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The Impact of Guiding Coalitions on the Overall Success of Schools Properly Implementing and Sustaining Professional Learning Communities

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The Impact of Guiding Coalitions on the Overall Success of Schools Properly Implementing and Sustaining Professional Learning Communities

By

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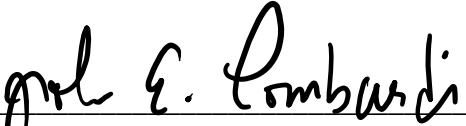
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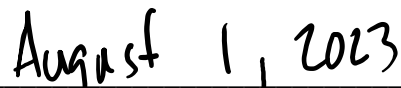
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The Impact of Guiding Coalitions on the Overall Success of Schools Properly Implementing and Sustaining Professional Learning Communities

A Dissertation
Presented to
The Faculty of
Western Washington University

Impartial Fulfillment
Of the Requirements for the Degree
Doctor of Education

by
John Lombardi
May 2023

ABSTRACT

The role of the school administrator and teacher leadership has become increasingly embedded within education. Extensive research and literature suggests teacher leaders are critical in reforming schools. Strong professional learning communities (PLCs) recognize that teacher leadership development must be a purposeful and formal component of their culture. The purpose of this quantitative study was to understand the impact of having or not having a guiding coalition (GC) on the overall success of schools properly implementing and sustaining PLCs.

This study explored the perceptions of secondary school administrators throughout Washington State on the five dimensions of PLCs as delineated by the Professional Learning Communities Assessment – Revised (PLCA-R). One hundred and three respondents participated. Insight into sustained PLC development and operation was sought from the results focused on quantitative data from the PLCA-R. The six dimensions measured by the PLCA-R are:

- Shared in Support of Leadership,

- Shared Values and Vision,

- Collective Learning and Application,

- Shared Personal Practice,

- Supportive Conditions – Relationships, and

- Supportive Conditions – Structures.

The data were analyzed using means, standard deviations, and t scores using a Welch's t test.

The results unequivocally indicate that the establishment of a focused GC is imperative to successfully implementing PLCs in schools. The data also revealed that there was not a statistically significant difference in any of the dimensions of the PLCA-R

between schools who were not PLCs and schools that claimed to be PLCs but did not establish a GC as outlined by Solution Tree. The final conclusion of this study is that schools who do not take the time to establish an authentic GC as part of their PLC process are doomed to what Reeves and DuFour call PLC Lite and should seek out other improvement efforts other than PLCs.

DEDICATION

Being deeply loved by someone gives you strength, while loving someone deeply gives you courage. - Lao Tzu

I dedicate this doctoral study to my parents, George and Mary Lombardi who I wish were here to celebrate this accomplishment with me. My parents' unwavering love and belief in me along with their consistent, usually quiet, insistence that I push myself to excel gave me the inspiration and confidence to start this endeavor. Often my parents believed in me more than I believed in myself and I know how much this accomplishment would have meant to them.

I further dedicate this work to my wife, Andrea who I owe a never ending debt of gratitude and to my children and siblings for their overwhelming support and encouragement. Thank you for standing by me and helping problem solve, organize and celebrate even the smallest successes. I appreciated that you all surrounded me with love and support throughout this journey.

ACKNOWLEDGMENTS

Coming together is a beginning; keeping together is progress; working together is success.
- Edward Everett Hale

The completion of this lifelong goal would not have been possible without the commitment and support of numerous groups and individuals. I extend my most heartfelt appreciation to my Western Washington University advisor, Dr. Tim Bruce, for providing guidance, support and advice throughout this process; and to my dissertation committee members, Dr. Wayne Robertson and Dr. Carl Bruner, for being flexible, showing a great deal of patience and giving timely feedback. I would like to express my gratitude to the faculty and staff of Western Washington University, who provided me with an exceptional educational experience. I would also like to thank Dr. Diane Oliver for granting permission to utilize the Professional Learning Community Assessment – Revised as my data collection instrument.

I want to acknowledge the support and sacrifices made by my wife Andrea, who gave up countless weekend adventures to allow me to study, read, write and grumble. She even tolerated me joining class from hotel rooms while we were on vacation without ire. The simplest acts of making sure my space was quiet, bringing home dinner or refilling coffee was noticed and greatly appreciated.

The input, connections, advice and insights from many members of the Solution Tree team including Cassandra Erkens, Luis Cruz, Mike Mattos and Bill Hall was not only inspirational but made this project all the more meaningful and relevant.

I would be remiss if I did not thank the entire Western Washington University Doctoral Cohort group. I was blessed to have such an amazing group of educational leaders surrounding me, supporting me and challenging me throughout this entire process. At times I wasn't sure if

we were an educational cohort or a support group for each other, but in the end this would not have been accomplished without them. Thank you, Mike, Michelle, Steve, Pat, Duane, Will, Byron, Mary, Angelina and especially Eric who talked me off the ledge more than once, I am indebted to each of you.

TABLE OF CONTENTS

CHAPTER 1: BACKGROUND OF THE STUDY

Introduction

The role of the administrator in public schools is often misunderstood because an administrator's activities can be viewed from two different lenses: as an educational leader and as an educational manager (Tyack & Cuban, 1997). Before the establishment of public primary and secondary education, schools had frequently been run by a teacher who had added supervisory responsibilities for buildings, students and staff. The position of principal emerged with the development of public schooling as an essential social service in industrializing economies in the second half of the 19th century. An increasing need for workers with basic education required more systematic school organizations, resulting in appointing a part-time or full-time administrator at the school level (Pont et al., 2008).

Since the early 20th century, enrollment in America's public schools has burgeoned and the demand for a quality education—especially in secondary schools—has increased dramatically (Reese, 2000). From the days of Taylor's scientific management movement to President George W. Bush's call for no child to be left behind, American secondary schools have become a focal point of educational reform efforts.

The *No Child Left Behind Act* (NCLB, 2002) and *Race to the Top* (RTT, 2009) are the most recent federal efforts seeking to improve the condition of education in the United States. Professional learning communities (PLCs) have emerged as one of the foremost reform strategies to answer this call for improvement (DuFour et al., 2008). Subsequently, numerous educational organizations have also endorsed PLC concepts. The National Education Association (NEA), American Federation of Teachers (AFT), the National Board for Professional Teaching

Standards (NBPTS), and The National Association of Secondary School Principals (NASSP) in

its *Breaking Ranks II Executive Summary* (2004) recommended, "A school will regard itself as a

community in which members of the staff collaborate to develop and implement the school's

learning goals . . . Every school will be a learning community for the entire community" (p.4).

Other education organizations that have advocated for PLC implementation include:

- Annenberg Institute for School Reform

- Center for Teaching Quality

- National Association of Elementary School Principals

- National Commission on Teaching and America's Future

- National Council of Teachers of Mathematics

- Southwest Educational Development Laboratory (DuFour & DuFour, 2010)

The purpose of this study was to use a quantitative method to understand the impact of

having or not having a guiding coalition (GC) has on the overall success of schools properly

implementing and sustaining PLCs. Solution Tree defines a true PLC as a school that is

organized into a series of high-performing collaborative teams which meet on a regular (weekly)

basis to focus on student learning and the four essential questions. Each team is a group of

people working interdependently to achieve a common goal, for which members are held

mutually accountable (DuFour et al., 2006). In the past, key tenets of PLCs have been examined

only through anecdotal self-reporting by building administrators and teachers. There is no direct

research on the role and impact of traditional school leaders on the process or evolution of a

school becoming a true PLC when faithfully using a GC. This study posed the following two

essential questions:

How important are a GC and shared leadership/shared decision making in the process of a school becoming an authentic PLC?

Does implementing a GC make the process more effective, efficient and ultimately provide greater staff efficacy?

Statement of the Problem

It has been my experience that a guiding coalition is essential in the process of establishing a true and productive Professional Learning Communities movement in schools. I have attempted to implement PLCs in three different secondary schools with varying degrees of success. In my first school, I focused on the areas of PLC implementation that I felt were most important and which caused the least amount of friction within the school and with the staff. This was a textbook example of establishing a "PLC Lite" program, a diluted and less impactful form of PLCs. The inevitable outcome was little or no improvement in student achievement and a perception by the majority of staff that PLCs were a fad, like many other educational programs and theories that preceded it. In my second attempt, I established a GC but insisted on maintaining control as the building administrator, hamstringing the true effects of a guiding coalition. We were successful in implementing positive change and improving student achievement, but when it was time for key leaders to move on, many of the structures crumbled due to the lack of a firm base of staff leadership and understanding of the PLC process. The effects of not establishing a true guiding coalition of staff leaders steeped in the PLC process and its anchoring tenets was apparent. In my most recent work, the impact of a true guiding coalition has not only driven the pillars of PLCs deeper into our school's culture but has also increased the

pace at which positive and impactful change has occurred. This experience lead to the formation of the two fore mentioned essential questions.

In addition, at the time of this study, there was not any direct research found that evaluated the extent to which having a PLC school with a GC implemented with fidelity impacts traditional school leadership and the perceived outcomes of establishing true PLCs in our schools. The concept of PLCs in public schools became a movement with the publication of *Professional Learning Communities at Work: Best Practices for Enhancing Student Achievement* by DuFour and Eaker (Solution Tree, 1998). An introduction to the idea of a guiding coalition was introduced by reviewing the work of John Kotter and his eight step change model. DuFour and Eaker later deliberately focused on and defined a GC as a group of influential staff members in a shared decision-making model based (2008).

There is substantial information regarding the significance of Kotter's work in the business world, but very little of DuFour and Eaker's (1998) application of it in education. While the majority of literature on properly implementing PLCs in schools includes the importance of establishing a GC. There is limited research on the impact that having or not having a GC has on teacher efficacy or the success rate of schools properly implementing and sustaining PLCs.

Scope of the Study

This study examined PLCs in secondary public schools in the state of Washington. The purpose of this study was to understand the impact that having or not having a GC has on the overall success of schools properly implementing and sustaining a PLC.

Study Limitations and Delimitations

The findings of this study were subject to the following limitations and delimitations:

- The study is limited to one state and the setting of secondary schools in that state. It may not be generalizable to other schools and states that have different educational systems, demographics, and/or whose needs vary from the schools in the study.

- The study is limited to secondary schools and may not be generalizable to elementary schools.

- The study is limited to public schools and may not be generalizable to private or charter schools.

- The response rate to the survey used may affect this study.

- The established culture and the student demographics of schools varies significantly and may affect principal responses on the survey.

- The administrator at each school responding may have had a different definition of shared leadership and the role of the school administrator in the PLC implementation process. This could affect responses on the survey.

- The researcher may have established relationships with principals of the schools in the study. Data collection will be anonymous, and participating schools will not identify themselves.

- Length of service at a school may affect principal responses on the survey.

Rationale and Significance of the Study

Research exists that defines the characteristics of PLCs and their impact on student learning when implemented with fidelity. There is a need, however, for research on the dimensions of PLCs that create and sustain them at the secondary school level. The significance

of this study for leaders in education is to gain insight into the processes of implementing and

sustaining PLCs, as well as the need for shared leadership in the form of a GC.

Hord (1997) outlined five dimensions of true PLCs which schools need to follow. These

five dimensions are consistent with DuFour and Eaker and are the foundation used in the

research instrument used in this study, the PLC Assessment-Revised (PLCA-R). The five

dimensions of this instrument are:

- Supportive and shared leadership: Distributed leadership is key in changing and

    maintaining change especially after an effective or influential leader leaves. To

    solidify and establish change that positively impacts student learning leadership

    must be shared as a key component in becoming a PLC. Schools cannot

    unilaterally transform themselves into high performing PLCs. Schools must create

    a guiding coalition of key teacher-leaders in each school to assist with

    implementation (DuFour, 2012). School and district administrators must move

    away from old habits and structures to focus on working collaboratively with

    shared responsibility for decision making with staff to help foster and ensure

    collective efficacy.

- Shared values and vision: A fundamental characteristic of a PLC is a shared

    mission and vision for the school that is clearly focused on student learning

    (Morrissey, 2000). Huffman et al. (2003) cited Barth:

    > Honoring the vision of others, maintaining fidelity to one's own vision,

    > and at the same time working toward a collective vision and coherent

    > institutional purpose constitutes an extraordinary definition of school

leadership and represents one of the most important undertakings facing
those who would improve schools from within. (p. 8).

- Collective learning and application of learning: Originally termed collective
creativity (Hord, 1997), the name of this dimension was changed to more
accurately reflect learning, and the application of learning that occurs. PLC school
staff engaged in processes that collectively seek new knowledge and ways of
applying that knowledge to their work (Morrissey, 2000). Erkens and Twadell
(2012) contended that learning together creates shared understanding and
generates organizational results against which to measure success (p. 176). Many
consider that the term learning in PLCs represents the learning that adults do in
order to support students in higher levels of learning and success.

- Shared personal practice: DuFour et al. (2016) provided a list of practices that
must shift from a traditional school model to one that is a PLC. Some of those
vital practices include: shifting from teachers working in isolation to
collaboration, each teacher determining what is essential to collaborative teams
establishing the priority of learning standards and the pace at which they should
be taught, and most importantly from the privatization of practice to open sharing
of practices, team development of instructional practices and a focus on
collectively building shared knowledge and best practices (p. 259).

- Supportive conditions: Hord (1997) identified two types of supportive structures
as structural conditions and collegial relationships. In practice, this means creating
time for professional learning teams to meet, build trust, hone their skills, and

develop strong collegial relationships that foster open and honest conversations.
Mattos et al. (2016) wrote:

> Organizations demonstrate their priorities by how they use their resources.
> Time is one of the most precious resources in a school. In light of the
> strong correlation between meaningful collaboration and improved student
> achievement, it would be disingenuous for any board of education to argue
> that it wants better results but is unwilling to provide this essential, cost-
> neutral resource to achieve them (p. 55).

These five pillars provide a strong way to assess the strength of PLC implementation, the impact of a GC, and will also give building and district administrators an understanding of the areas of PLC implementation that are a consistent challenge for secondary schools. They also highlight how a GC can have a positive impact on the overall implementation and on-going support to avoid schools from accepting a diluted and less impactful form of PLCs also known as 'PLC lite'.

Variables

Independent Variables

The independent variables in this study were:

1. If a school is or is not a professional learning community or is working on becoming an authentic professional learning community.
2. If the school has established a guiding coalition.
3. If the guiding coalition is focused on the five key attributes given above.

Dependent Variable

The fidelity of implementing a guiding coalition based on the five key attributes outlined by Solution Tree material and the impact it has on the perception data. The subscales and a total score of the subscales on the PLCA-R will be used as dependent variables.

Research Questions

Based on the literature, three research questions and experimental and null hypotheses was developed. The purpose of this study was to understand the impact that having or not having a GC has on the overall success of schools properly implementing and sustaining PLC. The quantitative questions answered are:

RQ1: How many of the secondary schools in the State of Washington are claiming to be working on becoming true professional learning communities?

RQ2: How many of the secondary schools in the State of Washington are claiming to be working on becoming true professional learning communities have established a guiding coalition?

RQ3: How many of the schools claiming to have established a guiding coalition have their GC focused on the issues given in Solution Tree's material?

RQ4: Does establishing and using a guiding coalition, as defined by Solution Tree publications, make an impact on the overall success of schools properly implementing and sustaining professional learning communities based on secondary school administrators' perceptions as reported on the PLCA-R?

Hypotheses

Experimental Hypothesis

Proper implementation of a guiding coalition that is focused on the five major factors of leading the professional learning communities process, will have an effect on the overall perception and effectiveness of professional learning communities in schools.

Null Hypothesis

Proper implementation of professional learning communities in schools is not influenced by the adoption or implementation of a guiding coalition to guide the work and will not have any measurable effect on the overall perception and effectiveness of the professional learning community process.

Definitions of Terms

Guiding Coalition. The guiding coalition is the lead team or model collaborative team in a PLC. This team is the center of a school's leadership universe from which leadership opportunities, leadership development, and leadership experience radiate (Hall, 2012, p. 4). There is not a defined size or membership required, but it is recommended that representatives of each collaborative teacher team or grade level be represented. Buffum, et al., 2017, state in *Taking Action*, a successful guiding coalition must comprise four essential types of power: Positional power, expertise, credibility, and leadership ability. So, an effective leadership team *(GC)* must be comprised of people who possess strong positional power, broad expertise, and high credit credibility with their peers (p. 39).

Professional learning community (PLC). An ongoing process in which educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better

results for the students they serve. Professional learning communities operate under the

assumption that the key to improved learning for students is continuous job-embedded learning

for educators. (AllthingsPLC, n.d.). PLCs must be focused on four essential questions:

1. What are students supposed to know and be able to do?

2. How will we know if they can do it?

3. What do we do if they can't?

4. What do we do if they can?

PLC Lite. A diluted and less impactful form of PLCs. Reeves and DuFour (2016) define

PLC Lite as: "Educators renamed traditional faculty or department meetings as PLC meetings,

engage in book studies that resulted in no action, or devote collaborative time to topics that have

no effect on student achievement – all in the name of the PLC process. These activities failed to

embrace the central tenets of the PLC process and won't lead to higher levels of learning for

students or adults" (p. 1).

Supportive and shared leadership. Hipp and Huffman (2003) found three critical

attributes that make up this dimension of PLCs. These attributes are "nurturing leadership among

staff; shared power, authority, and responsibility; and broad-based decision-making for

commitment and accountability" (Hipp & Huffman, 2003, p. 6).

Overview of the Study

This study was organized into five chapters. Chapter 1 includes the introduction,

background, theoretical basis for the study, statement of the problem, scope of the study,

limitations and delimitations, rationale and significance of the study, research questions and

hypotheses, and definitions. Chapter 2 presents a literature review of PLCs. Chapter 3 describes

the methodology for the survey research conducted in this study. The results of the study will be

discussed in Chapters 4 and 5. They will provide a discussion of the implications of the study,

with recommendations for future research.

CHAPTER 2: LITERATURE REVIEW

The following section reviews recent literature on theory and practice in educational leadership, capacity-building, and initiating a guiding coalition to facilitate and improve the process of a school becoming a PLC. In the first part of this review, I explored the transformation of school leadership theory and practice, moving from a top-down model to a more distributive one. I distinguished school management and school leadership. In the second part of this review, I examined the evolution of shared or distributed leadership in education and its importance and impact.

The third section reviews John Kotter's work on capacity building in organizations using guiding coalitions. Studies support the learning-focused leadership practice of creating an influential team being key to leading change. The fourth section considers guiding coalitions in education, with a focus on the work of Richard DuFour and Robert Eaker in relationship to PLCs. The review concludes with the very limited research on the impact of guiding coalitions. Due to the lack of research on the impact of guiding coalitions in secondary schools, I introduced research from higher education and medicine.

From Management to Leadership

The role of the administrator in public schools is often misunderstood. This is because an administrator's activities can be seen through two lenses: educational leader and educational manager (Tyack & Cuban, 1997). Before public primary and secondary education, schools had most commonly been supervised by a teacher with added responsibilities for buildings, students and staff. The position of principal emerged with public schooling as an essential social service in industrializing economies in the second half of the 19th century. Increased industrialization

and the accelerated need for workers with basic education required more systematic school organizations, resulting in the appointment of a part-time or full-time administrator at schools (Pont et al., 2008).

As the industrial revolution progressed and manufacturing practices such as the assembly line were introduced, the role of school principals/administrators changed in response. The reason for this change of focus was to complement more efficient management and production. This approach placed the role of building principal or administrator squarely in the realm of a manager. In the bureaucratic management systems common for most of the 20th century, the principal had overall responsibility for the operation of an individual school within a wider system run by a central bureaucracy (Aalst, 2002). This focus perpetuated a system in which teachers worked in relative isolation from each other and their building administrators (managers) who were focused on compliance and budgets. This remained the state of public education and even intensified after the launch of Sputnik, until a focus on equity, inclusion and opportunity began in the 1960s.

President Johnson's "War on Poverty" and the *Civil Rights Act of 1964* put equity and opportunity at the center of educational reform and improvement. Ravitch portrayed the change in focus for American education as "the major thrust of the Great Society educational reforms was the expansion of educational opportunity. This did not represent a break with the past, but rather a speeding-up of long-term democratizing trends in education" (Ravitch, p. 25). This signaled a change from management, focused on budgets and staffing to educational leadership concerned with providing equitable opportunities for staff and students alike.

In addition to administrators becoming responsible for problems that could be related to a shift in cultural norms and parental attitudes, the *Education for All Handicapped Children Act of 1975* added the responsibility for principals to ensure that all handicapped children received a free and appropriate education in the least restrictive environment. The 1980s brought a wave of new reform following publication of *A Nation at Risk* (McPeake, 2007). These changes led to the need for better leadership and teacher voice in decision making. A movement for more grassroots initiatives led to forming site councils and leadership teams. However, the history of bottom-up innovation and individual school autonomy is not impressive (Hargreaves & Ainscow, 2015). They summed up the situation this way:

> In an age of innovation and diversity, top-down strategies are inappropriate, while bottom-up strategies seem unable to achieve improvement on any significant scale. So, what do we do instead? One possibility is shifting attention towards districts, which can support schools and teachers in innovating and improving together (p. 42).

The Progress of Shared Leadership

In the system established at the outset of public education, principals were at the center of decision-making. Many early efforts to involve teachers were superficial at best and involved teachers volunteering. The seeds of school reform, planted by the National Commission on Excellence in Education, have taken root in the restructuring of schools and districts. Its fruit appears in practices such as increased teacher involvement in school governance, shared decision making, site-based management, school-site control, and teacher empowerment. (Conway & Calzi, 1995). Other researchers described it as follows:

The concept of the principal as a building manager has given way to a model where the

principal is an aspirational leader, a team builder, a coach, and an agent of visionary

change. These changes have rightly put student performance at the forefront, and

principals are being asked to develop new competencies largely centered around data,

curriculum, pedagogy, and human capital development in order to meet the new

expectations. But make no mistake, the increasing emphasis on instructional leadership

does not mean that the more traditional managerial concerns of school administration

have disappeared. Indeed, principals are still expected to be effective building managers,

disciplinarians, and public relations experts (DeMonte & Pennington, 2014).

This transformation in the role of the principal has added expectations to the role and

necessitated the need to approach problems of practice differently.

Professional collaboration has become critical to the success of any school. The evidence

indicates that decisions are better, have greater support, and are more likely to be implemented if

they are the result of intentional collaboration with teachers, staff and parents (Williamson &

Blackburn, 2018). Shared leadership recognizes that teachers and administrators have

complementary expertise and that a mere redistribution of responsibilities through delegation is a

lost opportunity. Schools with shared leadership have routines to leverage the perspectives of

both groups (Cummings, 2021; Harrison-Berg, 2021).

This belief is supported by a meta-analysis by McRel (Waters & Cameron, 2007) in

which the effect of school leadership and student achievement was examined. The researcher

found a statistically significant correlation between school level leadership and student

achievement. Waters and Cameron (2007) stated that there is no longer a question about the

effect of leadership on student achievement. Clearly, leadership makes a difference. The study of

21 leadership responsibilities included the importance of culture, communication, relationships,

input and the ability to optimize or, as they define it, to "lead new and challenging innovations"

(p. 3). All these responsibilities are the foundation for a shared or distributed leadership focus or

approach.

The emphasis of shared leadership is not a panacea. Conway and Calzi (1995) found

several counterproductive trends as they analyzed case studies and the evolution of sharing the

decision-making process. Where trust is high, participation becomes less crucial (though never

unnecessary). Principals who had earned their faculty's trust through consistent behavior, had

established clear expectations for their staff. Teachers knew what to do and had what they

needed in order to do their job. Once involved in decisions, however, they could no longer

predict outcomes, and their trust in the principal diminished. Consequently, their motto was

understandable: "Leave management to the manager and let us teach!" (p. 14). In 1986, the

debate on shared leadership reached a crescendo when the Carnegie Foundation Forum on

Education and the Economy suggested principals be replaced with lead teachers and that schools

should be run by committees (DuFour & Eaker, 1998). A more refined approach to shared

leadership was needed and business/industry may have a solution.

Kotter and Guiding Coalitions

By the early 1990s, many of the problems plaguing education were also present in the

American industrial and business sector. The need for innovation and improvement was evident.

In 1995, a seminal article by Kotter (1995) appeared in the *Harvard Business Review*. It

emphasized "guiding change may be the ultimate test of a leader. . . fundamental change is often

resisted mightily by the people it most affects: those in the trenches of the business" (p.1).

Kotter (1998) found that only 15% of change efforts in business were successful or made a

positive impact. To combat this, he created an eight-step model to create an urgency and order to

make change happen. His eight steps are based on one simple insight: management is not

leadership (Kotter, 2012).

Kotter's process is designed to ensure change managers have created the right

environment for change, develop the support they need to make that happen, and keep the

momentum going during the change (Airiodion & Crolley). Kotter (2012) contended that "The

combination of trust in a common goal shared by people with the right characteristics can make

for a powerful team" (p.68). The model applies this thought and establishes a process of

initiating, managing, and sustaining change.

The eight steps are:

1. Establishing a sense of urgency

2. Creating a guiding coalition

3. Developing a vision and strategy

4. Communicating the change vision

5. Empowering employees for broad-based action

6. Generating short-term wins

7. Consolidating gains and producing more change

8. Anchoring new approaches in the culture (Fullan, 2001; Kotter, 1995, 2012;

   Reeves, 2020).

Kotter (1995) maintained that too many managers do not realize transformation is not an event, but a process. Transformation advances through stages that build on each other and it can take years. Pressured to accelerate the process, managers skip stages. However, short-cuts can never work.

A coalition of leaders needs to be created as a powerful force to move change in a positive direction and sustain the sense of urgency. The GC cannot be a new name for a leadership team or site council selected or appointed by their peers who choose to place the mantle of 'leadership' on another member of their team. This is crucial because members of the GC must be ready to learn together and develop shared objectives and high levels of trust. Effective leaders select the members of the GC with care. These individuals must be successful in their roles and highly respected among their peers (DuFour et al., 2021).

Kotter (1998) contended that leaders seeking change make a fatal error when they underestimate the power of leadership to drive change forward. Kotter wrote:

> In today's less hierarchical but more complex organizations, leaders must win the support of employees, partners, investors, and regulators for many types of initiatives. Because you are likely to meet resistance from unexpected quarters, building a strong guiding coalition is essential (p.3).

Kotter (1998) gave the following three keys to establishing such alliances:

1. Engaging the right talent: Assembling the necessary skills, experience and chemistry.

2. Growing the coalition strategically: An effective guiding coalition needs a

   diversity of views and voices. This may require leaders to give others credit for

   success.

3. Working as a team, not just a collection of individuals: Beyond the customary

   team-building retreats and events, real teams are built by doing real work

   together, sharing a vision, and commitment to a goal (p.3).

The coalition of leaders should be created as a powerful force to move change in a

positive direction and help sustain a feeling of urgency. Efforts that do not have a strong GC can

make apparent progress, but eventually, the opposition stops the change (Kotter, 1995, 2012).

Professional Learning Communities and Guiding Coalitions in Education

Barth (as cited in Spiller & Powers, 2019) said, "The best principals are not heroes - they

are hero makers." The challenge for school leaders is to share power and responsibility in order

to create an organized and consistent school climate in which leaders and teachers collaborate,

make evidence-based decisions, understand that the student is the top priority, communicate

effectively, and are involved in trusting relationships (Spiller & Powers, 2019).

DuFour (1991) introduced the idea of shared leadership in schools to promote

collaboration and professional development as the means to improve schools through improving

the effectiveness of their staff.   He details the characteristics of quality schools that are focused

on student achievement and success and outlines the building administrator's major role in every

phase of staff development, from getting staff motivated for new programs to evaluating the

results. DuFour and Eaker (1998) integrate the research on effective schools, appropriate

business practices and the leadership behind those practices to create multiple recommendations for schools. They contend that:

> "Teachers in a professional learning community recognize her obligation to work together on school wide issues. They take an interest in the entire school. They recognize that the solutions to some school problems require collective action, and they accept personal professional responsibility for contributing to those solutions. This willingness to examine issues outside of individual classrooms and to seek solutions together is a major factor in the success of a professional learning community" (p. 219).

This focus on taking interest in the entire school and contributing to solutions is far from developing and driving change using a collaborative team model let alone a GC.

Although DuFour and Eaker review Kotter's work including the idea of a guiding coalition in their 1998 book, *Professional Learning Communities at Work Best Practices for Enhancing Student Achievement* they do not overtly recommend or assert the need to form a GC in schools. Instead they continually portray the building principal as a facilitator of collaborative processes that teachers need to undertake to improve their practice and make a positive impact on student learning. To have their greatest impact, principals must define their job as helping create a PLC in which teachers continually collaborate and learn how to become more effective. DuFour and Eaker (1998) asserted that, "principals of professional learning communities involve faculty members in the school's decision-making process and empower individuals to act" (p.185) and cited Kotter and Kanter to clarify that when initiatives fail it is often because the principal has tried to create change without building a coalition of collaborators.

DuFour, Eaker and DuFour's book *Revisiting Professional Learning Communities at Work* (2008) is the first time the thought of a GC in schools is clearly addressed as being essential to developing a true PLC. They state: Those who hope to lead the PLC process must begin by acknowledging that no one person will have the energy, expertise, and influence to lead a complex change process until it becomes anchored in the organization's culture without first gaining the support of key staff members (p. 310). In addition, they state: "A school with a single champion of the concept will proceed with a much different pace than a school with a guiding coalition of multiple leaders and widespread enthusiasm for moving forward" (p. 412). DuFour, et al (2016) further address the necessity of forming small cadres of influential staff members as a guiding coalition and support it. They wrote, "the bottom line for principals is this: If you can't persuade a small group of people of the merits of an idea and enlist their help, there is little chance you can persuade the larger group" (p.68).

DuFour et al. (2008, 2016, 2021) continued to explain the need for developing and implementing GCs. They described the necessity for the institution and refined the definition of what a coalition is and how it works. DuFour et al. (2021) clarified the process as:

> Rather than beginning the process of embedding the PLC at work concepts and practices on a districtwide or even school wide basis with the accompanying possibility of misunderstanding, lack of commitment, and pushback, a wiser course is to begin by working with a small group of respected and influential people in order to first learn together about the PLC process and its practices. As this small group –called a guiding coalition –gains new knowledge, and importantly, a commitment to move forward, the members become valuable advocates. (p. 28)

Mattos et al. (2016) clarified the purpose and intent as:

> This guiding coalition is not a school "dictatorship committee" but a team that learns
> deeply about best practices, assesses candidly the school current reality, determines
> potential next steps to improve the school, identifies possible obstacles and points of
> leverage, and plans the best way to create staff consensus and ownership. (p. 20).

Describing the essential need for a GC has not come only from DuFour and Eaker. Although they began with a business perspective, schools widely adopted it. The American Association of School Administrators promoted Kotter's change leadership theories (as cited in Reeves, 2020). Prioritizing a shared leadership model in the form of a GC is supported by many educational change theorists and practitioners.

Wilhelm through his work with the Riverside County School Leadership Center of the California School Leadership Academy (CSLA) determined that many schools and districts did not place the adoption of a guiding coalition high enough in the sequence of events in becoming a PLC. He contends that prior to establishing a Mission and Vision, the first prescribed sequence of events in the CSLA program, that instead schools needed to establish their guiding coalition. He states, "What I eventually came to realize was that this was really not what teams needed first. Instead, they needed a clear understanding of the new roles of teacher leaders who share leadership with the principal – a role that is still not clearly defined in many schools and districts – along with concrete tools for working with their teams of colleagues at the beginning stages" (p. 2). Jon Yost, the Associate Superintendent of Curriculum and Instruction for Sanger Unified School district, echoes Wilhelm's thoughts. Yost (2021) stated, "If there is anything I've learned about PLC implementation, it is that you must grow and utilize a guiding coalition. Keep it

simple: Get the right people on the bus, meet regularly, build a shared knowledge of PLC implementation, and influence those around you" (p.2).

Educators in a school community need to be part of the decision making process that leads to the collective actions they are committing to (Baldermann et al., 2021). Others echoed Noble's conviction, including Many (2012), Marzano (2003), Roberts (2020), Spiller and Power (2019), Wilhelm (2016), and Yost (2020). These researchers agreed that establishing a GC leadership team was absolutely necessary to properly implement PLCs in schools.

This idea was supported by Buffum et al. (2011). They noted that some influential staff members may be those who have resisted change. The coalition should also represent all relevant points of view and campus expertise. To make an impact, these coalitions must be representative bodies that maximize the staff's talents and belief in their ability to create positive change. There is no shortage of leadership teams in schools. Often, though, the leadership aspects ring hollow (Williams & Hierck, 2015). Muhammed and Cruz (2019) listed three principles for success and building the necessary credibility to influence others to embrace initiatives:

1. To guide and support staff members not on the team so they work together to continuously focus on increasing student learning.
2. To learn, and then share with the staff, research-based best practice that aligns with increasing student learning.
3. To actively listen to and provide a source of support for staff members grappling with challenging yet necessary change initiatives.

With all this time, effort, focus and insistence of the necessity of establishing guiding coalitions, no practitioner or theorist dedicated more than a small section of their work to the task and effort of properly building, maintaining, and growing a guiding coalition.

In 2022 Bill Hall wrote the first publication dedicated solely to understanding every aspect of how to create, sustain and further develop this essential leadership team. Hall explored the rationale for a GC and details each step necessary to establish and lead the coalition. Hall (2021) states that GCs in PLCs need to achieve the following goals:

- Become PLC experts by learning about the PLC process—from common vocabulary to the cycle of continuous improvement in which collaborative teacher teams participate.

- Become experts on the PLC process's benefits for students, teachers, and the school community.

- Disseminate information about the PLC process to collaborative teacher teams.

- Lead PLC transformation by example; maintain a laser-like concentration on improving student learning, focusing on results, and working collaboratively.

- Model continuous improvement.

- Design job-embedded learning opportunities.

- Support collaborative teacher teams. (p.3)

Hall (2021) wrote that the name of the team that leads your school is not important. However, what that team does is critical. In PLCs, nouns are not nearly as essential as verbs (p.1). Hall clearly delineates this idea in the following Table when he contrasts the differences in a traditional leadership team and a true Guiding Coalition.

Table 2.1

Traditional School Leadership Teams Compared to Guiding Coalitions

	Leadership Team	Guiding Coalition
Responsibilities	This team is responsible for leading multiple areas of the school, such as facilities, student discipline, school improvement, community relations, the PLC initiative or processes, and so on.	This team is singularly responsible for leading PLC processes at the school. It does not lead any competing initiatives at the school.
Member selection	Team members are selected (or volunteer) using criteria such as their longevity in their position, their specific knowledge or experience in multiple school-related topics, and their need or willingness to gain school-level leadership experiences. They might be handpicked by the principal, or they might gain membership, regardless of whether they meet any of the aforementioned criteria, if they are the only people available.	Team members might be selected using stricter criteria based on leadership, position power, expertise, reputation, relationships, and credibility (Kotter, 1999). Members may be voted onto the team by peers, handpicked by the principal, selected through an application process, and so on.

Focus	Team members may assist and support the principal in making decisions about multiple areas and topics. The team may have limited responsibility to focus on a narrow aspect of the school (such as current issues facing the school, public relations, communications, celebrations, staff morale, and so on).	Team members spend their entire meeting time on leading the PLC. The team primarily focuses on student learning, a collaborative culture, and results.
Decision-making authority	Team members may advise the principal or give their opinions and thoughts about issues and concerns, but they may not be formally involved in the actual decision-making process. Administrative personnel may be the only members of the team for confidentiality, personnel, and discipline purposes. Other aspects of the school might be led by ad hoc committees or department or grade-level teams.	Team members serve to advise and support the principal and share as equals in the decision-making process. The team usually has members who share high levels of trust, share a common goal, and are considered opinion leaders who are so respected that others will likely follow their lead.
Organizational structure	The team may have a leadership hierarchy where administrators have more of a boss relationship with the rest of the team. The members may have a tendency to operate by the credo, "Do as we say, not as we do."	The team has a flat organizational structure. There is no position of power. All team members sit as equals on the guiding coalition. The motto of this team might be, "We will model the way for how all teams will operate."

| Decision-making options | The team may make decisions in several ways: decide and announce, seek input from a sampling of team members and then decide, seek input from the entire team and then decide, reach consensus, or delegate the decision with criteria or constraints (Interaction Associates, n.d.). | The team makes decisions preferably by consensus notwithstanding unusual circumstances. When they cannot reach consensus in a timely manner, the principal has the fallback decision-making option to gather input from the team and decide (Interaction Associates, n.d.). |

Source: Hall, 2021.

Hall (2021) also emphasized the need for a GC. The GC is the lead team or model collaborative team in a PLC. It is the center of a school's leadership universe from which all aspects of school-based leadership radiate. In a PLC, all collaborative team members assume leadership responsibilities, but it is the GC's responsibility to set the tone for the collaborative work done in the school. Hall concluded that schools led by a traditional leadership team that leads all aspects of the school may wish to consider re-inventing themselves in order to take on the transformational work of becoming a PLC.

Despite the widespread adoption of Kotter's (1996, 2012) change model, most such efforts fail. One explanation is that despite the time and resources schools devote to the change model, the implementation is simply insufficient. Perhaps, as Kotter (2012) suggested, the GC is not powerful enough, or the people in charge allowed too much complacency. However, there is another explanation; the model itself is wrong. The model assumes urgency, and the change that follows is based on organizational leadership effectively communicating that need for change (Reeves, 2020).

Effectiveness of Guiding Coalitions

There have been two recent studies on the impact of GCs; Bradley et al. (2018) in the medical field and Margherio et al. (2019) in higher education. No research was found that determined the overall impact of a guiding coalition for the formation or establishment of a true professional learning community. Hall, who is the author of the only book focused solely on starting a GC in schools said:

> The focus of my work did not look specifically at the impact of guiding coalitions since those types of leadership teams were still very much in their infancy in terms of structure and processes. Most schools were led by more traditionally structured leadership teams. The bottom line of my study was this: being a model PLC school had a positive impact on student achievement. Unfortunately, I could not make a direct connection to the impact that the leadership structures of those schools had on achievement (Hall, personal communication, February 15, 2022).

In the field of medicine, Bradley et al. (2018) used a mixed methods approach on the impact of GCs, which they referred to as 'quality collaborative', to improve practices and the overall quality of care for heart patients in hospitals. The team conducted a longitudinal, mixed methods intervention study of ten hospitals over a two-year period. The data were collected from surveys of 223 individuals and 393 in-depth interviews with clinical and managerial staff. They stated their purpose was "to understand what distinguished hospitals that succeeded in shifting culture and reducing 30-day risk-standardized mortality rate (RSMR) after acute myocardial

infarction (AMI) through their participation in the Leadership Saves Lives (LSL) collaborative" (p. 2).

Bradley et al. (2018) reported that six of the ten hospitals in the study experienced substantial changes in their culture and reductions in RSMR. This was attributed to the following: effectively including staff from different disciplines and levels in the hospital's hierarchy in the team guiding improvement efforts (referred to as the GC in each hospital); authentic participation in the work of the guiding coalition, and distinct patterns of managing conflict. They also reported that hospitals that were most successful, as shown by a national quality collaborative to shift hospital culture and reduce RSMR, showed distinct patterns in membership diversity, authentic participation, and capacity for conflict management.

Margherito et al. (2019) from the University of Washington and the Rose Hulman Institute of Technology connected theory to practice and lessons learned in a change project by concentrating on team formation during the early stages of change-making. The team focused on the fact that "an important yet often overlooked step in any change project is pulling together individuals to form a competent and efficient team" (p. 6). The investigators focused on Kotter's characteristics of a GC to define a "competent and efficient team" (p. 7).

The outcome of the team's research, however, was inconclusive. They reported a similar impression in their review of literature:

> A review of the literature on guiding coalitions found that though the concept of a guiding coalition is widely advocated in the literature, only one study showed a moderate correlation between the existence of a guiding coalition in the success of a change process (Margherito et al., 2019, p. 1).

They further discovered from their qualitative study that respondents realized that using

Kotter's principles to establish a GC had mixed results because some participants noted that

the distinctions in roles felt "blurred." By the midpoint of their research, the "focus groups,

team members were more likely to discuss others on their team as well as themselves as

serving in leadership roles and in the change process" (p. 7).

Summary

It is evident from this literature review that the role of the school principal has changed

dramatically over time. As DeMonte and Pennington (2014) explained, the role evolved from

purely management that ensured the organization and effectiveness of a school, to an

educational leader who must balance the expectations of the past while helping all

stakeholders take collective ownership for student learning. The PLC movement begun by

DuFour and Eaker produced evidence that, when done faithfully, has a profound and

measurable impact on student learning.

Toncheff (2020) stated the following:

During this unprecedented time, intentional work leading change is crucial. One person

alone cannot solely lead an entire school to become a professional learning community.

Therefore, it is important to foster a shared leadership model - a guiding coalition - to

identify and support any needed change. (p. 1)

It is true that school improvement and having PLCs in schools is an enormous task that cannot

be done alone. Yet, there is no evidence that Kotter's principles of a guiding coalition, adopted

by DuFour and Eaker, is an essential second step to establish a PLC in schools, as prescribed

in *Taking Action* (Buffum et al., 2011). There has been little research done to correlate

Kotter's idea of a GC with promoting meaningful change. In this quantitative study of secondary school administrators in the State of Washington, It was determined if beginning a GC is essential to have true PLCs, as described by DuFour and other experts at Solution Tree.

Data was collected related to Hall's (2021) contention that "effective PLC leaders do not allow implementation of PLC concepts and processes to get lost in the noise of mandates, initiatives, and administrivia. One of the best solutions to keep this from happening is to lead the change through the guiding coalition" (p.3). The null hypothesis of this study will support Reeves' belief that:

> Despite the time and resources schools devote to this change model, the implementation is simply insufficient. Perhaps, Kotter (2012) suggests, the guiding coalition is not powerful enough or the people in charge allowed too much complacency. But there is another explanation–the model itself is wrong. (Reeves, 2019, p. 103)

The difference of opinions between Hall and Reeves (2009) highlights the need for research related to the efficacy of GCs in education.

CHAPTER 3: METHODOLOGY

Introduction

The purpose of this quantitative study is to understand the impact that implementing or not implementing an authentic Guiding Coalition has on the overall success of schools properly implementing and sustaining Professional Learning Communities. In the past, the key tenets of PLCs have been examined through anecdotal self-reporting primarily by building administrators and teachers. There is currently limited research on how the process of a school becoming a PLC, that includes a true GC, is affected by the role and impact of traditional school leaders. This study focused on two essential questions: First, how imperative are a GC and shared leadership/shared decision-making in the process of a school becoming an authentic PLC? Second, does including a GC make the process more effective, efficient, and ultimately more beneficial to staff efficacy?

A tool or method to objectively measure the impact of GCs on the formation of PLCs has not been found in the literature. Therefore, the primary purpose of this study was to explore the relationship between the role of GCs in secondary schools and the efficacy of PLCs in these schools. The focus of the study was secondary schools in the State of Washington that have been using the PLC model for at least 3 years. The PLCA-R survey was the means of measuring perceptions of PLCs and the process of implementation. This chapter has seven sections: Research questions, background, hypotheses, criteria for school selection, instrumentation, data collection and analysis, and a summary.

Research Questions

Data pertaining to the research questions below was assessed. This method assisted in an

understanding of secondary school administrators' perception of their PLCs from responses to the PLCA-R. The categorical questions allowed for disaggregation of the data to be used to compare data based on schools working on becoming PLCs and having a GC in the process.

Based on the stated problems the following primary research questions were answered:

RQ1: How many of the secondary schools in the State of Washington are claiming to be working on becoming true professional learning communities?

RQ2: How many of the secondary schools in the State of Washington are claiming to be working on becoming true professional learning communities have established a guiding coalition?

RQ3: How many of the schools claiming to have established a guiding coalition have their GC focused on the issues given in Solution Tree's material?

RQ4: Does establishing and using a guiding coalition, as defined by Solution Tree publications, make an impact on the overall success of schools properly implementing and sustaining professional learning communities based on secondary school administrators' perceptions as reported on the PLCA-R?

Background

Public schools first began to consider the concept of functioning as PLCs after DuFour and Eaker (1998) wrote their first work and included Kotter's research. DuFour and Eaker's later work in 2008, emphasized the significance of creating a guiding coalition, a group of influential staff members in a shared decision-making model. There is currently no research on the effect of traditional school leaders on the process of a school becoming a PLC when implementing an authentic GC.

There are numerous studies about the impact of Kotter's work in the business world but very little concerning DuFour and Eaker's (1998) application of it in education. While research on properly implementing PLCs in schools note the importance of establishing a GC, there is little work on whether having or not having one affects teacher efficacy or the success rate of schools properly implementing and sustaining PLCs.

Hypotheses

Experimental Hypothesis

Properly implementing a guiding coalition that is focused on the five major factors of leading the professional learning communities process will have a significant effect on the overall perception and effectiveness of professional learning communities in schools.

Null Hypothesis

Properly implementing professional learning communities in schools is not influenced by adopting or having a guiding coalition to direct the work and will not have a significant effect on the overall perception and effectiveness of the professional learning communities process.

Population and Sample

A purposeful, random sampling method was used to select a cross-section of public secondary school administrators in the State of Washington. The target population for this study was principals, assistant principals, and/or directors of teaching and learning in secondary public schools using the *Education Directory* (OSPI) at the time of this study. The sample size consisted of 103 voluntary respondents to the PLCA-R, which was sent to over 1000 randomly selected administrators.

Using the *Educational Directory* (OSPI), and school district websites a random sampling of secondary school administrators was established using an online research randomizer to create random rankings. Random sampling ensures that results obtained from the sample should approximate what would have been obtained if the entire population had been measured (Shadish et al., 2002).

The following process was followed to raise awareness and clarify the rationale for this study to engage the focus population to complete the online survey. The steps below helped ensure that the intended sample size is obtained:

1. Request that the Washington Association of School Administrators (AWSP) send out information regarding the intent of the study and to notify their members that an email will be sent with a link to the online survey.

3. Email 450 randomly selected participants the information regarding the intent of the study and link to the online survey.

4. Email reminders to the randomly selected participants

5. Send additional email requests based on the randomized list until the minimum participation in the study (n = 100) is reached or exceeded.

On November 23, 2022 the 103st response was received exceeding the proposed population for this study and providing ample data to complete the research.

Instrument

The PLCA-R (2010) is the instrument that was selected for this study. It is a 52-item assessment created by Dianne Olivier, Jane Bumpers Huffman, and D'Ette Fly Cowan at the University of Louisiana at Lafayette based on their work with Dr. Shirley M. Hord at Southwest

Educational Development Laboratory (SEDL). The PLCA-R was developed to measure

everyday classroom and school practices in relation to the five PLC dimensions (Olivier et al.,

2003). Respondents rate all items along a five-point scale. The PLCA-R is composed of 52

questions constructed on a four-point Likert scale (1= *strongly disagree* to 4 = *strongly agree*).

The PLCA-R has been used widely to assess perceptions of PLC implementation based on

responses from individuals within education and has been utilized in numerous schools and

school districts across the United States (Olivier et al., 2009). Permission to use the PLCA-R was

obtained and licenses purchased from PLC Associates. The most recent analyses of this

diagnostic tool in 2010 confirmed internal consistency, resulting in a Cronbach's alpha reliability

coefficients for 1209 factored subscales as follows: shared and supportive leadership (94), shared

values and vision (0.92), collective learning and application (.91), shared personal practice (.87),

supportive conditions-relationships (.82); supportive conditions-structures (.88), and a one-factor

solution (.97).

The descriptive statistics for each item were also reviewed; mean scores for the measures

resulted in a high of 3.27 within the collective learning and application dimension and a low of

2.74 within the shared personal practice (Olivier et al., 2009). After collecting data for this

research, Cronbach's alpha reliability values were calculated. This measure is often used to

determine a test's reliability, in this case, a survey's internal consistency reliability (Aron et al.,

2006).

The PLCA-R is divided into six subscales:

1. Shared and supportive leadership: Eleven statements designed to measure perceptions on the degree with which school administrators participate democratically with teachers sharing power, authority, and decision making.

2. Shared vision and values: Nine statements designed to measure perceptions on the degree to which the staff shares visions for school improvement that have a singular focus on student learning, and these visions are consistently referenced in the staff's work.

3. Collective learning and application: Ten statements designed to measure the staff's collective learning and application of the learning (taking action) to create high intellectual learning tasks and solutions to address students' needs.

4. Shared personal practice: Two statements designed to measure the degree to which teacher peers review and give feedback based on observing one another's classroom behaviors in order to increase individual and organizational capacity.

5. Supportive conditions-relationships: Five statements designed to measure the collegial relationships among the staff, including respect, trust, and norms of critical inquiry.

6. Supportive conditions-structures. Four statements designed to measure a variety of conditions within the school, such as its size, proximity of staff to one another, communications systems, and the time and space for staff to meet and examine current practice (Olivier et al., 2009).

In addition to the electronic consent to start the survey, this study had four additional questions added to the PLCA-R tool:

1. Is your school a Professional Learning Community (PLC) school or working on becoming a PLC school?

2. How long has your school been working on being a PLC?

3. Does the school have a Guiding Coalition (GC) to lead the PLC work?

4. What duties and responsibilities does your Guiding Coalition focus on?

   a. Leading the PLC processes;

   b. Student learning;

   c. Collaborative culture;

   d. Focus on the 4 Essential Questions of a PLC;

   e. Student data

The five attributes listed are the five facets of a Guiding Coalition defined by Hall in *Powerful Guiding Coalitions: How to Build and Sustain the Leadership Team in Your PLC at Work*. This data allowed me to determine if the school has a true guiding coalition as defined by Solution Tree and if they are focused on at least four of the five of the critical attributes of a guiding coalition.

Procedures

Once IRB approval was acquired, an email was sent to Dr. Dianne Olivier, co-author of the PLCA-R and assistant professor at the University of Louisiana at Lafayette requesting permission to use the PLCA-R for this study. Dr. Oliver responded by granting permission to utilize the PLCA-R.

In addition, all data collected was stored on an independent external hard drive that will be used only to store the data and research from this study. The hard drive and any supporting documents have been secured in a locked cabinet located in this researcher's office. The hard drive and any support documents will be secured for five years. At the end of the storage period,

(July 1 ,2028) all information on the hard drive will be permanently deleted and documents destroyed.

Data Collection and Analysis

Initial approval was granted on September 10, 2022 from the dissertation committee, and the research protocol was prepared and submitted to Western Washington University IRB for approval. The online version of the PLCA-R was submitted for use in this study. IRB approval was granted on September 21, 2022. The consent and additional categorical questions were added to the online version of the survey. The first email requests were sent on October 11, 2022 to the first 450 randomly selected principals, assistant principals, and/or directors of teaching and learning from secondary public schools in the State of Washington based on the *Education Directory* referred to earlier.

The purpose of the research was described, including a clarification that the research would be used in a dissertation. The email contained directions for PLCA-R and an active electronic link to the PLCA-R survey. The survey was solely conducted with an electronic version of the PLCA-R. Therefore, the results of the survey were available on-demand after the participants completed the survey.

Analyzing Descriptive Data

The first four questions in the survey are categorical and can be expressed as a simple pie chart or bar graph:

Question 1. Is your school a Professional Learning Community (PLC) school or working on becoming a PLC school?

Question 2. Do the schools that profess to be or working on being a PLC have a Guiding

Coalition to assist with your PLC work?

Question 3. How long have you been working on being a PLC?

Question 4. Does the school's GC focus on at least 4 of the five duties and

responsibilities outlined by Solution Tree?

Once the categorical data was assessed, three distinct groups to measure the impact of a

guiding coalition on the overall perception of success of schools properly implementing and

sustaining PLCs were established.

The data was divided into three distinct groups.:

Group A: Schools that are not focused on becoming a PLC

Group B: Schools stating they are or are working on becoming a PLC for three or more

years but do not have a GC or who state that they have a GC but are not focused on at

least 4 of the 5 essential attributes defined by Hall and Solution Tree.

Group C: Schools that have been working on being a PLC for at least three years and

have established a guiding coalition focused on at least four of the five critical attributes.

Each dimension section of the PLCA-R was analyzed to determine if there is a substantive

difference in the perceptions of each of the three established groups.

The PLCA-R reports scores using six dimensions:

1. Shared and supportive leadership.

2. Shared values and vision.

3. Collective learning and application.

4. Shared personal practice.

5. Supportive conditions-relationships

6. Supportive conditions-structures

An unpaired Welch t-test was used to determine if there is a significant difference between the means of the three groups (Not a PLC, No or Non-GC v. GC) because the standard deviation of each dimension is not consistent. The data was reviewed to determine if the t ratio is significant enough to support or reject the null hypothesis at a confidence level of 95% or above. If the null hypothesis is rejected, it will indicate that data readings are strong and probably not due to chance.

A Table resembling Table 3.1 below was created to outline the data and clearly review the impact of a GC on establishing PLCs.

Table 3.1

Example of data table that could be used in this study

Dimension	Discovery?	p	*M* of GC	M of No GC	Difference	SE of difference	*t*	*df*	*q*
Shared and Supportive Leadership	Yes	0.01253	3.12	2.7	0.42	0.1626	*2.58*	53.8	0.00949
Shared Values and Vision	No	0.05640	3.1	2.81	0.29	0.1491	*1.94*	60.2	0.03417
Collective Learning and Application	Yes	0.00060	3.14	2.57	0.57	0.1544	*3.69*	45.3	0.00143
Shared Personal Practice	Yes	0.00131	3.1	2.62	0.48	0.1416	*3.39*	54	0.00143
Supportive Conditions - Relationships	No	0.13769	3.14	2.93	0.21	0.1389	*1.51*	43.7	0.06953
Supportive Conditions - Structures	Yes	0.00142	3.29	2.83	0.46	0.1367	*3.36*	53.1	0.00143

The results of the unpaired Welch *t* test were analyzed to determine if the data supports the experimental hypotheses or null hypothesis. The sample data in Table 3.1 clearly demonstrate that there is a strong argument against the null hypothesis due to significant difference in four of the six dimensions at a 95% confidence level and five of the six dimensions at a 90% confidence level. There is not a significant difference or relation to establishing a GC and the participant's responses regarding supportive conditions (relationships).

Based on the sample study and data set, there is strong support for the experimental hypothesis that proper implementation of a GC that is focused on the five major factors leading the PLC process will have a profound effect on the overall perception and effectiveness of PLCs in schools.

Summary

In this study, principals, assistant principals, and/or directors of teaching and learning from secondary public schools in the State of Washington were invited to complete the electronic version of the PLCA-R and additional categorical questions. The random sample of secondary school administrators was purposely established using an online randomizer to ensure that results obtained from the sample will approximate the entire population of the state's secondary schools.

The primary objective of this quantitative study was to describe, compare, and contrast the perceptions of secondary school administrators based on the results of the PLCA-R survey and the impact that a GC has had on becoming a true PLC. The quantitative data was utilized to help describe administrators' perceptions of PLC practices in their schools. The research data is based on the subscales and overall scores of the PLCA-R. In addition, the categorical questions

helped discern if the schools have a true GC as defined by Solution Tree, and if the schools are

focused on at least four of the five the critical attributes of a GC.

CHAPTER 4. DATA ANALYSIS AND RESULTS

Overview

The purpose of this quantitative study was to investigate secondary school and district level administrators' perspectives on the effective implementation of professional learning communities (PLCs) and the impact of establishing a GC on the process. The study focused on the perspective of school leaders who were implementing the PLC model for at least 3 years in Washington State.

This study addressed the need for further, more specific research on the effectiveness of GCs as part of the process in establishing PLCs and provided answers to the following research questions:

RQ1: How many of the secondary schools in the State of Washington are claiming to be working on becoming true professional learning communities?

RQ2: How many of the secondary schools in the State of Washington are claiming to be working on becoming true professional learning communities have established a guiding coalition?

RQ3: How many of the schools claiming to have established a guiding coalition have their GC focused on the essential issues identified in Solution Tree materials?

RQ4: Does establishing and using a guiding coalition, as defined by Solution Tree publications, make an impact on the overall success of schools properly implementing and sustaining professional learning communities based on secondary school administrators' perceptions as reported on the PLCA-R?

The data in this study were analyzed to determine whether to accept or reject the null hypothesis.

The instrument used to measure the effects of GCs on PLC implementation was the PLCA-R. The survey used a four point Likert scale (1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Agree*, 4 = *Strongly Agree*). The PLCA-R data were analyzed using descriptive statistics and Welch's *t* test.

Summary of the Results

The online PLCA-R (Olivier et al., 2010) survey was used to determine the perceptions of secondary school administrators and directors of teaching and learning regarding the presence of PLC characteristics in their school. The questionnaire was sent to 1494 educational email addresses found through the OSPI Directory on the OSPI website. The total number of responses was 103, which represents a response rate of 6.8%.

The PLCA-R data were assessed to address the following research and null hypotheses:

H_1: The proper implementation of a Guiding Coalition that is focused on the five major factors of leading the Professional Learning Communities process will have a profound effect on the overall perception and effectiveness of Professional Learning Communities in schools.

H_0: The proper implementation of Professional Learning Communities in schools is not influenced by the adoption or implementation of a Guiding Coalition to guide the work and will not have any measurable effect on the overall perception and effectiveness of the Professional Learning Communities process.

Each dimension of the PLCA-R was analyzed to determine if there was a substantive difference in the perceptions of each of the three established groups: (a) not a PLC school, (b) PLC with no GC, and (c) PLC with GC. The PLCA-R assesses the following six dimensions:

1. Supportive and shared leadership: Distributed leadership is key in changing and maintaining change especially after an effective or influential leader leaves. To solidify and establish change that positively impacts student learning leadership must be shared as a key component in becoming a PLC.

2. Shared values and vision: A fundamental characteristic of a PLC is a shared mission and vision for the school that is clearly focused on student learning (Morrissey, 2000).

3. Collective Learning and Application: PLC school staff engaged in processes that collectively sought new knowledge and ways of applying that knowledge to their work (Morrissey, 2000). Many consider that the term learning in PLCs represents the learning that adults do to support students' higher levels of learning and success.

4. Shared Personal Practice: DuFour et al. (2016) provided a list of practices that must shift from a traditional school model to one that is a PLC. Some of those vital practices include: shifting from teachers working in isolation to collaboration, each teacher determining what is essential to collaborative teams establishing the priority of learning standards and the pace at which they should be taught, and most importantly from the privatization of practice to open sharing of practices, team development of instructional practices and a focus on collectively building shared knowledge and best practices.

5. Supportive Conditions-Relationships & 6. Supportive Conditions-Structures: Hord (1997) identified two types of supportive structures as structural conditions and collegial relationships. In practice, this means creating time for professional learning teams to meet, build trust, hone their skills, and develop strong collegial relationships that foster open and honest conversations.

The mean and standard deviation for each group (not a PLC school, PLC with no GC, and PLC with GC) were calculated for each dimension by using an online standard deviation calculator at calculator.net. In addition, the data from all six dimensions was combined to produce a one-factor solution data set. The one-factor solution had the highest Cronbach Alpha reliability coefficient of .97 accord to PLC Associates. The one-factor solution data will be used to determine the final effect size using a Hedge's g formula. The combined results were used to answer Research Question 4: Does establishing and using a GC, as defined by Solution Tree publications, make an impact on the overall success of schools properly implementing and sustaining PLCs based on secondary school administrators' perceptions as reported on the PLCA-R? These results are also used to determine whether to accept or reject the null hypothesis.

Detailed Analysis

Research questions one through three are categorical and can be addressed with a pie chart or bar graph. This format is preferable since it is easily accessible and understood and summarizes the information for two categorical variables at once, so you can see or easily calculate the percentage of individuals in each combination of categories and use them to compare groups (Rumsey, 73).

Table 4.1

Table 4.1 illustrates the responses of schools claiming to be focused on becoming an authentic and impactful PLC. Based on the responses received, over 83% of respondents believed that their school instituted established PLC principles or was working on being a PLC.

It addresses Research Question 1: How many of the secondary schools in the State of

Washington are claiming to be working on becoming true professional learning communities?

Table 4.1

Number of schools responding that they are or are not a professional learning community
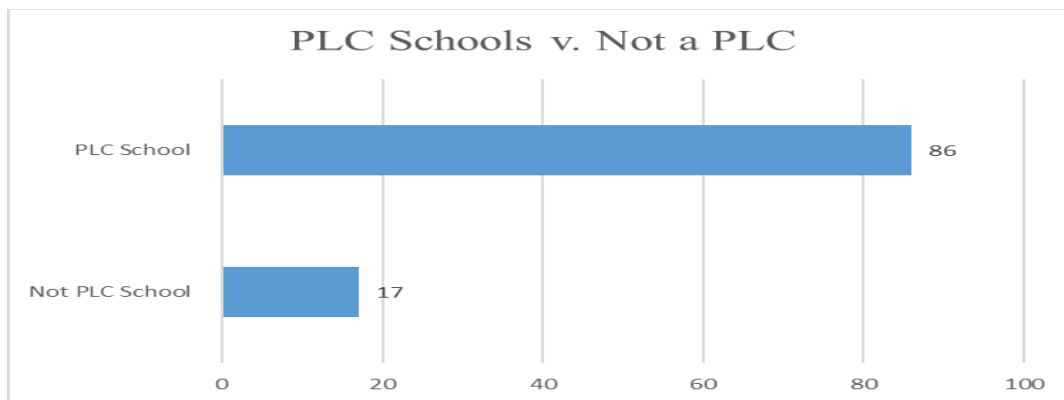
Table 4.2

Table 4.2 illustrates the number of respondents who believed their school is or is working

on becoming a PLC and if they have completed "Action One" in Taking Action, a Handbook for

RTI at Work by establishing a GC (p. 36). Table 4.2 pertains to Question 2: How many of the

secondary schools in the State of Washington are claiming to be working on becoming true

professional learning communities have established a guiding coalition?

Table 4.2

Number of PLC schools responding that they have or have not established a guiding coalition
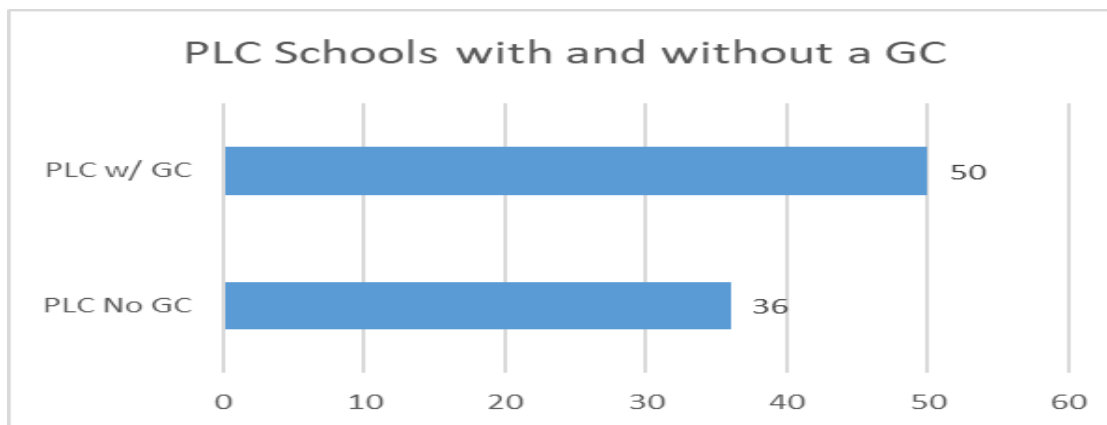

Table 4.3

Table 4.3 further sorts the responses based on the schools' focus on being a PLC and having been on the journey for three or more years. It also helps to answer Research Question 3: How many of the schools claiming to have established a guiding coalition have their GC focused on the essential issues identified in Solution Tree materials? Solution Tree defines a true PLC as a school that is organized into a series of high-performing collaborative teams that meet regularly (weekly) to focus on student learning and the four essential questions. Each team is a group of people working interdependently to achieve a common goal, for which members are held mutually accountable (DuFour et al., 2006). The respondents were asked if their established GC focused on at least four of the five essential elements defined by Hall (2022) and Solution Tree. The five elements are leading the PLC process, student learning, collaborative culture, focus on the four essential questions of the PLC, and student data. The data showed that of the 103 responses 69 (67%) individuals had been actively working on becoming a PLC for 3 or more

years. In addition, 37 of the 69 (54%) responses have a GC that focuses on at least four of the

five identified essential attributes or focuses on a GC.

Table 4.3

Number of PLC schools who have spent at least three years becoming a PLC and have a guiding
coalition focused on at least four of the five critical focuses of a GC
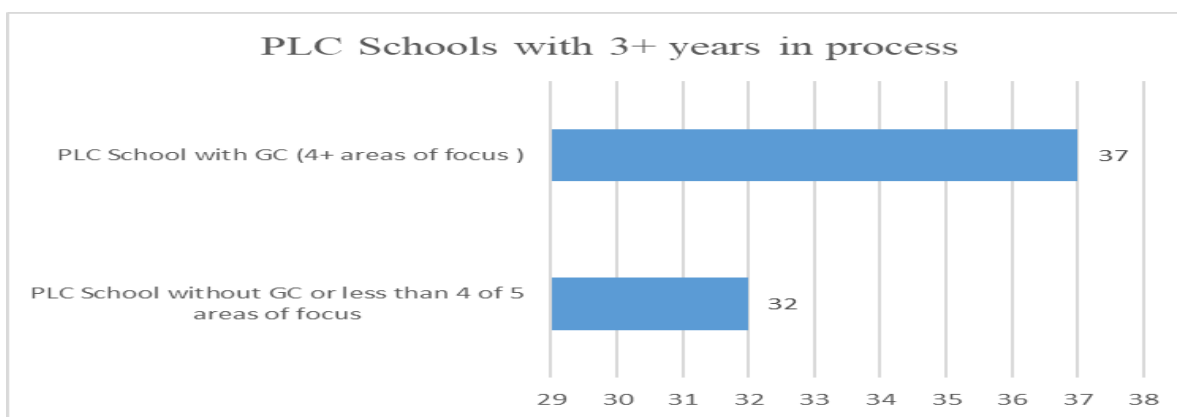
Table 4.4

Table 4.4 illustrates the data pertaining to Research Question 4: Does establishing and

using a guiding coalition, as defined by Solution Tree publications, make an impact on the

overall success of schools properly implementing and sustaining professional learning

communities based on secondary school administrators' perceptions as reported on the PLCA-R?

Table 4.4 includes a statistical analysis for each dimension of the PLCA-R including the p value,

mean, comparison of the mean and the standard error of difference. Supportive Conditions –

Structures was the dimension with the smallest mean difference ($M = 3.405$; $M = 2.662$; $D = $

0.74). Supportive Conditions – Relationships ($M = 3.319$; $M = 2.456$; $D = 0.86$) and Shared

Personal Practice ($M = 3.162$; $M = 2.357$; $D = 0.81$) show the greatest differences among the six

dimensions. The p value for all six dimensions was less than .0001 demonstrating statistical

significance.

Table 4.4

The statistical results of the PLCA-R comparing PLC schools with a GC and without a GC

Dimension	*p*	Mean - PLC with GC	Mean - PLC no GC	Difference	*SE* of difference
Shared and Supportive Leadership	< .0001	3.4229	2.6390	0.7839	0.145
Shared Values and Vision	< .0001	3.3362	2.4931	0.8431	0.139
Collective Learning and Application	< .0001	3.2784	2.5219	0.7565	0.139
Shared Personal Practice	< .0001	3.1621	2.3571	0.805	0.133
Supportive Conditions - Relationships	< .0001	3.3189	2.4562	0.8627	0.150
Supportive Conditions - Structures	< .0001	3.4054	2.6625	0.7429	0.162

Table 4.5

Table 4.5 further illustrates the data pertaining to Research Question 4. Table 4.5 includes a statistical analysis for the combined dimensions of the PLCA-R into a one-factor solution data set. The data analysis includes the *p* value, mean, comparison of the mean, the standard error of difference, *t* ratio using a Welch's *t* test and the effect size calculated with Hedge's g formula. The *p* value for the one-factor solution remained at less than .0001 demonstrating statistical significance along with the *t* score of 5.791. According to Rumsey (2016), a *t* value is significant if the absolute *t* value is higher or equal to 1.96. The Effect Size was calculated at 1.439. Bobbitt (2021) states that you can generally interpret Hedge's g as: 0.2 = small effect size, 0.5 = medium effect size and 0.8 = large effect size. He explains that an effect size of 0.2 would likely be considered a small effect size. This means that even if the difference between the two group means is statistically significant, the actual difference between the group means is trivial. In this case the effect size exceeds the threshold for a large effect size confirming the significance of the data.

Table 4.5

The statistical results of the PLCA-R using the one-factor solution to compare PLC schools with a GC and without a GC

Dimension	Discovery?	*p*	Mean - PLC with GC	Mean - PLC no GC	Difference	*SE* of difference	*t* ratio	*df*	*ES*
One-factor solution	Yes	< .0001	3.3316	2.5402	0.7914	0.137	5.7914	52	1.4386

Table 4.6

Although there was not a research question directly aligned with Table 4.6, the previous data analysis led to further investigation of the data. Table 4.6 includes the same statistical analysis for each dimension of the PLCA-R as Table 4.4 including the *p* value, mean, comparison of the mean, and the standard error of difference. Due to the significance of the data in Table 4.4, Table 4.6 includes the data used to determine if there was a statistically significant differences among the six dimensions of the PLCA-R for respondents at schools that are not PLC schools and respondents at schools that are a PLC or working on being a PLC but that did not establish a GC as part of their process.

Table 4.6

The statistical results of the PLCA-R comparing PLC schools without a GC and non-PLC schools

Dimension	*p*	Mean - PLC with GC	Mean - PLC no GC	Difference	*SE* of difference
Shared and Supportive Leadership	0.3304	2.64	2.88	-0.24	0.242
Shared Values and Vision	0.1927	2.49	2.81	-0.32	0.240
Collective Learning and Application	0.5853	2.52	2.65	-0.13	0.235
Shared Personal Practice	0.6240	2.36	2.25	0.11	0.221
Supportive Conditions - Relationships	0.3959	2.46	2.67	-0.21	0.243
Supportive Conditions - Structures	0.6977	2.66	2.76	-0.1	0.255

The gaps or differential in the data is much narrower than the data in Table 4.4.

Supportive Conditions – Structures was once again the dimension with the smallest differential

between their means (M = 2.66; M = 2.76; D = 0.1). Shared Values and Vision (M = 2.49; M =

2.81; D = 0.32) showed the greatest gap between the means of the six dimensions. Shared

Personal Practice was the only dimension where the mean of schools who were not PLCs (M =

2.25) was lower than the mean of the responses from PLC schools without a GC (M = 2.36).

Each of the other five dimensions of the PLCA-R for schools that were not attempting to

establish PLCs had higher means than the schools reporting that they are a PLC but did not

establish a GC as part of their process.

Table 4.7

Table 4.7 replicates Table 4.5 including a statistical analysis for the combined dimensions

of the PLCA-R into a one-factor solution data set. This data set compares PLC schools without a

GC and non-PLC schools to confirm that the statistical significance of the data. The data analysis

includes the p value, mean, comparison of the mean, the standard error of difference, t ratio using

a Welch's t test and the effect size calculated with Hedge's g formula. The p value for the one-

factor solution increases significantly to 0.4313 demonstrating the difference is not statistically

different from zero. The t score of 0.7968 and Effect Size of 0.2369 confirm that there is not a

statistical significance between the two sets of data or a Bobbitt stated the actual difference

between the group means is trivial (2021).

Table 4.7

The statistical results of the PLCA-R using the one-factor solution to compare PLC schools with

without a GC and non-PLC schools

Dimension	Discovery?	*p*	Mean - PLC with GC	Mean - PLC no GC	Difference	*SE* of difference	*t* ratio	*df*	*ES*
One-factor solution	No	0.4313	2.5402	2.6946	<0.154>	0.194	0.7968	33	0.2369

Summary

The purpose of Chapter 4 was to present the results of the statistical analyses to answer

the four research questions and to determine whether to accept or reject the null hypothesis.

Descriptive statistical analyses of participant responses to the 52 statements on the PLCA-R were

conducted to answer each research question.

Research Question 1: How many of the secondary schools in the State of Washington are

claiming to be working on becoming true professional learning communities? The results of the

survey indicate that a high percentage of schools in the State of Washington believe that they are

actively working to implement and sustain PLCs in their schools. Over 80% of all respondents

indicated that their school is a PLC school with only 17% (n=103) indicating that they were not

working on becoming a PLC. This is a high percentage of responses since only six schools in the

state of Washington showed continuous improvement in student achievement, earning the status

of Model PLC at Work school (Solution Tree Washington).

Research Question 2: How many of the secondary schools in the State of Washington are

claiming to be working on becoming true professional learning communities have established a

guiding coalition? Eighty-six respondents stated that their school is or is working on becoming a

PLC. The number of respondents stating that their school is a PLC but had not established a GC

was 36 (41.9%). Moreover, data were further assessed to determine how long each respondent's school had been invested in the PLC process. Ten respondents (27.7%) stated that they were working on becoming a PLC school for 1 to 2 years, 11 respondents (30.5%) specifically indicated that they have been working on becoming a PLC school for 3 to 5 years, and 15 responses (41.7%) indicated that they had been doing the work for five or more years. Fifty of 86 respondents (58.1%) stipulated that their school established a GC to guide the work of becoming a PLC. The breakdown consisted of seven responses from schools that were invested in the process for 1 to 2 years, 15 were working on the process for 3 to 5 years, and 28 who were invested in the PLC process for five or more years.

Research Question 3: How many of the schools claiming to have established a guiding coalition have their GC focused on the essential issues identified in Solution Tree materials? This research question was focused on the responses of school administrators who indicated that their schools invested three or more years in the process to better ensure the data were not skewed by common errors that occur when implementing a new program or strategy in a school. The research question and analysis also dealt with the combined data of PLC schools that had not established a GC and the schools that established a GC but were focused on less than four of the five essential areas identified by Solution Tree, which was 32 of 69 (46.4%) responses. The data was categorized by the number of years invested in the process with 11 respondents (34.4%) identifying that they had spent 3 to 5 years being a PLC and 21 respondents (65.6%) stating they spent five or more years on the process. In comparison, 37 respondents (53.6%) identified that their GC was focused on four or more of the essential areas identified by Solution Tree. Only one (2.7%) of the 37 respondents indicated that their school focused on four of the five identified

elements, excluding "Leading the PLC Process" as the only element that their GC did not include. The other 36 respondents (97.3%) indicated that their GC was focused on all five elements of the PLC process. The 37 respondents with focused GCs further indicated that their schools have been working on the process for 3 to 5 years, 15 responses (40.5%) and five or more years, 22 responses (59.4%).

Research Question 4: Does establishing and using the guiding coalition, as presented by Solution Tree publications, make an impact on the overall success of schools properly implementing and sustaining professional learning communities based on secondary school administrator's perceptions as reported on the PLCA-R? Each dimension of the cohort survey responses in addition to a combined one-factor solution was examined for specific areas that were rated highest and lowest by the participants and overall impact using the mean in addition to examining the t ratios and effect size to determine if there were statistically significant differences among the dimensions and the combined data. According to Rumsey (2016), the larger the sample size is, the larger the degree of freedom will be, and the more the t distribution will look like the standard normal distribution. Rumsey indicated that the rough cutoff point to obtain this degree of freedom is around $n = 30$. This sample size of 103 far exceeded $n = 30$; therefore, the results of the Welch's t test and Hedge's g should be valid. Due to the high t score and effect size of the study it is important to note the following:

- The confidence factors in relationship to t scores, according to Rumsey, are 1.96, which is equal to a confidence factor of 95%; 2.32, 98% and 2.58 correlates to a confidence factor of 99%.

- Bobbitt (2021) affirms that you can generally interpret Hedge's g as: 0.2 = small effect size, 0.5 = medium effect size and 0.8 = large effect size. A large effect size means that a research finding has practical significance, while a small effect size indicates limited practical applications.

In the Shared and Supportive Leadership dimension, the PLC schools with a GC posted their highest mean score of 3.422 meaning that there were a significant number of agree and strongly agree responses. In comparison, PLC schools without a GC had a mean score of 2.639 a difference of 0.783. The data analysis for the remaining five dimensions had very similar results as outlined in Table 4.4. Shared and Supportive Leadership and Supportive Conditions – Structures had the highest mean scores for PLC schools with a GC. Both of those dimensions had a mean in excess of 3.4 and schools with a GC did not have a dimension score lower than a 3.1. In contrast, the PLC schools without a GC did not have a mean score above 2.7 with their highest scoring dimensions being Supportive Conditions – Structures ($M = 2.662$) and Shared and Supportive Leadership ($M = 2.639$).

Due to the fact that the t score and effect size of the combined one-factor solution data between PLC schools that established a GC focused on at least four of the five essential elements and PLC schools that did not establish a GC or do not focus on the essential elements was statistically significant ($t = 5.791$, ES $= 1.438$), a comparison of schools not attempting to be a PLC and those without a GC were examined. The same manner and method was used comparing means and standard deviations to calculate a t score using Welch's t test and an effect size using Hedge's g. The purpose of this was to determine if the null hypothesis would be supported if the

focus was on schools not even attempting to be PLCs in comparison to those who failed to follow the essential action step of establishing a GC.

In this case, the mean of all six dimensions remained the same for PLC schools without a GC. The mean scores for the schools who were not attempting to be a PLC ranged between 2.25 for Shared Personal Practices to 2.88 for the dimension of Shared and Supportive Leadership. A surprising factor in this comparison is that schools not attempting to be a PLC had higher mean scores in all dimensions except for Shared Personal Practices, where the PLC schools without a GC had a mean score of 2.36 and non-PLC schools had a mean score of 2.25. The resulting t score (0.796) and effect size (0.237) also confirmed that there was little or no statistically significance difference between the two cohorts.

The resulting data, when used to determine whether to accept or reject the null hypothesis, overwhelmingly demonstrates that the establishment of a GC has a profound impact on properly establishing and maintaining PLCs in schools. In fact, the research may pose the question of whether schools are better off not implementing PLC practices than they are working on being a PLC school without a GC. Therefore, the data indicates that the null hypothesis should be rejected.

A summary and discussion of the research study results are presented next in Chapter 5. The discussion includes a review of the results in relation to the literature regarding the necessity of GCs in relation to the establishment of PLCs in schools. In addition, Chapter 5 discusses the limitations of the study, implications of the results and recommendations for future research.

CHAPTER 5: CONCLUSIONS AND DISCUSSION

Edwin R. Fisher, addressing a subcommittee of the U.S. House of Representatives in

1978, stated, "In God we trust. All others must provide data." (Davis, 2).

Introduction

Since 1998 when Richard DuFour and Robert Eaker wrote *Professional Learning*

Communities at Work: Best Practices for Enhancing Student Achievement, PLCs have been one

of the predominant models for schools and school districts to address and improve student

achievement and reduce the opportunity/achievement gap. PLCs became the prevalent model for

improving schools to meet the increasing demands of accountability and community

expectations. However, many educational institutions and school leaders still struggle to create

an authentic PLC that operates as defined in *Learning by Doing* (2006) as an ongoing process in

which educators work collaboratively in recurring cycles of collective inquiry and action

research to achieve better results for the students they serve. Askew (2012) contended that the

idea of PLCs stemmed, in part, from Senge's (2006) work on learning organizations,

organizational leadership, and systems thinking. Senge described a learning organization as a

place where "people continually expand their capacity to create desired results, where new and

expansive patterns of thinking are nurtured and where collective aspiration is set free" (p. 3).

Schmoker (2006) concluded that PLCs are the "most agreed upon means by which to

continuously improve instruction and student performance" (p. 106).

A great deal of literature exists on the use of PLCs as agents of improved student

achievement (Askew, 2012; DuFour et al., 1991, 1998; Erkens & Twadell, 2012; Morrissey,

2000; Muhammed & Cruz, 2019; Reeves, 2009 & 2019; Schmoker, 2006) and on PLCs as agents

of educational reform (Abrego et al., 2010; DuFour et al., 2008; Hord, 2004; Schmoker, 2008).

However, a large percentage of school leaders struggle to create authentic, high-performing

PLCs and instead settle for an incomplete, less effective version also known as *PLC Lite*. The

complexity of establishing true PLCs that focus on shared and supportive leadership, shared

values and visions, collective learning and application, shared personal practices, and supportive

conditions focused both on relationships and structures is a Herculean task. Too many school

leaders attempt to establish a true and vibrant PLC culture without the foundational support of a

GC. Since 1998, almost 25 years ago, very little research, if any, has been conducted on the

impact and necessity of school leaders distributing leadership roles and functions for establishing

PLCs through a GC.

The goal of the researcher in this quantitative study was to begin filling the existing void

and dearth of data in the literature and research regarding the relationship between

administrators' perspectives of PLC implementation and the implementation of a GC in the

process, as defined in the Solution Tree publication, *Taking Action*. The resulting data may aid

school leaders in understanding the importance of shared leadership as they strive to maximize

the use of PLCs in their schools to positively impact staff efficacy and student achievement.

Furthermore, the information from this study provides school leaders and educators with a

clearer understanding of the behaviors that should be evident in a school that has implemented

PLCs with fidelity.

Summary of Study

This study explored the perceptions of building administrators and Directors of Teaching

and Learning in secondary schools throughout Washington State on the five dimensions of PLCs

as delineated by the PLCA-R questionnaire. The study sample included 103 respondents. Insight into sustained PLC development and operation was sought from the results of the questionnaire focused on quantitative data from the PLCA-R. The six dimensions of a PLC used in the PLCA-R are aligned with Abrego et al.'s (2010) book *Demystifying Professional Learning Communities: School Leadership at Its Best*. The dimensions are Shared in Support of Leadership, Shared Values and Vision, Collective Learning and Application, Shared Personal Practice, Supportive Conditions – Relationships, and Supportive Conditions – Structures. The data were collected from 103 Secondary School Administrators and Directors of Teaching and Learning.

Originating from the review of the literature, the four overarching research questions were:

Research Question 1: How many of the secondary schools in the State of Washington are claiming to be working on becoming true professional learning communities?

Research Question 2: How many of the secondary schools in the State of Washington are claiming to be working on becoming true professional learning communities have established a guiding coalition?

Research Question 3: How many of the schools claiming to have established a guiding coalition have their GC focused on the essential issues identified in Solution Tree materials?

Research Question 4: Does establishing and using a guiding coalition, as defined by

Solution Tree publications, make an impact on the overall success of schools properly

implementing and sustaining professional learning communities based on secondary

school administrators' perceptions as reported on the PLCA-R?

As a result, the following experimental and null hypotheses followed.

Research Hypothesis

Proper implementation of a guiding coalition that is focused on the five major factors of

leading the PLCs process will have a measurable effect on the overall perception and

effectiveness of PLCs in schools.

Null Hypothesis

Proper implementation of PLCs in schools is not influenced by the adoption or

implementation of a guiding coalition to guide the work and will not have

any measurable effect on the overall perception and effectiveness of the PLC process.

Summary of the Results

To gather data in relationship to the research questions, the PLCA-R was used to measure

the perceptions of school administrators and directors of teaching and learning related to the six

essential dimensions of PLCs. The corresponding data were disaggregated using factors to

establish three primary groups of emphasis. These three groups were (a) respondents in schools

that were not attempting to be a PLC, (b) respondents in schools that were attempting to be a

PLC but did not establish a GC, or established a GC in name only, as part of their process, and

(c) respondents in schools that were working on being a PLC and established a GC focused on

four of the five essential elements defined by Hall. The corresponding data were compared to

determine if there was a statistically significant difference in perceptions among the three distinct groups for the six dimensions of the PLCA-R.

The initial results of the report on the PLCA-R stated that of the 103 respondents, 86 reported to be a PLC school. The data can be found in Table 5.0 and are also designated in blue in the corresponding Chart 5.0. Table 5.0 and the corresponding chart also illustrate that 17 respondents reported that they were not focused on becoming a PLC, designated in blue on the chart below. The initial data showed a statistically significant difference in the mean scores for five of the six dimensions with only the dimension of Shared Values and Vision having a difference less than 0.20 between their mean scores of 2.96 and 2.81. That gap widened considerably on the dimension of Shared Personal Practice, which had a difference of over 0.50 with mean scores of 2.77 and 2.25.

Table 5.0

The initial results of the PLCA-R with total respondents, categorized by PLC schools with the mean and standard deviation of each dimension

Selection	#		Shared and Supportive Leadership	Shared Values and Vision	Collective Learning and Application	Shared Personal Practice	Supportive Conditions - Relationships	Supportive Conditions - Structures
Yes	86	Mean	3.10	2.96	2.92	2.77	2.93	3.07
		StDev	0.81	0.79	0.77	0.80	0.83	0.86
No	17	Mean	2.88	2.81	2.65	2.25	2.67	2.76
		StDev	0.85	0.85	0.83	0.82	0.86	0.85

Chart 5.0

The mean scores for each dimension of the PLCA-R.
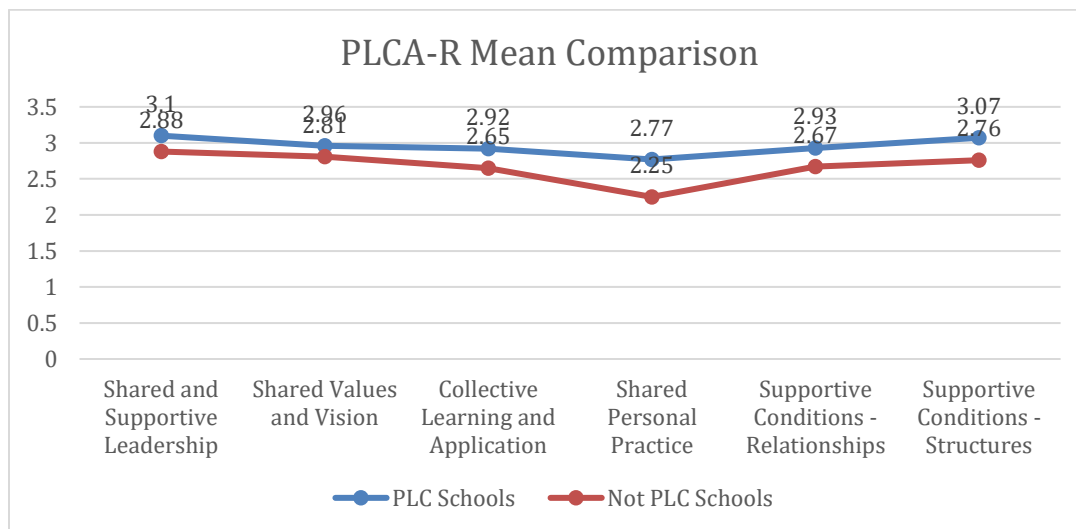
The information changed dramatically when comparing the data for schools that invested time and energy into establishing a focused GC while engaged in the PLC development process in their schools. Respondents with a focused GC in their school had to establish that their GC was focused on at least four of the five essential characteristics that included Leading the PLC Process, a focus on Student Learning, a Collaborative Culture, focus on the Four Essential Questions of a PLC, and a focus on Student Data. The change in the range between the reported means of non-PLC schools versus schools focused on becoming a PLC was 0.15 (Shared Values and Vision) to 0.52 (Shared Personal Practice) with an overall average of 0.29. In comparison, the range between the reported means of schools with No GC/Not focused GC and schools with a focused GC ranged from 0.74 (Supportive Conditions – Structures) to 0.86 (Supportive Conditions – Relationships) with an overall average of discrepancy of 0.80.

This study revealed that the area of least discrepancy (0.74) was among the respondents No GC/Not focused GC *(M = 2.66)* and with a focused GC *(M = 3.41)* for Supportive Conditions

- Structures. This dimension was one of the highest scoring dimensions for respondents with No GC/Not focused GC and second highest behind Shared and Supportive Leadership ($M = 3.42$) for respondents with a focused GC. Supportive Conditions – Structures establish that schools provide time and support along with fiscal resources for PLCs to work, learn and grow together. Strong school structure represents the belief that the school administration, rules of the school and use of fiscal resources help them in their work. Gray et al. (2017) cited Hoy's assertion that "an enabling school structure is a hierarchy that helps rather than hinders and a system of rules and regulations that guides problem solving rather than punishes failure" (p. 2). Organizations with supportive structures are more apt to facilitate problem solving, protect participants, and encourage cooperation, collaboration through flexibility and innovation. Divergently, a school that is viewed as having less supportive structures tends to focus on more top down, traditional leadership that does not focus on shared leadership and instead more tightly managed or controlled by the school leader.

In contrast, Supportive Conditions - Relationships had the greatest discrepancy (0.86) among the respondents with No GC/Not focused GC *(M = 2.46)* and with a focused GC *(M = 3.32)* on the PLCA-R instrument. Strong relationships have been called the glue that holds the other PLC dimensions together; without strong relationships difficult conversations to promote staff and student growth cannot occur. Miller (2020) contended that "PLCs need strong facilitators in order to engage in conversations that promote learning, risk taking, and innovation" (p. 5) and Huffman and Hipp (2003) found that "developing a trusting relationship was the first step for successful interaction" (p. 55). Successful PLCs engage in continuous examination of student data and teaching practices to inform and adjust instruction. This

continuous reflection requires strong, caring, and trusting relationships among the teachers and between the teachers and the administration. Thus, it is imperative that an authentic, productive relationship be cultivated for the purpose of forming strong PLCs.

Discussion of the Results

Research Question 1 was how many of the secondary schools in Washington State are claiming to be working on becoming true professional learning communities? The findings from research do not provide a definitive answer for this research question. However, based on 86 (83%) of 103 respondents stating that they are working on becoming a PLC, one can confidently deduce that a high percentage of secondary schools in the State of Washington professed to be or are working on being a PLC. Although 83% seems high, it aligns with the work of Basileo (2016), who detailed, "Most schools have PLCs in place, at least in some form. In a recent study conducted by the Learning Sciences researchers, 90% of the schools we surveyed reported that their PLCs meet regularly on average once per week" (p. 2). If 83% of the 2378 secondary schools listed on the Office of Superintendent of Public Instruction (OSPI) Educational Directory were PLC schools, that would equate to approximately 1974 secondary schools in the State.

Research Question 2 was how many of the secondary schools in the State of Washington are claiming to be working on becoming true professional learning communities have established a guiding coalition? Eighty-six respondents stated that their school was or was working on being a PLC. When asked if they had a GC, that data broke down to 50 (58%) schools claiming to have a GC and 36 schools without a GC. Based on the responses, only slightly more than half (58%) intentionally implemented a GC as part of their PLC process.

Research Question 3 was how many of the schools claiming to have established a guiding coalition have their GC focused on the essential issues identified in Solution Tree materials? For Research Question 3, the data were analyzed for two key elements. First, schools that had only been working on becoming a PLC for fewer than three years were eliminated to remove any common errors occurring when implementing a new program or strategy. Secondly, each respondent's answers were reviewed to ensure that their school's GC was focused on at least four of the five essential elements defined by Hall and Solution Tree. Once data analysis was completed, it was determined that only 37 of the 50 (74%) respondents met both criteria and were focused on four or more of the essential elements, with all but one focused on all five. This distinction is imperative, as Hall (2022) stated:

> Your school's guiding coalition should model the structure and processes required of the collaborative teams within your PLC. Grade-level and departmental collaborative teams that are structured like, act like, and sound like the guiding coalition have an excellent chance of staying true to PLC concepts. (p. 12)

Research Question 4 was does establishing and using a guiding coalition, as defined by Solution Tree publications, make an impact on the overall success of schools properly implementing and sustaining professional learning communities based on secondary school administrators' perceptions as reported on the PLCA-R? The crux of this study was epitomized by Research Question 4. The responses, which are displayed in Table 5.1 in conjunction with the *t*-score and effect size of the combined data displayed in Table 5.2, unequivocally indicates that the establishment and use of the GC focused on the appropriate and necessary functions is imperative to successfully implementing PLCs in our schools.

Table 5.1

Comparison of PLC schools with and without a GC

Dimension	p	Mean - PLC with GC	Mean - PLC no GC	Difference	*SE* of difference
Shared and Supportive Leadership	< .0001	3.4229	2.6390	0.7839	0.145
Shared Values and Vision	< .0001	3.3362	2.4931	0.8431	0.139
Collective Learning and Application	< .0001	3.2784	2.5219	0.7565	0.139
Shared Personal Practice	< .0001	3.1621	2.3571	0.805	0.133
Supportive Conditions - Relationships	< .0001	3.3189	2.4562	0.8627	0.150
Supportive Conditions - Structures	< .0001	3.4054	2.6625	0.7429	0.162

Table 5.2

PLCA-R one-factor solution comparison of PLC schools with a GC and without a GC

Dimension	Discovery?	p	Mean - PLC with GC	Mean - PLC no GC	Difference	*SE* of difference	*t* ratio	*df*	*ES*
One-factor solution	Yes	< .0001	3.3316	2.5402	0.7914	0.137	5.7914	52	1.4386

Due to the statistically significant *t* score and effect size, the need to compare data between schools not working on being a PLC and those that considered themselves PLC schools but didn't have a GC became indispensable. The data in Table 5.3 demonstrated that the mean for five of the six dimensions was higher in schools that were not focused on being a PLC than it was in schools that labeled themselves PLC schools but didn't establish a GC as part of their process. The means of the dimensions of Shared and Supportive Leadership, Shared Values and Vision, Collective Learning and Application, and Supportive Conditions both Relationships and Structures in non-PLC schools averaged 0.20 higher than PLC schools without a GC. PLC schools without a GC only scored higher in the dimension of Shared Personal Practice by 0.11

points. The *t* scores and effect size associated with the data presented in Table 5.4 was not statistically significant, and results may indicate schools are better at not working on being a PLC than implementing PLCs without a strong and focused GC.

Table 5.3

The statistical results of the PLCA-R comparing PLC schools without a GC and non-PLC schools

Dimension	*p*	Mean - PLC with GC	Mean - PLC no GC	Difference	*SE* of difference
Shared and Supportive Leadership	0.3304	2.64	2.88	-0.24	0.242
Shared Values and Vision	0.1927	2.49	2.81	-0.32	0.240
Collective Learning and Application	0.5853	2.52	2.65	-0.13	0.235
Shared Personal Practice	0.6240	2.36	2.25	0.11	0.221
Supportive Conditions - Relationships	0.3959	2.46	2.67	-0.21	0.243
Supportive Conditions - Structures	0.6977	2.66	2.76	-0.1	0.255

Table 5.4

PLCA-R one-factor solution comparison of PLC schools with without a GC and non-PLC schools

Dimension	Discovery?	*p*	Mean - PLC with GC	Mean - PLC no GC	Difference	*SE* of difference	*t* ratio	*df*	*ES*
One-factor solution	No	0.4313	2.5402	2.6946	<0.154>	0.194	0.7968	33	0.2369

Research Hypothesis

The research hypothesis was that proper implementation of a GC that is focused on the five major factors of leading the PLCs process will affect the overall perception and effectiveness of PLCs in schools. The data identified a clear correlation between a well-

established and focused GC in the overall perception of effectiveness and impact that PLCs can have in schools. The crux of the work of a GC is learning together about PLC implementation and collectively building knowledge of next steps. With this knowledge and focus on continuous learning, the GC can support and influence collaborative teams of teachers into action on the essential elements of being a PLC. As the GC builds greater clarity on their role and what is involved in becoming a PLC, they help those around them learn, grow and ultimately become more effective and impactful.

Limitations

This quantitative research study has the following limitations:

- The results are limited to voluntary responses of school administrators and district Directors of Teaching and Learning in the State of Washington. Therefore, generalizations to other settings cannot be assumed.

- The results are limited due to the use of only one survey instrument (PLCA-R) to measure the respondents' perspectives. Additional measures could have provided more in-depth information regarding their perceptions.

- The results are limited to the perceptions of administrators serving in secondary schools during the 2022 – 2023 school year. The perceptions of elementary administrators and other district personnel associated with teaching and learning may have provided additional insights and resources.

- It is unknown if data may have been impacted by the effects of the COVID 19 pandemic on school improvement efforts including but not limited to the establishing and sustaining of PLCs and GCs.

- Data was not collected on the longevity of each administrator in the program that they were assessing. A school may have been working on the PLC process for three or more years but the administrator responding to the survey may or may not have been there for the entire time.

- The results are limited to the responses of the participants who actually returned their surveys and by the assumption that the participants responded honestly to the survey.

- The results are limited by the methodology. The study was quantitative and used survey design. The inclusion of other methodologies and research designs could produce more data and lead to more specific results.

Implications of the Results for Practice

Although this quantitative study was limited and one of the first to explore this detailed topic of the impact of GCs, the findings have implications for educational practice. The data clearly show that all dimensions assessed in the PLCA-R are heavily and positively impacted when a school implemented a GC that is focused on the five essential elements.

The results of this quantitative study revealed the following implications for practice:

- The PLC model, when implemented appropriately, is a powerful method for school reform.

- Proper implementation of the PLC model must include the establishment of a GC that is focused on the five essential elements of leading the PLC process: a focus on student learning; building a collaborative culture; maintaining a focus on the four essential questions of the PLC; and the review of student data to drive professional development.

- School leaders should use current research such as the information in the Literature Review of this study and/or Solution Tree resources such as Taking Action or Bill Hall's (2022) book *Powerful Guiding Coalitions* to assist them as they refine the practices of their PLCs.

- GCs at schools should engage in the ongoing professional development of the coalition to ensure that they fully understand the essential elements and work of a highly functioning and effective GC.

Recommendations for Future Research

The results of this study provided additional quantitative research regarding the relationship between the successful implementations of PLCs in schools and the necessity of establishing a GC to lead that work. While this study revealed data on perceptions of PLC implementation, caution should be used in generalizing these results to other populations. In order to expand and confirm upon the results, the following recommendations are suggested for future research:

- Replicate this study and include administrators at the elementary, middle, and high school levels along with other district administrators whose positions focus on student learning and educators from across the country. A larger sample size will increase the precision of the study to generalize across larger populations.

- Conduct a longitudinal study of PLC implementation and the impact of the GC within the school. It would be beneficial to compare perceptions on the PLCA-R over time.

- Replicate the study to include a quantitative analysis to further delve into the impacts of the GC and its impact on the perception of school staff.

- Replicate the study to include instructional staff at the school so a comparative analysis between administrator and teacher perceptions can be studied.

- Examine the relationship of PLC implementation and the establishment of a GC with other measures of student achievement. These measures may include scores on standardized tests, grade point average, on-time graduation rates, and dropout rates. It would be interesting to determine if any correlation exists between PLC implementation and these other measures of student achievement.

Conclusion

DuFour (2004) stated, "The professional learning community model is a grand design—a powerful new way of working together that profoundly affects the practices of schooling" (p.10), and its implementation is as daunting as it is worthwhile. Yet, leaders who apply sound principles to lead, facilitate, and manage the change process will ultimately succeed in creating an environment characterized by collaboration that emphasizes learning, not just teaching. It can take years for a school to develop an effective PLC, with much effort on the part of the teachers and school leaders. This effort can be for naught or diminished if the principles of shared leadership through a GC are not properly implemented to support and guide the process. Mattos et al. (2016) defined the GC as an alliance of key members of an organization who are specifically charged with leading the change process through predictable turmoil. Members of the coalition should include opinion leaders – people who are respected within the organization that others are likely to follow their lead. This study demonstrates the essential relationship between establishing a GC to shepherd the work of a school becoming a PLC and collective efficacy in developing PLCs, in addition to addressing a gap in the literature. PLCs offer schools

a model for reform and school improvement. The results of this study iterate the significance of educators and school leaders working together to develop the structures and trust necessary to build these communities of learning through a thriving GC. Buffum (2012) indicated:

> Too often, schools rely upon preexisting "leadership teams" to guide the cultural change necessary to operate as a PLC. Members of these preexisting teams have been selected around old paradigms and ways of thinking that are anathema to the real work of PLCs. Even worse, principals sometimes go it alone in attempting to change the culture of their schools, or they only involve staff in ways that appear to be symbolic rather than substantive. (p. 2)

This study added to the research on successful PLC implementation through the establishment of a GC and emphasizes that advancing these practices and incorporating a GC into the daily culture of schools is key to any educational organization desiring to become a true and impactful PLC. Schools who want meaningful, lasting, and substantive change by becoming an authentic PLC must implement a focused GC.

The data also revealed that there was not a statistically significant difference in any of the six dimensions of the PLCA-R between schools who were not PLCs and schools that claimed to be PLCs but neglected to establish a GC as outlined by Solution Tree. The lack of clarity and direction by school leadership and peers jeopardizes a school's efforts in becoming a PLC similar to a teacher not clarifying their goals and objectives of a lesson to students.   Erkens summed it up by stating:

> The most significant hurdle with becoming a learning community is that most teachers don't truly understand the work of PLCs. They are not hearing a clear, consistent, and compelling

rationale from trusted colleagues – GC Leaders – in their daily work. Hence, most educators

(from all levels) experience the collaboration required to function effectively as something

that is being forced upon them rather than a gift of opportunity and a work of love crafted for

them. Effective GCs work with care to design meaningful conversations and empower

critical decision making with peers (Erkens, personal communication, January 31,2023).

The final conclusion of this study is that schools who fail to take the time to establish an

authentic GC as part of their PLC process are relegated to what Reeves and DuFour call PLC

Lite. These schools must examine their commitment to becoming authentic, effective change

agents to support student learning as a PLC. Authentic and powerful PLCs follow all of the

critical steps outlined in *Taking Action* including step two and the essential element of forming a

powerful GC.

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