvancED, (2012). *Company overview*. Retrieved October 6, 2012, from

      http://www.advanc-ed.org/company-overview

Astuto, T. L., & Clark, D. L. (1995). Activators and impediments to learner centered

      schools. *Theory into Practice*, *34*(4), 243-249.

Bolman, L. G., & Deal, T. E. (2008). *Reframing organizations: Artistry choice and*

      leadership. San Francisco, CA: John Wiley & Sons, Inc.

Bryk, A., Camburn, E., & Louis, K. S. (1999, December). Professional community in

      Chicago elementary schools: Facilitating factors and organizational

      consequences [Supplement]. *Educational Administration Quarterly*, *35*, 751-

      781.

Bryk, A., & Schneider, B. (2003). Trust in schools: A core resource for school reform.

      Educational Leadership, *60*(6), 40-44.

Buffum, A., & Hinman, C. (2006). Professional learning communities: Reigniting

      passion and purpose. *Leadership*, *35*(5), 16-19.

Buffum, A., Mattos, M., & Weber, C. (2009). *Pyramid response to intervention: RTI*

      professional learning communities, and how to respond when kids don't learn.

      Bloomington, IN: Solution Tree Press.

Bullough, R. J., Jr. (2007). Professional learning communities and the eight year

      study. *Educational Horizons*, *85*(3), 168-180.

Caine, G., & Caine, R. N. (2010). *Strengthening and enriching your professional learning community: The art of learning together.* Alexandria, VA: Association for Supervision and Curriculum Development.

Center for Comprehensive School Reform and Improvement, The. (2009). *Professional Learning Communities*. Retrieved April 15, 2011, from http://www.centerforcsri.org/plc/index.html

Chetty, R., Friedman, J. N., & Rockoff, J. E. (2011). The long-term impacts of teachers: Teacher value-added and student outcomes in adulthood (NBER Working Paper Number 17699). Cambridge, MA: National Bureau of Economic Research.

Clark, D. L., & Astuto, T. A. (1994). Redirecting reform: Challenges to popular assumptions about teachers and students. *Phi Delta Kappan*, *75*(7), 512.

Darling-Hammond, L. (1998). Teacher learning that supports student learning. *Educational Leadership*, *55*(5), 6-11.

Darling-Hammond, L. (2009). Teaching and the change wars: Professionalism hypothesis. In A. Hargreaves & M. Fullan (Eds.), *Change wars (*pp. 45-70). Bloomington, IN: Solution Tree Press.

Darling-Hammond, L., & McLaughlin, M. W. (1995). Policies that support professional development in an era of reform. *Phi Delta Kappan*, *76*(8), 597-605.

Dewey, J. (2001). *The school and society & The child and the curriculum*. Mineola, NY: Dover Publications, Inc.

Doolittle, G., Sudeck, M., & Rattigan, P. (2008). Creating professional learning

    communities: The work of professional development schools. *Theory into*

    Practice, *47*(4), 303-310.

Drake, T. L., & Roe, W. H. (1986). *The principalship*. New York, NY: Macmillan

    Publishing Company.

DuFour, R. (2004). What is a "professional learning community"? *Educational*

    Leadership, *61*(8), 6-11.

DuFour, R., DuFour, R., & Eaker, R. (2008). *Revisiting professional learning*

    communities at work: New insights for improving schools. Bloomington, IN:

    Solution Tree.

DuFour, R., DuFour, R., Eaker, R., & Many, T. (2006). *Learning by doing: A*

    handbook for professional learning communities at work. Bloomington, IN:

    Solution Tree.

DuFour, R., Eaker, R., & DuFour, R. (Eds.). (2005). *On common ground: The power*

    of professional learning communities. Bloomington, IN: National Education

    Service.

Fullan, M. (2006). Leading professional learning. *The School Administrator*, *63*(10),

    10-14.

Fullan, M. (2007). *The new meaning of educational change* (4th ed.). New York, NY:

    Teachers College Press.

Fullan, M. (2008a). *The six secrets of change: What the best leaders do to help their*

    organizations survive and thrive. San Francisco, CA: John Wiley & Sons, Inc.

Fullan, M. (2008b). *What's worth fighting for in the principalship* (2nd ed.). New York, NY: Teachers College Press.

Garrett, K. (2010). Professional learning communities allow a transformational culture to take root. *The Education Digest*, *76*(2), 4-9.

Giles, C., & Hargreaves, A. (2006). The sustainability of innovative schools as learning organizations and professional learning communities, during standardized reform. *Educational Administration Quarterly*, *42*(1), 124-156.

Goddard, Y. L., Goddard, R. T., & Tschannen-Moran, M. (2007). A theoretical and empirical investigation of teacher collaboration for school improvement in public elementary schools. *Teachers College Record*, *109*(4), 877-896.

Guskey, T. R. (2003). What makes professional development effective? *Phi Delta Kappan*, *84*(10), 748-750.

Hall, W. (2006-2007). Leadership development: The critical element in sustaining the cultural changes of a professional learning community. *National Forum of Educational Administration and Supervision Journal*, *24*(1), 44-49.

Hargreaves, A. (2007). Sustainable professional learning communities. In L. Stoll & K. S. Louis (Eds.). *Professional learning communities: Divergence, depth, and dilemmas*. New York, NY: McGraw-Hill.

Hargreaves, A., & Fullan, M. (Eds.). (2009). *Change wars*. Bloomington, IN: Solution Tree Press.

Hargreaves, A., & Goodson, I. (2006). Educational change over time? The sustainability and nonsustainability of three decades of secondary school change and continuity. *Educational Administration Quarterly*, *42*(1), 3-41.

Hargreaves, A., & Shirley, D. (2008). Beyond standardization: Powerful new
    principles for improvement. *Phi Delta Kappan*, *90*(2), 135-143.

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

Hattie, J. A. C. (2009). *Visible learning: A synthesis of over 800 meta-analyses*
    relating to achievement. New York, NY: Routledge.

Hipp, K. K., & Huffman, J. B. (Eds.). (2011). *Demystifying professional learning*
    communities. Lanham, MD: Rowman & Littlefield Education.

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

Hord, S. M. (2004). Professional learning communities: An overview. In S. M. Hord
    (Ed.), *Learning together: Leading together* (pp. 5-14). New York, NY:
    Teachers College Press.

Hord, S. M. (2009, Winter). Professional learning communities: Educators work
    together toward a shared purpose-Improved student learning. *Journal of Staff*
    Development, *30*(1), 40-43.

Hord, S. M., & Tobia, E. F. (2012). *Reclaiming our teaching profession: The power of*
    educators learning in community. New York, NY: Teachers College Press.

Hughes, T. A., & Kritsonis, W. A. (2006). A national perspective: Professional
    learning communities and the impact on school improvement efforts. *National*
    Journal for Publishing and Mentoring Doctoral Student Research, *1*(1), 1-11.

Huffman, J. B., & Hipp, K. K., (2003). *Reculturing schools as professional learning communities*. Lanham, MD: Scarecrow Education

Kilbane, J. F., Jr. (2009). Factors in sustaining professional learning community. *NASSP Bulletin*, *93*(3), 184-205.

Kotter, J. P. (1996). *Leading change*. Boston, MA: Harvard Business School Press.

Levin, B. (2009). Reform without (much) rancor. In A. Hargreaves & M. Fullan (Eds.), *Change wars* (pp. 259-272). Bloomington, IN: Solution Tree Press

Little, J. W. (2007). Chapter 9 Teachers' accounts of classroom experience as a resource for professional learning and instructional decision making. *Yearbook of the National Society for the Study of Education*, *106*, 217-240. Doi: 10.1111/j.1744-7984.2007.00103.x.

Louis, K. S., Kruse, S. D., Bryk, A. S., Hopkins, J., King, J. A., Lonnquist, M. P., . . . & Weiss, D. A. (1995). *Professionalism and community: Perspectives on reforming urban schools*. Thousand Oaks, CA: Corwin Press, Inc.

Louis, K. S., Marks, H. M., & Kruse, S. (1996). Teachers' professional community in restructuring schools. *American Educational Research Journal*, *33*(4), 757-798.

Marzano, R. J., Waters, T., & McNulty, B. A. (2005). *School leadership that works: From research to results*. Aurora, CO: Mid-continent Research for Education and Learning.

McLaughlin, M. W., & Talbert, J. E. (2006). *Building school-based learning communities: Professional strategies to improve student achievement*. New York, NY: Teachers College Press.

McLaughlin, M. W., & Talbert, J. E. (2010). Building professional learning

 communities in high schools: Challenging and promising practices. In L. Stoll

 & K. S. Louis (Eds.), *Professional learning communities: Divergence, depth,*

 and dilemmas (pp. 151-165). New York, NY: Open University Press.

Meister, D. G. (2010). Experienced secondary teachers' perceptions of engagement

 and effectiveness: A guide for professional development. *The Qualitative*

 Report, *15*(4), 880-898.

Muhammad, A. (2006-2007). Do we believe they can learn? *National Forum of*

 Educational Administration and Supervision Journal, *24*(1), 14-19.

National Association of Elementary School Principals [NAESP]. (2001). *Leading*

 learning communities: Standards for what principals should know and be able

 to do. Alexandria, VA: National Association of Elementary School Principals.

National Commission on Excellence in Education, The. (1983, April). A nation at risk:

 The imperative for educational reform. A report to the nation and the Secretary

 of Education, United States Department of Education. Washington, DC: U.S.

 Government Printing Office.

Newman, F. M. (1994, Spring). School-wide professional community. *Issues in*

 Restructuring Schools, *6*, 1-2. Madison, WI: Wisconsin Center for Education

 Research.

No Child Left Behind Act of 2001, 20 U.S.C. (2008). Retrieved from

 http://www2.ed.gov/policy/elsec/leg/esea02/index.html

North Dakota Department of Public Instruction. (n.d.). *The Title I AYP communication toolkit for schools: A resource for communicating with parents on Adequate Yearly Progress, program improvement identification, and sanctions under the No Child Left Behind Act*. Bismarck, ND: North Dakota Department of Public Instruction.

North Dakota Department of Public Instruction. (2010). *2010-2011 North Dakota educational directory*. Bismarck, ND: North Dakota Department of Public Instruction.

Olivier, D. F. (2003). Assessing schools as PLCs. In J. B. Huffman & K. K. Hipp (Eds.), *Reculturing schools as professional learning communities* (pp. 67-74). Lanham, MD: Scarecrow Education.

Olivier, D. F. (2009, March). *Assessing schools as professional learning communities: Symposium introduction, Professional Learning Communities Assessment-Revised*. Paper presented at the Annual Meeting of the Louisiana Education Research Association, Lafayette, LA. Retrieved from http://ullresearch.pbworks.com/f/Olivier_Assessing_PLCs_Symposium_-_PLCA-R_Introduction.pdf

Orlich, D. C. (1989). *Staff development: Enhancing human potential.* Boston, MA: Allyn and Bacon.

Pankake, A. M., & Moller, G. (2003). Overview of professional learning communities. In J. B. Huffman & K. K. Hipp (Eds.), *Reculturing schools as professional learning communities* (pp. 3-14). Lanham, MD: ScarecrowEducation, an imprint of The Row & Littlefield Publishing Group, Inc.

Patterson, K., Grenny, J., Maxfield, D., McMillan, R., & Switzler, A., (2008).

    Influencer: The power to change anything. New York, NY: McGraw-Hill.

Ravitch, D. (2010). *The death and life of the great American school system: How*

    testing and choice are undermining education. New York, NY: Basic Books.

Reeves, D. B. (2006, December/2007, January). How do you change school culture?

    Educational Leadership, *64*(4), 92-94.

Reeves, D. B. (2009). *Leading change in your school: How to conquer myths, build*

    commitment, and get results. Alexandria, VA: Association for Supervision and

    Curriculum Development.

Rosenholtz, S. J. (1989). *Teachers' workplace: The social organization of schools*.

    New York, NY: Longman.

Schleicher, A. (2009). International benchmarking as a lever for school reform. In A.

    Hargreaves & M. Fullan (Eds.), *Change wars* (pp. 97-116). Bloomington, IN:

    Solution Tree Press.

Schmoker, M. (2006). *Results now: How we can achieve unprecedented improvements*

    in teaching and learning. Alexandria, VA: Association for Supervision and

    Curriculum Development.

SEDL (Formerly Southwest Educational Development Laboratory). (2012a).

    Professional Learning Community Assessment-Revised (PLCA-R) online.

    Retrieved from http://www.sedl.org/pubs/catalog/items/plc01.html

SEDL (Formerly Southwest Educational Development Laboratory). (2012b).

    Professional Learning Communities Assessment-Revised: Interpreting results.

    Retrieved from http://www.sedl.org/plc/assessment_interpreting_results.html

Senge, P. M. (2006). *The fifth discipline: The art and practice of the learning organization* (Rev. ed.). New York, NY: Currency Doubleday.

Slavin, R. E. (2007). *Educational research in an age of accountability*. Boston, MA: Pearson Education, Inc.

Solution Tree. (2011). *All Things PLC*. Retrieved April 15, 2011, from http://allthingsplc.info

Solution Tree. (2012). *What we do*. Retrieved October 6, 2012, from http://www.solution-tree.com/about/what-we-do

Southwest Educational Development Laboratory. (1997). Professional learning communities: What are they and why are they important? *Issues ...about Change*, 6(1), 1-7.

Sparks, D., & Hirsch, S. (1997). *A new vision for staff development*. Alexandria, VA: Association for Supervision and Curriculum Development.

Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, *7*(4), 221-258.

Stoll, L., & Louis, K. S. (Eds.). (2007). *Professional learning communities: Divergence, depth, and dilemmas*. New York, NY: McGraw-Hill.

Talbert, J. E. (2010). Professional learning communities at the crossroads: How systems hinder or engender change. In A. Hargreaves, A. Lieberman, M. Fullan, & D. Hopkins (Eds.), *Second International Handbook of Educational Change*, *Part 1* (pp. 555-571). New York, NY: Springer Science+Business Media B. V.

Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of

    professional learning communities on teaching practice and student learning.

    Teaching and Teacher Education, *24*, 80-91.

Webster-Wright, A. (2009). Reframing professional development through

    understanding authentic professional learning. *Review of Educational*

    Research, *79*(2), 702-739.

Wei, R. C., Darling-Hammond, L., & Adamson, F. (2010). *Professional development*

    in the United States: Trends and challenges. Dallas, TX: National Staff

    Development Council.

Wei, R. C., Darling-Hammond, L., Andree, A., Richardson, N., & Orphanos, S.

    (2009). *Professional learning in the learning profession: A status report on*

    teacher development in the United States and abroad. Dallas, TX: National

    Staff Development Council.

Wells, C., & Feun, L. (2007). Implementation of learning community principles: A

    study of six high schools. *NASSP Bulletin*, *91*(2), 141-160.

Wood, D. R. (2007). Professional learning communities: Teachers, knowledge, and

    knowing. *Theory Into Practice*, *46*(4), 281-290.

Zhao, Y. (2009). *Catching up or leading the way: American education in the age of*

    globalization. Alexandria, VA: Association for Supervision and Curriculum

    Development.