

CONTENTS

Abstract	iii
List of Tables	vi
List of Illustrations	vii
Acknowledgements	viii
CHAPTER	
1. INTRODUCTION	1
Professional Learning Communities	2
Procedure for this Study	7
Research Question	7
Data Collection	8
Analysis of Data	8
Organization	8
2. AMERICAN EDUCATIONAL REFORM: AN ENDLESS OFTEN FRUITLESS CYCLE ..	10
Early American Education and Reform	11
19th Century Education and School Reform	14
20th Century Education and School Reform	20
3. THE HISTORY OF PROFESSIONAL LEARNING COMMUNITIES	39
The Need for Reform	39
The Development of Professional Learning Communities	41
What are Professional Learning Communities?	46
Changing the Culture and Values	53
Matching Day to Day Activities with Organizational Values	54

Leadership Roles in Professional Learning Communities.....	55
Teacher Isolation.....	57
Collaboration.....	58
Advantages for Teachers.....	60
Learning for All Students.....	62
Data Driven Instruction.....	64
Celebrations as Vital Motivators	65
A Review of Professional Learning Communities	66
Strengths of Professional Learning Communities	66
PLCs as an Avenue for Professional Growth	67
Hard Work and Persistence are Paramount	70
Challenges in Implementing and Sustaining PLCs.....	72
Barriers and Concerns for PLC Implementation	75
Evidence of Student Achievement and Recommendations for Implementation.....	84
Problems Linking PLCs to Achievement and Determining the Status of a PLC	86
The Growing Demand and Support for PLC Professional Development.....	87
4. DISCUSSION, ANALYSIS AND PREDICTION.....	93
Outside Influences on Education	93
Professional Learning Communities Today.....	95
Informational Cascades.....	101
The Future of Professional Learning Communities.....	105
REFERENCES	111

LIST OF TABLES

Table

1. PLC Conferences Provided by Solution Tree.....	92
2. Number of Educators Attending Solution Tree Events	93
3. Duration and Peak of Educational Innovations	100

LIST OF ILLUSTRATIONS

Figure

1.	ERIC Search for PLC.....	96
2.	ERIC Search for Professional Learning Community.....	97
3.	ERIC Search for Madeline Hunter.....	97
4.	ERIC Search for Block Schedule.....	98
5.	ERIC Search for Whole Language	98
6.	ERIC Search for Phonics Instruction.....	98
7.	ERIC Search for Basic Schools	99

ACKNOWLEDGEMENTS

This dissertation has taken a long and winding road through many personal and professional trials and tribulations, as well as success and joys. There were many individuals along the road who encouraged me and often actually thrust me forward when I wanted to give up. Those who know me, though, know that I never would have forgiven myself if I had taken the easy way out and given up when I wanted to.

It is impossible to thank all those who have contributed to the successful completion of this project, but I must acknowledge some individuals and groups:

I wish to acknowledge the contributions of my doctoral committee at the University of Kansas. I particularly want to thank the chair of my committee, Dr. Howard Ebmeier, for putting up with the considerable number of delays, and allowing me to push forward when he could have given up on me. He offered me guidance, perspective, and support throughout my coursework and dissertation. Dr. Twombly, your thoughtful comments and questions have indeed made me a better, more reflective writer. Dr. Rury, I truly appreciate your knowledge of the history of education and insights you offered related to my work. To Dr. Markham and Dr. Perry, thank you for the insightful discussion during my defense.

I would also like to thank my wonderful family. My husband, Jeff, has supported my efforts with encouragement and patience. My boys, Cole and Tate, are the joys of my life. It is for them that I have been driven to prove to myself that I can be the best mother, teacher, leader, and friend that I want to be. My parents, Ed Linville, Leslie Riney, and JoAnn Linville, instilled in me the qualities of strength, determination, and perseverance, and for that I thank them all sincerely. I would not be the person I am today if it weren't for their love and support. My brother and sisters – Jesse, Kelli, and Susie – along with all my other family members, including

my in-laws, have been instrumental in my efforts. My children's childcare provider, Jean, has also played a huge role in my life. She took extra time to care of my most precious gifts when I needed time to pursue this project. My goddaughter, Anyssa, spent an entire month watching my boys so I could work on this paper as well. Each of you has made pursuing my dreams possible through your kindness and love for my children. Even though I could not be with them as much as I would have liked while working on this project, I knew they were with others who loved them just as much as I do.

Thank you to my special friends who have been instrumental in my success by providing encouragement and a kick in the pants when I needed it: Holly, Jess, Jen, Linda, Kari, Rita, Lucille, Tara, Ande, Bridgett, Joe, Anyssa, and Helen. You all have been remarkable friends, and I know I am truly blessed to have each of you in my life. Your support, encouragement, and kindness over the last couple of years has helped me keep going, even when I thought I couldn't. Alicia, beyond your supportive friendship, you have provided endless guidance in creating this paper, offering suggestions, resources, and taking the time to repeatedly review my paper. To my colleagues and friends in my cohort group, especially Devin and Megan – thanks for always checking in on me and making sure I finished what I started. To my friend and mentor, Dr. Singer, you have impacted my life more than you know. You have always offered guidance and encouragement, and you always believed in me even when I didn't believe in myself. You are an inspiration, and I strive to touch others' lives as you have throughout the years. You have been instrumental in my accomplishments. And, Julie, what would I ever have done without you? Thank you for your endless hours editing my paper and your unending patience with my mistakes!

I have discovered so much about myself, my family, and my friends over the course of this academic endeavor. There are so many other family and friends whom I did not mention, but who also had a significant impact on me both personally and professionally. I am extremely grateful to and for each of you. Thank you.

CHAPTER 1

INTRODUCTION

In 1983, *A Nation At Risk* was released to the American public by the National Commission on Excellence in Education. This report crucified America's public education system, stating that American schools were in peril due to the substandard education that its students were receiving. A flurry of educational reforms followed this report in efforts to improve American public education (DuFour, DuFour, & Eaker, 2008).. During the late 1980s and the early 1990s, a small number of schools emerged that were able to reach considerable success in raising student achievement. Although small in number, this group of seemingly unrelated schools began to command the attention of fellow educators and educational researchers alike. Soon commonalities of these schools became apparent, and one of these commonalities was a concept termed "professional learning communities" (PLCs). The popularity of professional learning communities slowly grew, implemented as the newest educational reform and intended to be the "silver bullet" to educational success and reform. According to the information provided by Solution Tree (S. Ritz, personal communication, March 27, 2012) professional development for this reform is in more demand today than ever. This growth is documented in chapter 3. This overview of the professional literature about professional learning communities is completed from a historical perspective. Awareness of professional learning communities and the issues leading up to this reform can help educators gain an understanding of the cycle of innovations and reforms in education. Observing and evaluating the patterns of educators' and researchers' responses to the implementation of educational reforms and the professional development associated with them can provide insight into the trends of current and future educational reforms and innovations.

Professional Learning Communities

A Nation At Risk (U.S. Department of Education, 1983) brought forth a resounding cry for the improvement of our educational practices. The ensuing public and government response to the educational outcomes caused a stir in many American institutions. Successful educational reform was demanded and expected. Within a few short years, some veteran educators began speaking out about the need to readdress the way teachers teach and assess students, collaborate with peers, and critically reflect on the strengths and weaknesses of their own teaching practices as well as those of their peers. Professional learning communities was one of the reforms that rose to the top among many other reforms.

Professional Learning Communities provided a framework for how a school should function in order to continually increase student achievement. It was grounded in the concept that student success was a direct result of staff development (DuFour et al., 2008). Ernest Boyer (cited in Sparks, 1984) summed up the importance of professional development:

The only way we are going to get from where we are to where we want to be is through staff development. When you talk about school improvement, you're talking about people improvement. That's the only way to improve schools unless you mean painting the buildings and fixing the floors. But that's not the school, that's the shell. The school is the people, so when we talk about excellence or improvement or progress, we're really talking about the people who make up the building. (p. 9)

The premise of this framework was also very clear that staff development focused on developing a team or community of learners with an unrelenting focus on student learning.

In accordance with this main premise, PLCs emerged with six identified characteristics: “1) shared mission, vision, and values, 2) collective inquiry, 3) collaborative teams, 4) action orientation and experimentation, 5) continuous improvement and 6) results orientation” (DuFour & Eaker, 1998, p. 25). According to DuFour and Eaker (1998), creating a shared mission, vision, and values is an integral part of a learning community. In order to create effective

mission, vision, and values, it is imperative that these three guiding principles are developed and shared by people throughout the school and not simply handed down by those in leadership positions. These principles must be embedded in the hearts of those people throughout the school.

Secondly, PLCs were required to use collective inquiry to drive the improvement and growth of the community of learners. Everyone in the community must be in a constant state of curiosity and inquiry, looking for new methods to improve student learning. Those methods are then implemented or tested and reflected upon. Within a learning community, the status quo is constantly questioned and examined for improvements for the benefit of their primary focus, student learning. This is not done by an individual, but by a group or team. A four-step process of 1) individual reflections by each team member, 2) finding a common meaning in the collective group's reflections, 3) team planning to test insights, and 4) coordination the implementation of the team's plan is repeated continuously. According to Senge, Ross, Smith and Roberts (1994), this process is referred to as "the team learning wheel." They further explain the importance of this cycle: "the deep learning cycle . . . (is) the essence of the learning organization" (p. 18).

Professional learning communities are based on the idea of a group of individuals working together as a collaborative team which then works with other teams in the school for the common purpose identified in the mission, vision, and values (DuFour & Eaker, 1998). However, as simple as it sounds, this concept is easily misunderstood. "Collaborative" refers to focus on enhancement of communication and action as a team, not by individuals within the team (DuFour & Eaker, 1998). Teams that learn together and from each other carry a momentum and desire for continuous improvement. In addition, the word "team" refers to learning as a focused group (DuFour & Eaker, 1998). This can be easily misconstrued as team

building, in which relationships are built and team procedures are fine tuned. Rather, the “team” of collaborative teams refers to a group bonded by their focus on continual learning (DuFour & Eaker, 1998).

Another characteristic of PLCs, action orientation and experimentation, points out a common deficit in many schools. In PLCs, participants don’t simply take small steps toward change. They don’t “say” they are making attempts for improvement. They are not “sayers” but “doers.” In addition, the “doers” do not tolerate the “sayers” in the community. A spirit of experimentation exists in the community, allowing for improvements and accepting unexpected results as a possibility (DuFour & Eaker, 1998).

Continuous improvement is paramount in PLCs. The previously mentioned “doers” constantly challenge the status quo by searching for new innovations, planning, implementing and reflecting, only to lead to another round of searching, planning, implementing, and reflecting. This ongoing, unending cycle of constant challenge leads to continuous improvement, which becomes embedded in the day-to-day work of everyone in the community. Members guide this cycle, keeping in mind the community’s purpose, aspirations, possible strategies, and methods of assessment for those new innovations. The key to the success of this characteristic is that members embrace the never-ending cycle rather than viewing it as something to check off the completion list (DuFour & Eaker, 1998).

Lastly, PLCs focus on results (DuFour & Eaker, 1998). Organizations assess the success of new ideas, strategies, and innovations based on hard data; otherwise the organization will not know when they have hit their target. Peter Senge (1996) states, “the rationale for any strategy for building a learning organization revolves around the premise that such organizations will produce dramatically improved results” (p. 44).

As the concept of PLCs spread through the field of education (as demonstrated in chapter 3), so did the stories of schools who successfully implemented this model. One frequently cited school —Adlai Stevenson High School District 125 in Lincolnshire, Illinois (also known as Stevenson High School) (SHS)—drew the interest of many in the field of education. Before the first day the doors opened at Stevenson High School, this school was a source of conflict. Because one area school had two conflicting sets of constituents, they split into two separate schools, one of which was Adlai Stevenson High School. Because of this, SHS had a rocky start; three months before the start of the new school year, they had an unfinished school building, no board of education, and no school principal. At the beginning of the school year, the school lacked student desks, had minimal text books and no library books, and still had no principal. Despite the unsteady start, the constituents of SHS were determined to create one of the best high schools in the country, so they held strong and stayed the course (Adlai E. Stevenson High School, 2009).

A pivotal time in the success of SHS came in the 1980s when two significant events positively impacted SHS’s goal to ensure a quality education for the children of this growing community. The first impetus came in the form of *A Nation At Risk* in 1983. As previously mentioned, this report’s condemnation of America’s public education system rocked the educational community, including SHS. During this time, the District 125 Board of Education used the *Nation At Risk* report and the hiring of Dr. Richard DuFour, both in 1983, as a “springboard” to reemphasize the desire to be the best and ensure quality education for all students in their community (Adlai E. Stevenson High School, 2009.)

In order to ensure a quality education for all of its students, SHS put into place a plan and process for students who weren’t learning. This was a small part of a reform framework that

later became known as a professional learning community (DuFour, personal communication, March 14, 2012). They developed a pyramid of interventions that provided a “safety net of policies and procedures” to help identify and assist students who were struggling. In addition, a number of other reforms were made for the benefit of student learning such as the encouragement of Advanced Placement classes for all students, six-week grading periods, a Freshman Mentor Program, and encouragement to participate in co-curricular programs (Adlai E. Stevenson High School, 2009).

Consequently, SHS became known as a leading example of professional learning communities. Adlai Stevenson High School won the Blue Ribbon Awards for Excellence in Education from the U.S. Department of Education in 1987, 1991, 1998, and 2002 as well as the U.S. Department of Education’s New American High Schools Award in 1998. The school was applauded for its collaborative staff atmosphere and the assessment of student and staff learning based on data driven, measureable results. Dr. DuFour was one of the leaders of this paradigm shift, and as a result, was eventually in wide demand as a consultant for school reform via professional learning communities (Adlai E. Stevenson High School, 2009).

As the success of SHS became known, schools and districts alike jumped at the opportunity to improve their own educational systems. A large number of districts requested professional development to learn how to implement PLCs. Each district and school wanted their own “silver bullet” method of school reform that was sure to enhance student learning and as a result, student achievement. Professional development about professional learning communities was increasing. During this time, organizations such as the Association for Supervision and Curriculum Development rapidly created and disseminated professional development materials associated with ASCD. For example, DuFour was the lead consultant

and author of the ASCD's seven-part video series on principalship. He also wrote a quarterly column for the *Journal of Staff Development* during this decade. Solution Tree, a professional development marketing organization, collaborated with DuFour to publish books and other materials and produce a significant number of PLC conferences and workshops (Richardson, 2011). The increased demand for PLC information and Solution Tree's strategic marketing efforts created a symbiotic relationship that was financially beneficial for the commercial enterprise.

Procedure for this Study

This synopsis of the professional literature regarding professional learning communities is from a historical perspective. History can be looked at as a collection of “what worked,” which should be replicated and expanded upon, and “what didn't work” that should be discarded in favor of something more effective. Tyack and Cuban (1995) note that:

History provides a whole storehouse of experiments on dead people. Studying such experiments is cheap (no small matter when funds are short) and it does not use people (often the poor) as guinea pigs. Many educational problems have deep roots in the past, and many solutions have been tried before. If some “new” ideas have already been tried, and many have, why not see how they have fared in the past. (p. 6)

Terry Deal, in his foreword in Richard DuFour and Robert Eaker's book *Fulfilling the Promise of Excellence* (1987), asked, “What can we legitimately expect from ...reform efforts? If history is our guide, the outcome is fairly certain. Very little of any significance in school will be changed” (p. x). This is an unfortunate truth, but as Tyack and Cuban (1995) mentioned, observing and studying those histories can help leaders learn from failures and build on successes as a means to change this “certain outcome” in order to create a paradigm shift.

Research Question

Educational reform is a commonplace cycle in educational systems today as well as in the past. Educators watch for the next educational reform to come, then wait for it to quietly slip away into the abyss of failed reform efforts. Larry Cuban (1984) was quite accurate when he stated, “There should be a page in the *Guinness Book of World Records* on failed educational reforms, for few if any seem to have been incorporated into teachers’ repertoires” (p. 6). A current reform effort in education is professional learning communities. The purpose of this study is to describe and analyze the development of professional learning communities given the historical context of their origins. In addition, this study will analyze patterns of former innovations in order to predict the possible future state of professional learning communities.

Data Collection

Articles and books in professional literature about the history of American educational reform and professional learning communities were the primary sources for this study. In addition, dissertation topics related to professional learning communities were used as sources.

Analysis of Data

Miles and Huberman (1994, cited in Kelly, 2000) note some analytic practices that may be used across different research studies:

- Affixing codes to a set of field notes drawn from observations or interviews.
- Noting reflections or other remarks in the margins.
- Sorting and sifting through these materials to identify patterns, themes, distinct differences between subgroups, and common sequences.
- Isolating these patterns and processes, commonalities and differences, and taking them out in the field in the next wave of data collections.
- Gradually elaborating a small set of generalizations that cover the consistencies discerned in the database.
- Confronting those generalizations with a formalized body of knowledge in the form of constructs or theories. (p. 10)

Some of these procedures were applied to the collected literature in an effort to gain a historical perspective on this attempt at planned educational reform that affected schools all across the nation.

Organization

This study reviews the historical and current need for educational reform. It describes the changes in educational practices throughout history and the factors that led to these practices and changes. It then describes a current reform framework in education: professional learning communities.

Chapter 2, *American Educational Reform: An Endless Often Fruitless Cycle*, explores the history of American education in order to build an understanding for the foundation of our current educational system and past reform efforts in relation to political, economic, and social changes in society. Chapter 3, *The History of Professional Learning Communities*, explores the history and background of professional learning communities and the rise in popularity of this reform. Chapter 4, *Discussion, Analysis, and Prediction*, examines the current state of professional learning communities, analyzes and compares trends of other innovations, and predicts the possible future of this current innovation.

CHAPTER 2

AMERICAN EDUCATIONAL REFORM: AN ENDLESS OFTEN FRUITLESS CYCLE

The American educational system has been in an endless cycle of reform efforts throughout its history (Rury, 2009). Education has been a virtual rollercoaster of change. These efforts have typically been a reflection of America's political, social, and economic status and concerns of the time. Whatever issues have occurred in American society were often blamed on the public educational system, and responsibility was assigned to the system to address and improve the situation.

From the colonial period to the present, our nation's citizens have "dreamed of improving, if not perfecting, the nation's public schools" (Reese, 2000, p. 7).

From the Revolution onward, educational theorists have self-consciously used schooling to construct the citizens of the new order. A Protestant-republican ideology of making the United States literally God's country inspired the promotion of the public school movement of the nineteenth century. (Tyack & Cuban, 1995, p. 2)

Education has been the avenue for fixing the ills of American society (Reese, 2000). If there were problems in our society at any time, the responsibility for repairing the problem was given to the American educational system. As a result, educators have attempted repeated reform movements, seeking to heal whatever the current ails of American society happened to be at the time. Education has been and still is a direct reflection of the political, social, and economic concerns of the time. In 2000, Reese lamented, "Reforming schools is one prominent way the United States tries to understand and improve itself" (p. 7). According to Terry Deal's foreword in Richard DuFour and Robert Eaker's book *Fulfilling the Promise of Excellence*, "For several decades, the public schools have been the target of reform and improvement initiatives" (1987, p. ix). Currently, the overall reform efforts in American education are related to the accountability of schools to prove that their students are learning at an acceptable standard. In

order to understand the current plight of educational reform, it is important to reflect on and analyze the development of America's educational system, including reform efforts and movements in the past. This includes how the social, political, and economic state of the country affected those changes and reforms.

Early American Education and Reform

In 1607 and 1620, the first settlements of North America, Jamestown and Plymouth Colony, were established. The members of these settlements brought with them their religious views which would impact the future of American education. According to Rury (1989), "most education in colonial North America was probably conducted informally in homes and businesses, either by children's parents or within the context of apprenticeships of other work-related experiences" (p. 11). Years later, in 1635, the first Latin Grammar School, Boston Latin School, was established. This school was intended for the sons of specific social classes who were expected to fill future leadership positions. In the same year, the first "free school" in Virginia opened; however, this was not a commonplace occurrence in the South, as most families relied on homeschooling or tutors as a means for educating their children.

The following year, the first higher education institution was established in Massachusetts (Sass, 2012). According to Rury (1989), during this time, only men served in the capacity of teacher due to legal and social restrictions placed on women and Blacks. In addition, generally speaking, schooling was typically only available to the middle and upper class white citizens, mostly through private schools in the Northeast or traveling tutors in the South. This being the case, parents expected teachers to be similar to themselves in background and value systems, which led to the employment of middle or upper class white males, many of whom were young, so they were able to travel while tutoring. Schooling was intended to be a

“supplement to a more complete program of studies in the home” (Rury, 1989, p. 14). Due to the supplemental nature of this schooling, teaching was considered part-time work. Most male teachers worked other jobs as well to add to their income. Being a teacher, for most men, was a stepping stone to another career such as law or ministry. Teaching was considered to be more a trade than a profession and was perceived as a less prestigious profession. Because of all these factors, there was a high turnover of teachers during this time (Rury, 1989).

The first two educational laws were passed in 1642 and 1647. The first was the Massachusetts Bay School Law of 1642, which required that parents ensure their children knew the principles of religion and the capital laws of the commonwealth. According to Rury (1989), the main reason for this was “to guarantee that each new generation would be properly acquainted with the Bible and would be able to participate fully in the life of a religious community which New England had been established to sustain” (p. 13). From its inception, the values of society were directly reflected in American education.

The second, and significantly more important in the quantitative advancement of education, was the Massachusetts Law of 1647, also known as the Old Deluder Satan Act. Many towns ignored the Massachusetts Bay School Law, so this new law required towns with a specified number of families to hire a schoolmaster and those with more families to hire a Latin Grammar School master (Sass, 2012). This set the stage for the growth of American education.

In the late 1600s, the first “Dame” schools developed. These were small elementary schools intended for the education of girls. Their popularity grew, particularly in the coastal towns and cities. These schools were run by women, and female teachers were employed. These positions represented the first teaching opportunities for women (Rury, 1989).

In 1779, Thomas Jefferson proposed a two-track educational system, with different tracks for “the laboring and the learned.” This system specifically called for the separation into social classes (Sass, 2012). This was in response to the impending changes that were being introduced in the political realm of the new American government in which representatives would be elected. There was anxiety regarding the idea that “the common man, poorly informed and subject to manipulation by elites, be relied on to uphold the principles of fairness and honesty that were vital to the country’s future” (Rury, 2009, p. 49). Some of the leaders in the developing new republic knew that in order for this form of government to be successful, education was essential so voters could be properly informed and prepared for decision-making. The leaders believed, “if democracy was to take root as a political tradition, popular education had to become an American institution” (Rury, 2009, p. 49). Widespread education became a topic discussed by many politicians. Politics and social values were evident in Jefferson’s plan, which he had hoped would “lead to the rise of ‘natural aristocracy’ of talent and accomplishment,” thereby providing America with new leaders, did not materialize. The ideas about publicly supported schools that he and his counterparts espoused, however, remained in the repertoire of many leaders of the time (Rury, 2009).

Between 1783 and 1785, Noah Webster expressed dissatisfaction with the current English textbooks. As an alternative, he wrote *A Grammatical Institute of the English Language*. This textbook and its successor, the *McGuffey Reader*, both emphasized civic duty and morality and were very influential, as each text sold millions of copies nationwide. Society’s social and political desires were disseminated throughout the nation through use of these books.

The Constitutional Convention, a momentous event in the history of America, occurred in 1787. Ironically, during this assembly in Philadelphia, the concepts or words *education* and

school were never addressed. Shortly afterward, the first Congress of the United States passed the Bill of Rights. Again, there was no mention of education or schools. However, the Tenth Amendment to the Constitution does indicate that powers not designated to the federal government are passed down to the state department. This passed the responsibility for education from the federal government to the state government (Sass, 2012). On the other hand, shortly after the ratification of the Constitution, the Confederation Congress enacted The Northwest Ordinance. This document illustrated the importance of education by requiring all new townships of all new states to set aside a section of land for the support of education. The document states, “Religion, morality, and knowledge, being necessary to good government and the happiness of mankind, schools, and the means of education shall forever be encouraged” (Sass, 2012). Although the Constitution did not address education, other political efforts were made to ensure what leaders believed to be the proper education of mankind, which again interlocked political and social values with America’s education.

American education started to experience a paradigm shift near the end of the 18th century. In previous years, religion and morals were a foundation for the curriculum taught in American schools. During the latter part of the 18th century, the curriculum began to subtly take on a new tone of a more “secular, scientific, and functional orientation” (Schneider & Keesler, 2007, p. 199, cited in Romeo, 2010). This new tone was a result of European persuasion and the start of generalized American opinion that education could be a “socialization tool” (Schneider & Keesler, 2007, p. 199, cited in Romeo, 2010) to develop democratic citizenship for America. American leaders continued to use education as a medium for sustaining and spreading their own social and political values. Throughout this time in American education, the profession remained dominated by middle-class, white males, a direct result of the social values of the time.

19th Century Education and School Reform

The momentum for the establishment of universal, tax supported public schools, also known as free schools, grew tremendously in the first half of the century (Reece, 2000). In the early 1800s public schools were mainly elementary schools. It wasn't until around the 1820s that the push for free secondary schools appeared (Schneider & Keesler, 2007, cited in Romeo, 2010). In 1821 the first public high school, Boston English High School, was opened. This was quickly followed by the passage of a state law in Massachusetts in 1827 requiring towns of more than 500 families to provide a public high school that was open to all students. This had a significant impact on American public schooling. The vast number of public schools was concentrated primarily in the Northern states, with few public schools established in the Southern states. It was not until after the Civil War that public schooling gradually made its way into the Southern states (Sass, 2012).

An event that catalyzed the rapid growth of public schools was the appointment of Horace Mann as the Secretary of the newly formed Massachusetts State Board of Education in 1837. Mann was known for his visionary leadership, his desire to standardize parts of public education, and his relentless desire and effort to fund public schools and training for teachers. Mann desired more state control of local districts, consolidation of schools, the formation of age-graded classrooms, and uniformity and standardization in the adoption of textbooks and curriculum. His job as the editor of the *Common School Journal* allowed for the national dissemination and support of his belief in free, universal public education. Mann fought for this agenda for more than ten years during his tenure in this position, and this reform movement changed the face of American education (Reese, 2000).

As is evident in the previous findings, Massachusetts was consistently an innovator of improving public education. Due to the increased number of students, there was an increased need for teachers, improved teacher training, and improved standards for the students. In 1839 in Lexington, Massachusetts, the state funded a school specifically for teacher education (then called “normal” schools). Reforms in other states followed, paving the way for public education of teachers. This would have a lasting impact on American education and was a direct result of the increasing demand for teachers.

During the mid-19th century, a theory was introduced to the public that still remains controversial today. Charles Darwin published his book *The Origin of Species*, in which he introduced the theory that species, including humans, evolve through the process of natural selection. This laid the foundation for more than a century of social and educational controversy related to his theory of evolution and the teaching of this theory in schools (Sass, 2012).

By 1850, most state education systems had created plans to monitor local schools and improved standards of certification and instruction (Strober & Langford as cited in Rury, 1989). Rapid urbanization was occurring in some parts of the country, and demand for teachers came with it. With the new formalization of schools came greater expectations of teachers. Urban teachers were now being asked to provide eight months or more of schooling to their students. This did not allow male teachers the time to work another job to supplement their minimal income. This, combined with the greater array of other work opportunities that paid higher salaries, led to a decline in the number of male teachers. With this decline and the increased need for teachers, females began to find their place in the teaching profession. Due to the demand, society deemed this shift in the female role in education acceptable and the feminization of educators began. That being said, female teachers were more prevalent in the urbanized, high

enrollment areas and were much less prevalent in the less populated and lower enrollment rural areas, especially in the South, where male teachers remained in the forefront (Rury, 1989). The economic demands in the country played a significant role in the feminization of the teaching profession during this time in our nation's history.

It was commonplace in the 1850s for schools to be used as a social mechanism for "Americanizing" immigrants (Nelson, Palonsky, & Carlson, 2000). The pool of teachers in America remained primarily of Caucasian background with very few other races represented (Rury, 1989). By combining the students of various cultures and teaching them about civics, history, and the English language from a Caucasian perspective, the hope was to reprogram the immigrant students and phase out their cultural beliefs. Public education was used as a social tool to alter immigrants' belief systems to conform to a more universal democratic belief system, again reflecting the influence of social values on education (Nelson et al., 2000).

At the outbreak of the United States Civil War in 1861, the progress of education stopped; hence the attempts to socially reform American immigrants also declined. Education became a non-priority during this turbulent time in the country's history. During the war, schools were destroyed. By 1865, the war had ended and the 14th Amendment was passed, abolishing slavery and guaranteeing privileges of citizenship, including due process and equal protection under the law. This became a foundation for many future conflicts (Sass, 2012).

The state of education was further disordered by the Panic of 1873, which resulted in an economic depression, leading to a reduction in funding for education. This had a particularly bad impact on the Southern states, where education had already been lagging behind and the situation had been exacerbated during the Civil War (Sass, 2012). It seemed to be "one step forward and two steps back" for education throughout the country, but especially in the South.

However, the occupation of teaching held allure for many young men and women in rural areas, especially in the South. For some, the prospect of teaching held the hope of stability and opportunity in a difficult economic time. For women, this was one of the very few respectable areas in which to work outside of rural communities. As a result, the desire for secondary education leading to a job in education increased (Rury, 1989). The economy had both a negative and positive influence on the state of American education during these difficult times.

In response to the increase in interest and demand for higher education, the movement to create and expand public universities took root in this era. A number of higher education institutions were developed during this time, including institutions for African Americans and women. The recent political changes had paved the path for these opportunities to develop. Institutions such as Mount Holyoke Female Seminary, The African Institute (now called Cheyney University), The Ashmun Institute (now Lincoln University), and Howard University were established to serve African Americans or women. All of these universities were established two hundred years or more after the first university for white men (Sass, 2012). This reflects the changing politics and values of Americans during this time.

In 1875, the Civil Rights Act was passed. This act banned segregation in all public places. Unfortunately, the Supreme Court later ruled this act unconstitutional. This set the stage for a continued segregation in all facets of life, including education. At the end of the 19th century, a case that was to become famous played out in court. A Black American man, Homer Plessy, filed a suit against the state of Louisiana, stating that the state's "Separate Car Act" in which Blacks were required to ride in separate railroad cars, violated the 13th and 14th Amendments. The Supreme Court concluded in majority that the 14th Amendment "had not been intended to abolish distinctions based on color." The results of this case essentially

legalized “separate but equal” and set a precedent and standard for legal segregation, including segregation in education (Sass, 2012).

Although extensive efforts and reforms were made to encourage and enhance education for all children, the bulk of school children during the 19th century attended school for only a few brief years (Reese, 2000). The economy of the nation was significantly dependent on farms and the farming community, and with 90% of Americans still living and working on farms, most considered school an extravagance and only intended as a luxury. Only ten percent of children attended formal schools (Schneider & Keesler, 2007, cited in Romeo, 2010). In urban areas, the rapid expansion of the economy, industrialization, and immigration had a tremendous impact on schools. Regardless of the location, North or South, economic values continued to impact the state of education.

The rapid growth in cities and the demand for increased time commitment for teachers because of the lengthening of the school term led to an even greater increase in the proportion of female teachers to male teachers. By this time, nearly three-quarters of the teaching population was female. In some parts of America, teaching was almost entirely a female occupation. This seemed to be less a result of women moving into the profession and more a result of men moving out of the profession (Rury, 1989). This change in American education reflected a change in social values influenced by the economy.

By the 1890s and early 1900s, reformers were already talking about the concept of the “new education” (Reese, 2000), which was a combination of ideas originating in Europe that made its way to America. Advocates of the new education had a wide variety of philosophical viewpoints about how schools should educate children. One particularly notable movement encouraged the shift away from emphasis on traditional textbooks and recitation to more child-

centered teaching strategies. Despite the agenda of the new education, most schools still held firmly to their social values and operated in a traditional manner in the early 1900s.

20th Century Education and School Reform

At the turn of the century, John Dewey, a professor at the University of Chicago, published *Democracy and Education: An Introduction to the Philosophy of Education* (Peterson, 2010). In it, he explained his theory about education, which involved a change in the curriculum of schools. He espoused schools as places of social reform and believed that academics were not the only lessons to be learned in school. He believed that schools could be used as tools to enhance democratic morals and promote the central role of government (Reese, 2001) and that schools could be used to teach the whole child. Schools should teach students how to live, helping them reach their full potential and then use that for the greater good of democracy (Dewey, 1897). This theory clearly embedded social and political values into education. His work was labeled “progressive education” (Reese, 2001). Supporters of progressive education advocated for a more active learning style, improved student-teacher interactions, and recognition of individual differences.

A “progressive movement” took place during the first half of the twentieth century, which was advanced by Dewey’s philosophy in some aspects (Sass, 2012). The leaders of this movement, referred to as administrative progressives, typically were educated white men who comprised the first generation of the new schools of education. These professionals characteristically had similar training, interests, values, faith in educational science and had been admitted to the inner circle of “movers and shakers.” They had also “carved out lifelong careers in education as city superintendents, education professors, state or federal officers, leaders in professional organizations such as the National Education Association (NEA), and foundation

officials” (Tyack & Cuban, 1995, p. 17). Most educational decisions during this era were clearly managed by the white, male, middle to upper class leaders that comprised the administrative progressives. These men managed the path of education, telling those throughout the educational community the way in which education should be addressed, upholding the social values during this era.

The ideals of the business sector began to impact the field of education during this time. The industrialization of the country was occurring quite successfully at this time in American history. The administrative progressives’ agenda was to set about reforming America’s schools by creating a “blueprint for educational progress,” mimicking the industrialization philosophy in the business sector (School Communities that Work, 2002; Tyack & Cuban, 1995). They believed that a combination of standardization and differentiation was the key; standardization of inputs such as buildings, equipment, professional qualification of staff, administrative procedures, social and health services and regulations, and other educational practices; while differentiating curriculum to meet fit the “backgrounds and future destinies” of the students (Tyack & Cuban, 1995). The goal was for schools to “produce assimilated, productive citizens as efficiently as Ford’s factories produced cars” (DuFour et al., 2008, p. 2). Efficiency was a key component that caused the consolidation of rural and urban schools, creating much larger, highly centralized school systems. These systems were run by well paid education “experts” who were charged with advocating for the best interests of all students (Reese, 2000). Local communities lost any control over their school systems; however, the dominant political and social values of the country continued to be a strong influence in education by way of the policies implemented by these experts.

While the administrative progressives exerted extensive power, dissension grew. Although the administrative progressives claimed to be standardizing resources and instruction, the reality was questionable. “The inequalities stemmed from differences in place of residence, family occupation and income, race and gender, and from physical and mental handicaps” (Tyack & Cuban, 1995, p. 22). The social groups that were negatively affected to the greatest extent were the poor, Blacks, working-class immigrants, the disabled, females, and families in rural areas. The bureaucracies were run by natural born rich, arrogant, white men who were not inclined to listen to the aforementioned groups. School districts and even schools in the same district were diverse (Reese, 2000). Public high schools had been standardized, but private schools were maintained in the larger cities for the wealthy, perpetuating racial and social segregation. The common perspective was that education was intended to create democratic American citizens while maintaining barriers of race and social status. These negative effects and intentional segregations were clear implications as to the social values of the administrative progressives and their desire to assert their values into the field of education to maintain those values.

Although there was reasonable opposition to the administrative progressives, they did have a positive impact on American education in several respects.

More children had access to public education, children attended school more often and for longer periods of time, school funding increased, and the structures of current day elementary and secondary schools were solidified. The role of the high school changed rapidly with diversification of the curriculum and addition of extracurricular activities. (Romeo, 2010, p. 33)

Tyack and Cuban state that the administrative progressives “shaped the agenda and implementation of school reform more powerfully from 1900-1950 than any other group has done before or since” and that they were “chief American architects of reform and arbiters of

educational progress” (1995, p. 17). According to Schneider and Keesler (2007, cited in Romeo, 2010), the concept of progressive education was one of the most prominent educational reform movements of the 1920s and 1930s. Modern education still sees remnants of this time of America’s public education reform movement. During the 1940s and 1950s, there was a shift to more traditional methods, schedules, and routines in public education. However, the progressive methods rose again during the 1960s through the 1970s, only to be quieted again in the 1980s with the publishing of *A Nation at Risk* in 1983 (Schneider & Keesler, 2007, cited in Romeo, 2010). The values of the administrative progressives were highly influential in the field of education. American public education encountered many challenges from 1929 to 1945 that inhibited its growth and progress. During the Great Depression, schools were of lower priority just as they were during the Civil War. During the Civil War, there was physical devastation of the schoolhouses, and during the Depression there was economic devastation. After the stock market crash, many schools could not sustain themselves and were closed. Many teachers took salary cuts and others lost their jobs entirely. The onset of World War II stifled that progress as well. Upon the United States’ entrance into the war in 1941, school construction was put on hold due to lack of resources. The United States devoted its resources to the war, and the citizens followed that lead. Many male students, teachers, and other employees left the schools to join the war or were drafted into the armed forces. Others showed their support of the war by leaving to work in the defense plants, making available teaching jobs for women to fill (Sass, 2012). Education was on the back burner, but during this time women were able to take teaching jobs without many societal complaints. Teachers were needed, and if this meant allowing women to fill that need, then society as a whole accepted it (Rury, 2009). The political issues of the war had an economic impact on the country, and the economic and political concerns of this time

impacted the social values of society. The resulting demands for teachers made it more socially acceptable for women to fill this role in greater numbers due to the absence of male teachers. Due to this demand, the social values altered once again, creating a greater acceptance for women filling this role in education.

There was a turning point in education during this time. President Franklin D. Roosevelt signed the Servicemen's Readjustment Act of 1944, often known as the G. I. Bill, into law in 1944 just before the war ended, which provided benefits for seven years to all veterans. More than two million veterans took advantage of the Bill by going to colleges or universities, doubling the number of students at these facilities. In this way, political circumstances affected education, and broken forever was the tradition that only wealthy people attended college (Sass, 2012).

Although some advancement was made, other inequitable standards remained which directly reflected the social values of the time. Although it has been said that the profession of education had been feminized and that education had become a place primarily for women, men retained the vast majority of management or administration jobs. According to Rury (1989), "despite feminization, the positions with the greatest prestige and authority (and the best salaries) as a rule went to men" (p. 27). Strober and Tyack point out, "in the field of education, women teach and men manage" (as cited in Rury, 1989, p. 27). Rury (1989) succinctly summarized educational roles at this time: "women did the bulk of the teaching under the supervision of an increasingly authoritative cadre of male administrators" (p. 29). This was reflective of the social views of the time, with males being regarded as the decision-makers while women carried out those decisions.

In addition to the lack of administrative jobs, women also faced another challenge in the profession of education. During this time restrictions were placed on women's employment. Women were only allowed to remain in the field of teaching until they got married. They were expected to devote their time to their own families, and as a result, the majority of teachers were very young, and the turnover rate was high. Furthermore, this placed difficult restrictions on females being able to maintain an administrative position (Rury, 1989).

Although advancements were breaking down some societal barriers, segregation remained a constant dispute in America. This political and social turbulence once again had a distinct impact on the educational state of that time. In 1954, the U.S. Supreme Court heard the now famous case, *Brown vs. Board of Education of Topeka*. The court ruled, "in the field of public education, the doctrine of 'separate but equal' has no place" (Imber & Van Geel, 2004, p. 213). This case paved the way for the journey to equality, especially in education; however, this journey would have a long, uphill climb. Many American citizens still held the belief that segregation in any form was necessary. These social values were reflected in education during this time, and in all aspects, segregation and inequalities remained. The Civil Rights movement in America was gaining momentum, and a string of events occurred, such as the Montgomery Bus Boycott, marking changes in American society, and, as a result, in education.

Even though courts ruled the unconstitutionality of separate but equal, many American citizens did not agree. This political and social battle continued to rage within the education system. Although the *Brown* case called for schools to desegregate, the response and adherence by the schools faltered, and many schools, especially in the South, resisted any form of desegregation. Two marked incidents that reflected this turmoil took place in Alabama and Louisiana. In 1957, federal troops were required to enforce integration in Little Rock, Arkansas,

as nine Black students attempted to integrate into Central High School. Three years later, in New Orleans, a first grader named Ruby Bridges made history as the first African American to attend William Frantz Elementary School. The Caucasian families resisted but eventually lost their battle (Sass, 2012). But it was not until the Civil Rights Act of 1964 that the federal government had a way to enforce racial desegregation in public schools (Schneider & Keesler, 2007, cited in Romeo, 2010). The Act prohibited allocation of federal fund to schools that discriminated on the basis of race, color, sex, religion, or national origin. It also provided an effective sanction for schools that did not comply with desegregation. This political act effectively built a roadblock against some of the social values regarding racial inequality present during this time.

Other changes came about during this time that had a profound effect on education. According to Rury (1989), “By the mid-twentieth century, women in teaching were more mature, less tractable, and increasingly interested in having a career outside of their families” (p. 37). During the Depression and World War II, it became necessary and commonplace for married women to work outside of the home. Later, as a result, it was no longer considered inappropriate for married women to work outside of the home. Many women began rejoining the work force after their children were in school. Women began thinking of teaching as a long-term career rather than a temporary job. This had a significant impact on the make-up and characteristics of teachers in education (Rury, 1989).

Because of this change in the educational workforce, along with the shortage of teachers, the characteristics of the profession were generally changing. Teachers who thought of their profession as a long-term career choice and had multiple years of work and real world experience, exhibited an increased sense of confidence and leadership. These more mature

teachers were not as timid and easily managed as their younger predecessors, nor were they leaving the profession as a result of societal constraints. As a result, teachers' unions began to move from only a small number of cities to small and large districts all over the country. The number of teachers in those unions also grew. With this growth came the increased power to improve working conditions as well as teachers' salaries. These factors gave educated middle class citizens a strong opportunity to enter the teaching profession. In the next several years, teachers' unions succeeded in raising teacher salaries. This made the profession of teaching even more attractive, and the number of male teachers began to rise again. Teaching became a desired career profession rather than a temporary job (Rury, 1989).

As these changes occurred, so did the atmosphere of the classroom. Teachers began to gain confidence in making their own decisions in their classrooms. No longer were the female teachers "instructed" what to do, without personal insight and reflection, while the men "managed," telling the teachers how to set up their classrooms. Teachers began closing their doors to outsiders and running their classrooms in the best way they saw fit, making their own professional judgments. They became dependent on themselves for choosing what was best in their classrooms. A sense of classroom territory and teacher independence and, as a result, isolation, began to emerge during this time. Teachers taught with little accountability as to what students were actually learning in their classes. This attitude and practice would continue for many years.

Not only did teachers gain power and confidence, but so did American citizens, although not for the same reasons. America gained confidence in its power and competitiveness following the closure of World War II. During the time following the war, America prospered and grew rapidly (Reese, 2000). In 1957, that confidence took a blow in the form of a Soviet Union

satellite named Sputnik—the first satellite to orbit the earth. Although America soon launched its own satellites, the impact had already been made in the scientific community and the education community (Sputnik: The Fiftieth Anniversary, 2012). In typical fashion, the political and social ails of America were immediately reflected in the schools. The blame for this political embarrassment and accompanying fear immediately fell on America’s public education system for its failure to adequately prepare students with the necessary science and math skills to remain competitive in innovations. In 1958, the National Defense Education Act (NDEA) was passed, authorizing increased funding for scientific research as well as science, mathematics, and language education (Sass, 2012).

During this time educational changes were an evident, direct result of political and economic concerns. Inequalities in American public education continued through the 1960s and 1970s. President Lyndon Johnson declared a War on Poverty, passing the Elementary and Secondary Education Act as a means to provide federal funds for low-income students resulting in programs such as Title I, bilingual education, and Project Head Start. He also signed the Higher Education Act, which increased federal aid, scholarships, and student loans for higher education (Sass, 2012). During this time President Johnson made attempts to provide resources in order to create equal opportunities for all students to learn. This political and educational measure had a significant impact on future efforts for equality and attempts to meet all students’ needs.

In 1966, the Coleman Report, officially named The Equality of Educational Opportunity Study, was presented. Its main author, James S. Coleman, conducted a study following the Civil Rights Act of 1964.

The study began with the controversial and innovative premise that equality of opportunity should be assessed by equality of outcome rather than equality of input. The

researchers therefore collected data, not only on the educational resources available to different groups of children, but also on students' achievements (as measured by, for example, test scores) (Schugurensky, 2011, n.p.)

Coleman found that in America's public educational institutions, the availability of equal educational opportunity by reason of race, color, religion, or national origin was lacking. His study found that "most children attended schools where they were the majority race. Further, schooling between white and minority schools were similar" (Coleman, 1966, n.p.).

The study found that although the resources invested in the schools were similar, the outputs showed disparities. In the primary schools, minority children's academics were a few years behind those of the whites. This academic gap continued to widen by the time they reached high school. "In conclusion, the academic achievement was related to family background in the early years, but going to school allowed for a greater disparity between the academic differences between whites and blacks" (Schugurensky, 2011).

The following year, another study conducted by the Civil Right Commission, Racial Isolation in the Public Schools, confirmed Coleman's findings (Schugurensky, 2011). For policymakers, racial integration of schools was necessary to create an equalization of opportunities stifled by neighborhood income levels and ethnic composition. Their answer was the busing of school children to schools outside their neighborhoods. The goal was to achieve more racially balanced schools by preventing Black enrollment from exceeding 60% (Schugurensky, 2011). The findings of this study challenged a major foundation of Lyndon Johnson's War on Poverty. While he had been pouring funds into supporting low-income students, this study found that inputs—in this case, money—did not have a significant impact on outputs—student achievement (Schugurensky, 2011). The results of this study and report

impacted school desegregation policy for many years following its publication (Schugurensky, 2011).

In 1975 Congress passed Public Law 94-142, Education for All Handicapped Children Act. One of the most comprehensive laws in the history of education in the United States, this act brought together several pieces of state and federal legislation, making free, appropriate education available to all eligible students with a disability (Chambers & Hartman, 1983). Once again, political attempts were made to equalize opportunities for all students, regardless of their differences.

Leading up to the early 1980s, there was some criticism of public education. Upon the release of the 1983 federal report, *A Nation at Risk*, authored by the National Commission of Excellence in Education, criticism reached a crescendo. This report critiqued the American education system and called for sweeping educational reform (National Commission on Excellence in Education, 1983). The first paragraph of the report cut right to the heart of the concern and included many political undertones throughout:

Our Nation is at risk. Our once unchallenged preeminence in commerce, industry, science, and technological innovation is being overtaken by competitors throughout the world. This report is concerned with only one of the many causes and dimensions of the problem, but it is the one that undergirds American prosperity, security, and civility. We report to the American people that while we can take justifiable pride in what our schools and colleges have historically accomplished and contributed to the United States and the well-being of its people, the educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a Nation and a people. What was unimaginable a generation ago has begun to occur—others are matching and surpassing our educational attainments. (Archived Information, n.d., para. 51)

The report continued its criticism, indicating several economic and political concerns stemming from these results. The report stated that educational institutions “have lost sight of the basic purposes of schooling, and of the high expectations and disciplined effort needed to

attain them” (Archived Information, n.d., para 1). According to the findings in the report, America was losing its prominence in the areas of “commerce, industry, science, technology, and innovation” (Good & Braden, 2000, p. 34, cited in Romeo, 2010). The Commission cautioned that United States national security was in peril due to the substandard education that was occurring in the country’s public schools. The Commission called for increasing standards and rigor and extending the school day and school year (DuFour & Marzano, 2011). The report went on to create a reality check regarding the state of America’s public education and urgency for addressing this issue by comparing it to an act of war:

If an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of war. As it stands, we have allowed this to happen to ourselves. We have even squandered the gains in student achievement made in the wake of the Sputnik challenge. Moreover, we have dismantled essential support systems which helped make those gains possible. We have, in effect, been committing an act of unthinking, unilateral educational disarmament. (Archived Information, n.d., para 4)

This report pled for public support and action in addressing these recommendations.

Creating a sense of urgency, it stated:

Of all the tools at hand, the public’s support for education is the most powerful. In a message to a National Academy of Sciences meeting in May 1982, President Reagan commented on this fact when he said: “This public awareness—and I hope public action—is long overdue . . . This country was built on American respect for education. . . . Our challenge now is to create a resurgence of that thirst for education that typifies our Nation’s history. (Archived Information, n.d., para 4)

This political outcry played on the social, political and economic concerns of American citizens and garnered an immediate and typical response in American public education which is still felt today. According to DuFour, DuFour and Eaker (2008), “*A Nation at Risk* served as a catalyst for a flurry of school improvement initiatives throughout the United States that came to be known collectively as the ‘excellence movement’” (p. 34). Unfortunately, the “excellence movement” did not offer new ideas but instead prescribed “more”: *more* credits for graduation,

more rigorous courses, *more* homework, *more* days in a school year, *more* hours to the school day, testing students *more* frequently, and expect *more* from teachers (DuFour et al., 2008). Five years after the release of the report, President Reagan planned a celebration of educational reforms.

As a reporter for the *New York Times* recounts, “Leading politicians and educators, as well as those in the national media who cover education, used the occasion to reflect on the accomplishments of the school reform. And we came to a startling conclusion: there weren’t any.” (Fiske, 1992, p. 25, cited in DuFour & Marzano, 2011, p. 11)

Despite the wealth of efforts, a decade had passed and the excellence movement failed to produce results. Public education remained at a status quo of low levels (Alsalam & Ogle, 1990, cited in DuFour et al., 2008).

The top-down structure of the excellence movement essentially stripped decision-making opportunities from local educational institutions. Local schools lost autonomy in making site-based decisions for the improvement of their own schools. The standardization, reliance on rules and regulations, and detailed specifications prescribed in this movement came from government institutions and businesses. Local educators held no control in the recommendation of reform efforts and fell hostage to the business-based decisions of state legislatures (DuFour et al., 2008).

With the downfall of the highly standardized excellence movement, a second movement, the restructuring movement, took its place. In 1989, President George H. W. Bush called for a national summit on education, inviting the nation’s governors (DuFour & Marzano, 2011). The result of this summit was two-fold. First, after some adjustments by Congress, it declared an ambitious set of goals that America’s schools were to meet by the year 2000 (hence its name, Goals 2000) (DuFour et al., 2008). These national education goals were developed “to guide local, state, and national school improvement efforts” (School: The Story of American Public Education, n.d., n.p.). The goals’ objectives were “for all students to master challenging subject

matter in core disciplines and for American students to become ‘first in the world’ in math and science” (School: The Story of American Public Education, n.d., n.p.).

Secondly, this movement called for local site-based autonomy for meeting these goals. President George H. W. Bush declared that this strategy called for “decentralization of authority and decision-making responsibility to the school site, so that the educators are empowered to determine the means for accomplishing the goals and are to be held accountable for accomplishing them” (Bush 1989, cited in DuFour et al., 2008, p. 35). The philosophy behind site-based management was that local autonomy would draw support from teachers and building administrators. District and building level administrators were encouraged to share control and decision-making, promoting teacher leadership. As a result of local control and buy-in, it was expected that student achievement results would show improvement (School: The Story of American Public Education, n.d.).

As quickly as the hopes rose with this movement, they fell just as quickly. “Studies of the movement’s impact consistently found that school practitioners typically elected to focus on marginal changes that did not directly address the quality of student learning” (Newmann & Wehlage, 1995 cited in DuFour et al., 2008). As the year 2000 came and went, virtually no evidence was found to support the progress in American public schools in meeting these ambitious goals (DuFour & Marzano, 2011). It seemed that reforms never made it directly into the classrooms to affect students. “So the restructuring movement, like the excellence movement before it, failed to make a significant difference in the ability of American schools to meet the challenges they face” (DuFour et al., 2008, p. 37).

With the onset of a new century, education reform took yet another turn in the United States. Upon President George W. Bush’s induction into office, one of the first items on his

domestic agenda was another education reform (DuFour et al., 2008). This movement, the third since *A Nation at Risk*, came to be known as the “standards movement” (Hunt, 2008, cited in Romeo, 2010, p. 38). President Bush took a very different approach than his recent predecessors, basing his concept on strict accountability. In 2002, Finn stated, “Accountability may be the hottest word in primary and secondary education” (p. 85). The framework of this agenda, No Child Left Behind (NCLB), has been called “the most ambitious federal educational initiative in American history” (DuFour & Marzano, 2011, p. 12).

Since President George H. W. Bush’s decentralization of authority had failed to generate student achievement, this new reform took an entirely different approach. The NCLB statute passed in 2002, and “stipulated that schools must show improving student achievement on standardized tests until not a single student failed to demonstrate proficiency, and it outlined a series of increasingly punitive penalties and sanctions for schools that were unable to do so” (DuFour & Marzano, 2011, p. 12). Finn and Hess (2004) summarized that NCLB is “driven by two main pistons: imposing systematic testing on schools and districts, and imposing forceful remedies on weak schools” (p. 39). NCLB set national standards and accountability guidelines but left it to individual states to decide the specifics of what students were to learn, how students were to be assessed, and what constituted that a student was proficient. With a few adjustments, this law passed with strong bipartisan support in Congress (DuFour et al., 2008; DuFour & Marzano, 2011).

NCLB required yearly assessments in reading and mathematics in third grade through eighth grade and one assessment during high school. The results of those tests would then be disaggregated by majority and minority subgroups determined by ethnicity, race, and other key demographic factors. Those groups were to be analyzed to determine if all groups, especially the

subgroups, had made progress from year to year. This was termed “adequate yearly progress” (AYP) (DuFour et al., 2008, p. 37). If a school could not show AYP, then they were deemed in need of interventions and subsequently sanctioned in an increasing manner each year. In addition, if schools did not demonstrate AYP, students had options including tutoring or transferring to better-performing schools.

NCLB also mandated that states ensure that every teacher was considered “highly qualified” and that they provide detailed reports to parents regarding teacher quality and school performance. One of the most controversial mandates was that “the law designated annual increases in the percentage of students achieving proficiency on the state assessment until 2014, when the poor performance of a single student would designate the entire school as ‘failing’” (DuFour et al., 2008, p. 37). According to Imber and Van Geel (2004), the essential goal of No Child Left Behind was to transport all students to a state-specified level of proficiency by 2014 (Imber & Van Geel, 2004). This goal was imposed by strong-arming school districts with a threat of brutal government consequences. These grim impending penalties caused immediate anxiety through the ranks of school districts throughout the nation. Educators at all levels were feeling the strain of NCLB. They began a feverish search for ways to improve daily practices within their schools to improve student achievement in order to meet the requirements of NCLB.

Throughout the centuries of education, it has typically been maintained that education was a top priority of the nation. However, the national government’s role in education has been minimal and typically has been left to the state government systems. The passage of NCLB immediately expanded the federal government’s role in education. However, Finn and Hess (2004) stated that NCLB “has grand ambitions, but its means are meager” (p. 39). Less than 7% of the funding for education came from federal dollars, and the responsibility for education had

traditionally been left to the states, thus giving Congress “limited fiscal leverage” (Finn & Hess, 2004, p. 39). Nonetheless, NCLB promoters asserted that the United States was confronted with a bleak option: Would it “risk jeopardizing the future of our nation’s children and our competitiveness in the global economy by maintaining the status quo” (Commission on No Child Left Behind, 2007, p. 11 as cited in DuFour et al., 2008, p. 38) or would it take valiant steps to transform schools to improve student achievement (DuFour et al., 2008)?

By the time Bush left office in 2008, even the original supporters of NCLB had reached a grim conclusion. NCLB had failed to improve student achievement. A former advisor for the Bush administration confessed that he had begun as a “true believer” regarding the influence of NCLB to reform schools, but had been gradually and reluctantly coming to the conclusion that NCLB as enacted was fatally flawed and probably beyond repair. “I can’t pretend any longer that the law is ‘working,’ or that a tweak and a tuck would make it work” (DuFour et al., 2008, p. 43).

Another NCLB advocate, Diane Ravitch, also confessed her amended view about its effectiveness. She even went so far as to say that the “evidence was compelling and conclusive: NCLB had not only failed to improve schools but had damaged them” (DuFour & Marzano, 2011, p. 12). A disappointed Ravitch (2010) concluded:

The great legacy of No Child Left Behind is that it has left us with a system of institutionalized fraud. And the institutionalized fraud is that No Child Left Behind has mandated that every child is going to be proficient by the year 2014....And the states told, “If you don’t reach that bar, you’re going to be punished. Schools will be closed. They’ll be turned into charter schools.” That’s part of the federal mandate, that schools will be privatized if they can’t meet that impossible goal. So in order to preserve some semblance of public education, the states have been encouraged to lie, and many of them are lying, and so we see states that are saying, “90 percent of our kids are proficient in reading,” and when the national test comes out, it’s 25 percent. (cited in DuFour & Marzano, 2011)

With the Obama administration came new changes to national education reform. Obama agreed with prior assertions that the improvement of schools, hence student achievement, should continue to be a primary national focus. He established the goal requiring schools to make certain that every high school graduate is “college ready and career ready” (DuFour & Marzano, 2011, p. 13). In this instance, the president did not call for a massive overhaul or a new reform movement. He simply offered some proposals for amending NCLB. DuFour and Marzano (2011) state,

It may be premature to assess the effectiveness of the administration’s strategies at this point but those strategies do have a familiar ring—accountability based on test scores, increasing the number of charter schools, and punishment as motivation, particularly for the five thousand lowest-performing schools in the nation that would be closed according to the Obama plan. (p. 13)

Students of school reform remain pessimistic about the impact of these changes on improving schools. Michael Fullan is a widely known international authority and author on educational reform (DuFour, Eaker & DuFour, 2005) and is considered one of the most thoughtful critics of the American school reform effort (DuFour & Marzano, 2011). According to Fullan (2010), the fact that “the nation has steadily lost ground to other countries” since the reform efforts were launched “tells you the strategies are dramatically wanting” (cited in DuFour & Marzano, 2011, p. 13). Fullan is not hopeful that the Obama amendments and strategies will produce any further progress necessary for school improvement and student achievement. He candidly states, “The stimulus money, in the absence of an appropriate whole system reform conception, will fail” (cited in DuFour & Marzano, 2011, p. 29).

American education has seen massive changes and reforms since its inception more than four hundred years ago. History provides insight as to the purpose of these reforms and why they did not succeed long term. As society has historically found itself on the peaks and in the

valleys of political, social and economic changes, those changes have been reflected in America's educational systems. American education finds itself in its own peaks and valleys of impending change with one remedy or innovation after another. Changes in political, social, and economic concerns determine innovations in American school systems.

The results of *A Nation at Risk* are still felt today. This was the starting block for teacher accountability for student achievement, which is directly reflected in NCLB. America is still licking its wounds from the political and economic blow to its ego delivered by *A Nation at Risk*, and America's educational system is still fighting today to prove its effectiveness (DuFour et al., 2008).

The expectations in American schools are much different today than they were a century ago. No longer are teachers asked to simply instruct without reflection, leadership, and problem solving. No longer are students from various backgrounds taught in the same manner. No longer are teachers expected to work in isolation. Teachers and all educators are held accountable for the achievement of their students. As a result, they must find a way to bring about change in order to produce results (DuFour et al., 2008).

With changes comes choices. After the litany of failed reform efforts, teachers hesitate to try the latest "silver bullet" reform presented to them, only to see it fail as well. The fact remains that the United States educational system must improve. The current reform movement for school accountability requires this improvement. So, how should schools determine what reforms and innovations to adopt without wasting valuable time and money? Educational leaders must choose these changes wisely to avoid waste and gain the trust and confidence of those around them. There are many reform strategies and frameworks to choose from, one of which is professional learning communities.

CHAPTER 3

THE HISTORY OF PROFESSIONAL LEARNING COMMUNITIES

The Need for Reform

America's educational systems have continued to evolve since their inception. Early schools were distinctly private, intended only for upper class males; now they are publicly funded and intended for the equal education of all students regardless of race, gender, or social class. Politics, economic and social demands continue to be the catalyst for education reform. More recently, American society has demanded that schools be held accountable for students' learning regardless of their social background, gender, or race.

In the past few decades, educators and policymakers have consistently sought new strategies and reforms to more effectively educate our students in order to meet the increasingly higher standards set forth (Hord, 1997).

It is important to realize that American education has been down this path before. The criticisms of current educational reformers—that our schools provide most children with an education that is too passive and too rote-oriented to produce learners who can think critically, synthesize and transform, experiment and create—are virtually identical to those of progressive educators at the turn of the century, in the 1930's, and again in the 1960's. (Darling-Hammond, 1996, p. 4)

The American public educational system has found itself in a cycle of new initiatives and reforms followed by failure of those attempts. American education has been in a constant state of overhaul.

A significant body of circumstantial evidence points to a deep, systematic incapacity of U.S. schools, and the practitioners who work within them, to develop, incorporate, and extend new ideas about teaching and learning in anything but a small fraction of schools and classrooms. (Elmore, 1996, as cited in Romeo, 2010, p. 12)

According to DuFour and colleagues (2008), these unsuccessful school reform efforts failed for multiple reasons: (a) unrealistic expectations set forth by policymakers, (b) the

complexity of the task, (c) misplaced focus and ineffective strategies, (d) lack of clarity about the intended results, (e) lack of perseverance, and (e) a failure to appreciate and attend to the change process. In addition, Darling-Hammond (1996) wrote, “Policymakers increasingly realize that regulations cannot transform schools; only teachers, in collaboration with parents and administrators, can do that” (p. 1). As will be discussed in greater detail later, DuFour et al. (2008) indicate that there is a consensus from a variety of fields—organizational development, change processes, leadership practices, teacher preparation, professional development, school improvement, and effective schools—as to the strategies for significant improvement, They elaborate: “Simply put, if schools are to be significantly more effective, educators must break from the industrial model upon which they were created and embrace a new model that enables them to function as professional learning communities” (p. 66).

Previous models for school improvement have focused on the factory approach or clinical approach (DuFour & Eaker, 1998). The factory approach was suited to a model of schooling that assumed there was one best way to do things. The leader would take on the task of finding that one best way to educate students, and then require teachers to follow and implement that best way in their classrooms. Professional learning communities are not compatible with this approach to school improvement. According to Aseltine, Judith, and Rigazio-DiGilio (as cited in Burant, 2009). there has been a shift in education as the focus has moved from the centrality of teaching to the assurance of student learning. Darling-Hammond (1996) states,

Because rapid social and economic transformations require greater learning from all students, society is reshaping the mission of education. Schools are now expected not only to offer education, but to ensure learning. Teachers are expected not only to “cover the curriculum” but to create a bridge between the needs of each learner and the attainment of challenging learning goals. (p. 1)

In order to address these needs, educators have been asked to change many things, from policies and procedures to even their own practices (DuFour et al., 2005). According to DuFour and Eaker (1998), one school improvement model that has emerged to meet these demands is that of professional learning communities. According to Newmann and Wehlage (1995), “If schools want to enhance their organizational capacity to boost student learning, they should work on building a professional community that is characterized by shared purpose, collaborative activity, and collective responsibility among staff.” (p. 37)

The Development of Professional Learning Communities

The characteristics of a professional learning community developed from a variety of sources. In his book *Schoolteacher*, Lortie (1975) interviewed hundreds of teachers and established that they worked in almost total isolation, especially in relation to other professions. Lortie also found that many teachers preferred this privacy because of its lack of pressure or demands from supervisors. On the other hand, for others this isolation led to boredom and professional hesitation. In either case, both scenarios led to an ineffective impact on school improvement.

According to Hord (2004), during the mid to late 1980s, the characteristics of work setting and work culture and their effects on employees began to be a topic of research and exploration within the private corporate world and the public education sector. During the late 1980s, teacher workplace factors were also initiated into the conversation of teaching quality. Susan Rosenholtz, in her 1989 research of 78 schools, found that “learning-enriched schools” were characterized by “collective commitments to student learning in collaborative settings,” . . . “where it is assumed improvement of teaching is a collective rather than individual enterprise,

and that analysis, evaluation, and experimentation in concert with colleagues goals are conditions under which teachers improve” (All Things PLC, n.d., n.p.). Rozenholtz also determined that

teachers who felt *supported* in their own ongoing learning and classroom practice were more committed and effective than those who did not. Support by means of teacher networks, cooperation among colleagues, and expanded professional roles increased teacher efficacy for meeting students’ needs. (Hord, 2004, p. 6)

In addition, Rosenholtz established that “teachers with a strong sense of their own efficacy were more prone to adopt new classroom behaviors and that a strong sense of value and efficacy encouraged teachers to stay in the profession” (Hord, 2004, p. 6). The study indicated that teacher collaboration associated with shared goals that were focused on student achievement led to enhanced teacher learning, greater conviction about choosing effective teaching practices, and higher levels of teacher commitment. All of these characteristics collectively paved the path for greater gains in student achievement (All Things PLC, n.d.)

In the following year, 1990, Peter Senge’s book, *The Fifth Discipline*, was published and disseminated throughout the business world in America (Hord, 2004). Senge stated that performing for someone else’s approval creates an environment that promotes the very conditions that ensure second-rate practices. Instead, employees should learn to become more adaptable and to generate innovative and resourceful solutions to problems. He declared that methods of control paralyze both employees and leaders, which would only allow organizations to maintain themselves as machines.

An organization that fails to extend a sense of trust to creatively solve local problems in a manner consistent with the purpose and values of the organization, typically mandates solutions instead that are poorly suited to the real problem at hand. (cited in Hord, 2004, p. 6)

As an alternative, Senge promoted a different organizational structure that was driven by learning rather than by controlling. He proposed that it was a better fit for the current society,

which was multifaceted, inter-reliant, and swift paced. Senge saw this newly conceptualized organization of learning as one “where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together” (Hord, 2004, p. 6)

Over the next year or so, Senge’s book and his conceptualization of continuous improvement through *learning organizations* or *communities of practice* moved from the business sector and corporate America into the American educational systems (Schmoker, 2005). As Senge’s concept was investigated by educators and disseminated through the professional literature, Senge’s *learning organizations* became known as *learning communities* in the field of education (Hord, 2004). Peter Senge and his associates (1994) observed “ultimately, a learning organization is judged by results” (DuFour et al., 2005, p. 20). This caught the attention of many in the field of education because there was so much dissatisfaction with its quality at the time and the need for schools to be accountable for results.

In 1993, Judith Warren Little and Milbrey McLaughlin reported their research, which found that the most successful schools and the most effective departments within schools operated as strong professional communities characterized by:

1. Shared norms and beliefs
2. Collegial relations
3. Collaborative cultures
4. Reflective practice
5. Ongoing technical inquiry regarding effective practice
6. Professional growth
7. Mutual support and mutual obligation. (All Things PLC , n.d., n.p.)

In that same year, McLaughlin and Talbert’s (2006) research also supported Rosenholtz’s conclusions. Their research suggested that when teachers had opportunities for collaborative

inquiry and its related learning, the result was a body of wisdom about teaching that could be widely shared. Their research helped to support this newly developing educational paradigm (Hord, 2004).

In 1995, McLaughlin continued to support this paradigm when addressing listeners at the annual conference of the National Staff Development Council. She reported, “We are closer to the truth about school improvement than ever before. The most promising strategy for sustained, substantive school improvement is developing the capacity of school personnel to function as a professional learning community” (All Things PLC, n.d., n.p.). During that same year, Fred Newmann and Gary Wehrlage reported on research that was conducted on more than 1,200 schools. This primarily quantitative research of test scores and surveys also included intensive, in-depth case studies. Through this mixed research they found, “The most successful schools were those that used restructuring tools to help them function as professional learning communities.” (All Things PLC, n.d., n.p.). They clarified that in these schools educators: (a) engaged in a collective effort to achieve a clear, commonly shared purpose for student learning, (b) created collaborative culture to achieve the purpose and (c) took collective – rather than individual – responsibility for the learning of all students (All Things PLC, n.d.).

Also during 1995, Sharon Kruse, Karen Seashore Louis, and Anthony Bryk detailed their findings that schools most effective in terms of student achievement operated as professional learning communities characterized by reflective dialogue, de-privatization of practice, collective focus on student learning, collaboration, and shared norms and values (All Things PLC, n.d.)

During this time, it became common to consider shared decision-making as a factor in curriculum reform as well as in the renovation of teaching roles in some schools (Darling-Hammond, 1996). Structured time was provided in those same schools in order for teachers to

work together in planning instruction, observing each other's classrooms, and sharing feedback. "Researchers also began observing improvements in schools where the faculty was functioning as a learning community" (Hord, 2004, p. 7).

Regardless of the consistent conclusions of researchers regarding the power of professional learning communities' ability to positively impact schools, teacher, and students, that research was not evoking a significant desire from schools and practitioners to implement this reform tool. As a response to this lack of implementation, Kruse and her colleagues wrote in 1995, "Professional community within schools has been a minor theme in many educational reform efforts since the 1960's. Perhaps it is time it became a major rallying cry among reformers, rather than a secondary whisper" (All Things PLC, n.d., n.p.). An important step in advancing the PLC concept from a "secondary whisper" to "a major rally cry" was the publication of *Professional Learning Communities at Work: Best Practices for Enhancing Student Achievement* by Richard DuFour and Robert Eaker (1998) (All Things PLC, n.d.).

According to Michael Fullan, a leader of school reform for over 25 years, it was during this time that interest in PLCs moved from a "whisper" of researchers to a "rallying cry" among the field of educational practitioners themselves. However, he delivered a cautionary message that the term "professional learning communities" traveled through the educational sector faster than the actual concept behind the term. Fullan expressed concern that, as a result, many schools espoused the title of professional learning community while failing to fully understand or adequately implement the pillars of this reform framework. He suggested that this inadequate implementation would have little effect on student achievement. In addition, he surmised that without the support from the central office as well as state educational agencies, it would be difficult to sustain PLCs in individual schools.

What Are Professional Learning Communities?

Professional learning communities refer to a reform or organizational framework that focuses on the combination of three big ideas: (a) collaboratively developed and shared mission, vision, values, and goals of the school and division; (b) collaborative teams that work interdependently to achieve common goals; and (c) teams using data to drive the role of instructional and school improvement to see targeted results (Eaker, DuFour & DuFour, 2002). The framework of professional learning communities provides a collaborative, professional, and results oriented method of operating a school community. This community is different from traditional experiences (Wells & Feun, 2007). Various definitions exist, but the common characteristics include: (a) teachers working collaboratively to reflect on their collective practice; (b) examining evidence regarding the relationship between educator practice and student outcomes; and (c) making the necessary adaptations to educator practice in order to improve teaching and learning for the benefit of students and their students' achievement (McLaughlin & Talbert, 2006).

The first of the three big ideas of PLCs focuses on the practice of ensuring that students learn. According to DuFour (2004), in education there is:

...an assumption that the core mission of formal education is not simply to ensure that students are taught but to ensure that they learn. This simple shift—from a focus on teaching to a focus on learning—has profound implications for schools. (p. 1)

In order to maintain focus on student learning, three crucial questions must drive the work of those within a PLC: (a) What do we want each student to learn? (b) How will we know when each student has learned it? and (c) How will we respond when a student experiences difficulty learning? (DuFour, 2004). DuFour and Marzano (2011) later added another question: How will we enrich and extend the learning for students who are proficient?

In considering the answers to these four questions – the original three plus the added question – the school community must develop a school-wide, systematic response when the answers indicate that a student is having difficulty. This response must be timely, based on intervention rather than remediation, and directive (DuFour, 2004). The school must quickly identify students who are in need of additional time and support. This additional time and support should come prior to the summative evaluation of a unit and as quickly after the student experiences difficulty as possible. This assistance should not rely on summer school, retention, and remedial courses. This assistance should also be required for those students experiencing difficulty. Students should not be “invited” to seek additional help, but rather the school should require students to devote extra time and receive additional assistance until they can display that they have mastered the necessary concepts (DuFour, 2004).

The second big idea focuses on a culture of collaboration. Collaboration is often a misunderstood term. Some schools associate “collaboration” with teachers spending time together in one room, talking about lesson plans and building a collegial team. Other schools associate collaboration with working together in committees to address whole school issues and needs related to the operation of the school, such as school activities, discipline procedures, or changes in scheduling. Still other schools consider collaboration to be the act of building staff consensus on operational procedures, such as how the school will respond to tardies and frequent absences and how recess and lunch will be supervised.

Although these topics may be significant, this is not the kind of collaboration that truly and effectively impacts student learning (DuFour, 2004). In the respect to PLCs,

Collaborative conversations call on team members to make public what has traditionally been private—goals, strategies, materials, pacing, questions, concerns, and results. These discussions give every teacher someone to turn to and talk to, and they are explicitly

structured to improve the classroom practice of teachers—individually and collectively. (DuFour, 2004, p. 3)

Many intentional processes must occur and be understood in order for this collaboration to be truly effective. First, the administration must ensure that everyone is a part of a group whose focus is student learning and designate time for teams to meet within the school day and throughout the school year. Those teams must develop norms in order to clarify any expectations related to member roles, responsibilities, and relationships with one another. Student learning standards must be developed and must be linked to district and state standards, and teachers must be held accountable for teaching curriculum that addresses those standards. Marzano (2003) named a curriculum that is thoughtfully designed the *intended* curriculum, while the curriculum that is actually taught is called the *implemented* curriculum (p. 23). “Teacher conversations must quickly move beyond ‘What are we expected to teach?’ to ‘How will we know when each student has learned?’” (DuFour, 2004, p. 3). In addition, educators must discontinue the list of excuses as to why they *can’t* collaborate and instead focus on how they *can* collaborate. Educators could list a litany of excuses for why they fail to collaborate, but this doesn’t solve the problem.

As Roland Barth (1991) wrote, “Are teachers and administrations willing to accept the fact that they are part of the problem?...God didn’t create self-contained classrooms, 50-minute periods, and subjects taught in isolation. We did—because we find working alone safer than and preferable to working together.” (as cited in DuFour, 2004, p. 4)

According to DeFour (2004), if a staff is honestly committed to collaborating for the benefit of student learning, they will find a way to make it happen. It is simply a matter of will.

The third big idea is grounded in educators’ focus on results. “Professional learning communities judge their effectiveness on the basis of results” (DuFour, 2004, p. 10). Each team derives its results from the common assessments previously developed by the team. According

to DuFour, each team identifies the current level of each of its students, then establishes a goal that builds upon that level until each student is deemed to have met the standard of proficiency as documented by periodic evidence along the way. These goals are the cumulative responsibility of the team. The collection of this data, or evidence, becomes an indicator as to the strength of the instructional practices or the need for improvement of instructional practices. It also helps teachers hone in on which students need additional assistance in order to meet proficiency. The key to the usefulness of this data is the manner in which the educators react to it and the manner in which it affects future instruction. Data is virtually useless unless it is analyzed and then used to make adjustments in order to positively impact student learning (DuFour, 2004). DuFour contends,

Teachers have never suffered from a lack of data. Even a teacher who works in isolation can easily establish the mean, mode, median, standard deviation, and the percentage of students who demonstrated proficiency every time he or she administers a test. However, data will become a catalyst for improved teacher practice only if the teacher has a basis of comparison. (2004, p. 4)

The development of common assessments allows teachers the opportunity to compare all grade level students against one another in order to identify areas of concern, which can be related to student issues or areas in need of instructional improvement. It also permits teachers to collectively pool their resources, including materials, ideas, strategies, and instructional strengths, for the benefit of the entire team (DuFour, 2004). This consistent focus on data driven instruction ties together the first two big ideas of PLCs: student learning and collaboration. This unflinching focus and examination of data is the cumulative result of the meaningful collaboration, with student learning as its focal point. Educators want to see the results of their focused efforts, and data is the outcome that allows for celebrations and adaptations.

Another authentic example can explain the successful use of data to drive the daily instruction provided by teachers (DuFour, 2004). Freeport Intermediate School, located 50 miles south of Houston, Texas, attributes its success to an unrelenting focus on results. Much like the manner previously described, the teachers work in collaborative teams for 90 minutes daily in order to clarify the essential outcomes of their grade level courses or units and to ensure that those outcomes are directly related to state standards. The teams develop consistent instructional calendars and formative and summative assessments. Each teacher administers the same short assessment to all students at that same grade level at the conclusion of each instructional unit which occurs approximately once a week. In addition, the teams administer a common summative exam to all students in that course or grade level. During the spring, the teams develop and give exams in order for students to practice for state tests. The results of these tests are then disaggregated into teachers and skills. Each teacher knows exactly how each of their students performed on these tests overall as well as each student's performance on each skill. This then allows teachers to collaborate to identify successful practices for each skill in order to repeat those successful practices in all of the classrooms in future lessons. In addition, the teachers are able to identify areas of the curriculum that needs improvement (DuFour, 2004).

As a result of this unwavering focus on student achievement,

Freeport Intermediate has been transformed from one of the lowest-performing school in the state to a national model for academic achievement. Principal Clara Sale-Davis believes that the crucial first step in that transformation came when the staff began to honestly confront the data on student achievement and work together to improve the results rather than make excuses for them. (DuFour, 2004, p. 4)

According to DuFour (2004),

Educators must begin to embrace data as a useful indicator of progress. They must stop disregarding or excusing unfavorable data and honestly confront the sometimes-brutal facts. They must stop using averages to analyze student performance and begin to focus on the success of each student. (p. 4)

A common justification for poor student achievement that is heard throughout the field of education is the influence of factors outside the classroom. Some examples of those outside factors are parental influence and home life, student discipline issues, school climate, and student motivation. Educators must shift their focus away from these factors to factors that they can control within their teams, most important of which is student learning, team collaboration, and data driven results (DuFour, 2004).

Doerr (2009) expands on these three big ideas by offering six key elements of a PLC. She identifies those elements as:

- Establish a clearly identified problem around which the learning team has come together.
- Meetings must focus on the problem.
- Dedicate time to meet consistently.
- Share and appropriately differentiate responsibility as well as mutual accountability.
- By assigning appropriate roles and responsibilities, the entire community can capitalize on the strengths of each individual member.
- Establish a climate of trust where teachers can be open about their concerns and weaknesses. (p. 2)

Building on this work, DuFour and Eaker (1998) identified six similar characteristics of professional learning communities:

- Shared mission, vision, and values
- Collective inquiry
- Collaborative teams
- Action orientation and experimentation
- Continuous improvement and
- Results orientation. (p. 25)

Logistically, these attributes are addressed through shared planning time that has been built into the school day, as well as through team-based leadership. Teachers in a PLC do not continually work in isolated classrooms, but instead come together with colleagues in order to effectively plan instruction and assessment. This is also a time to review collective data

regarding student achievement. The sharing of ideas is meant to occur liberally and spontaneously in order to establish collective wisdom (DuFour et al., 2008). Haberman (2004, as cited in Burant, 2009) concurred with both of these findings and identified the following attributes of a learning community: modeling, continual sharing of ideas, collaboration, egalitarianism, high productivity, community, and practical applications.

Communication is essential in any organization or relationship. In professional learning communities, the school must communicate what it values. DuFour and Eaker (1998) lists six areas a PLC should focus on in its communication efforts:

1. Identifying the criteria with which it will monitor the advancement toward its vision, the presence of its values, and the accomplishment of its goals.
2. Systematically gathering information on those criteria.
3. Sharing data with the entire staff.
4. Engaging the entire staff in collective analysis of the information that is gathered.
5. Developing new strategies for achieving its objectives more effectively.
6. Carefully monitoring the results of implementing those strategies. (p. 108)

These actions clearly communicate the values that are an essential part of its culture. Professional learning communities should focus their efforts on three key questions listed by DuFour and DuFour (as cited in Burant, 2009) as: (a) What is it we want all students to learn? (b) How will we know when they have learned it? and (c) How will we respond when a student is not learning? The three questions ensure that all efforts of the community focus on student learning.

The primary goal or purpose of the professional learning community is student learning and achievement for all. A professional learning community involves a common, systematic approach to recognize and concentrate on students' needs. In a PLC, teachers use research-based strategies in order to teach students with varying skill levels and improve student achievement (DuFour et al., 2005). According to Doerr (2009), "PLCs improve the practice of all teachers in

the school and ensure that students are being prepared to function in a 21st century economy.”
(p. 1)

Changing the Culture and Values

DuFour and Eaker (1998) emphasizes that when a school takes on the endeavor of becoming a PLC, a great deal of change will take place. Purkey and Smith state, “Academically effective schools are distinguished by their structures, processes, and climate of values and norms that channel staff and students in the direction of successful teaching and learning.” (Romeo, 2010, p. 13). Changing the structure of the school is not enough. If an administrator wants to effectively implement PLCs in a school, there must be an overarching change in the culture of that school (DuFour & Eaker, 1998). Fullan concurs, stating, “Structure does make a difference, but it is not the main point in achieving success. Transforming the culture – changing the way we do things around here – is the main point” (2001, p. 43). Changing the culture of an organization is a daunting task that is difficult and time-consuming. The ability to create cultural changes in a school or school district can be one of the most challenging aspects of effective implementation of PLCs (Wells & Feun, 2007).

A professional learning community is not a program that can just be implemented into a school (Fullan, 2006). Changing the culture involves addressing elements such as collaboration, the development of agreed upon mission, vision, values and goals, focused school improvement plans, a strong focus on learning, celebrations, and persistence, all of which are driven by effective leadership (Eaker, 2002). These elements are essentials of a successful professional learning community. At the heart of these elemental changes is the development and working knowledge of a vision that is shared by all those involved. Huffman (2003) suggested that the

leader combines the personal visions of all staff members into a collective vision that is shaped and accepted by all.

DuFour (2004) emphasized that professional learning communities are a framework for reform for increasing student achievement, and he recommended that teachers be engaged in school improvement efforts to heighten the successes of this change process. Fullan (2007) agreed, stating, “Educational change depends on what teachers do and think – it’s as simple and complex as that” (p. 129). The staff development and consensus of this vision becomes the driving force for the school-wide cultural change and unrelenting focus for all future decisions for the school (DuFour & Eaker, 1998). Teachers are the primary change agents, so it is vital that they take ownership of and internalize this vision.

Matching Day to Day Activities to Organizational Values

If the vision represents the idealistic view or the ultimate goal of a school, then the values represent the day-to-day steps that must be taken to make school improvements toward that goal. “[The concept of] values explains how the organization is to advance toward its ideal by promoting certain behavior and attitudes” (DuFour & Eaker, 1992, p. 35). Values are what guide the daily decision making for the school, thus having the most direct impact on the culture. DuFour and Eaker (1998) recommend that these shared values be initially developed by a task force of teachers, administrators, and community members. Once this group develops a rough draft, he recommends that it be sent out to small groups for feedback, sent back for revising, and that this cycle be continued until consensus is reached. It is important that the values receive the support of the full staff before proclaiming it complete. According to DuFour, by giving every person a voice in the process, they are more likely to uphold these values as their own, and make decisions and take actions in accordance with these values.

Once values have been established, it is necessary for teachers and other staff members to get together to discuss and analyze the daily happenings in the school and their grade levels and classrooms. “They examine their school’s operation and their individual practices with a critical eye, looking for discrepancies between the values they have endorsed and the day-to-day workings of their school” (DuFour & Eaker, 1998, p. 134). This practice of reflection should be repeated multiple times throughout the school year. Teachers have always been encouraged to reflect upon their lessons, but now they have a standard from which to evaluate the purpose of their lessons. In addition, scheduling time for teachers to actively reflect and setting the expectation that everyone will participate in this practice will help produce a necessary shift in day to day activities and, hence, the culture, which is the foundation for change (DuFour & Eaker, 1998).

Leadership Roles in Professional Learning Communities

Once the foundations of culture have been established through vision, mission, and values, the major focus turns to results-driven education and school improvement. The first standard of the National Staff Development Council is, “Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, selective responsibility, and goal alignment” (NSDC, 2012, para. 1). Staff development activities must focus on the ability of teachers to help students achieve the intended results of the curriculum. An administrator takes on the role of supporting teachers in their path to increasing student learning and achievement.

Glickman (2002, cited in Burant, 2009) stated that the traditional method of instructional supervision of random drop-in visits by a supervisor a few times a year without the consideration of continuous discussion, critiquing, and planning with others, actually leads to the diminishment

of the teaching profession. In the last decade, the change in the manner in which professional support is delivered has changed the role of administrators. Practices such as peer coaching, mentorship, and professional growth plans that are often found in PLCs have facilitated an increased involvement of colleagues in the supervisory process rather than a reliance on the administrator for supervision. As teacher support needs change, so does the role of administrators. There has been a distinct shift in the focus from supervising teachers to developing the capacity of teachers to work collaboratively in order to support professional growth for the benefit of student learning (DuFour et al., 2005).

One significant manner in which administrators can provide this assistance to teachers is through the use of targeted, applicable, and research-based professional development (Doerr, 2009). Through the process of developing professional learning communities, staff development at the school level occurs. Superior staff development procedures result in teachers talking and thinking about effective teaching (DuFour & DuFour, 2003, as cited in Burant, 2009). Doerr (2009) gives advice to administrators in the early development of a PLC:

As roles are established and the wheels begin moving, control of the group is left in the hands of its members, and your role shifts to responding to each team's needs. You can be a liaison to the school district for what your teams need, such as specific professional development and schedule adjustments/flexibility to allow for collaboration: Even the most experienced content-based team hits a limit in what they know about their area, so you can bring in outside experts to deepen their understanding and continue their growth. (p. 3)

Principals will also be learners. “According to the New Teacher Center, strong principals see themselves as Chief Promoter of Learning as well as Chief Learner” (Doerr, 2009, p. 3).

School level professional development and policy development based on research are necessary for success by schools and teachers. However, as DuFour (2003) stated, “Practices of the central office play a major role in the eventual success or failure of the improvement efforts of

individual schools” (p. 16). Research has shown that individual schools are able to develop written policy but are much less successful in putting those policies into effective practice without the support of their district’s central office (Townsend, 1987, as cited in Burant, 2009).

Lafleur and Parker (2004, as cited in Burant, 2009) stressed that it is vital to understand that improvements must take place within a school but each school exists within a larger system. In order for teachers and individual schools to be involved in a successful professional learning community, it is critical that central office staff and other school leaders play a significant role in providing the necessary resources to support the professional growth of the staff within that school. When a district central office is supportive of the PLC reform, it is more likely to understand and value the process from which those needs were derived; hence it will be more likely to provide those necessary resources (Kaplan & Owings, 2002, cited in Burant, 2009).

In addition, leaders need to consider communication, expectations, and the politics, inside and outside of a school, when developing learning communities (Taylor, 2002). According to Servage (2006/2007, cited in Burant, 2009), the focus on research-supported teaching practices is so compelling that one can wonder why the professional learning communities model is so difficult to implement. Her answer suggested that the problem was not with the basic rationale but with the inattention to the assumptions that underlie the collaborative process.

Teacher Isolation

Historically, teachers have worked in isolation in their own rooms, with their own students, planning their own lessons, and analyzing their own student achievement results. According to Tyack and Cuban (1995), over the years one common theme has emerged as a predominate factor for change and innovation to improve education: the call for teachers to work collaboratively in teams rather than in isolation. Educators cannot achieve the fundamental

purpose of learning if they work in isolation. Collaboration among educators with the purpose of fostering teacher improvement is imperative, as teachers cannot flourish when isolated from colleagues, being deprived of access to fresh ideas and insights (DuFour & Burnette, 2002).

Darling-Hammond (1996) asserts,

In most of these European, and many Asian, countries, teachers spend between 15 to 20 hours per week in their classrooms and the remaining time with colleagues developing lessons, visiting parents, counseling students, pursuing research, attending study groups and seminars, and visiting other schools. (p. 3)

She further explains that most U.S. elementary teachers are given three or less hours in one entire week for responsibilities outside of actual instruction. This divides out to only eight minutes per hour of classroom instruction. She continues, saying that secondary teachers have approximately five preparation periods in a one-week period, which breaks down to 13 minutes per hour of classroom instruction. She contends that it is not commonplace in most U.S. schools for there to be an expectation of teachers meeting with other teachers in order to develop curriculum or assessments or to observe other teachers' classrooms. Time is generally not spent in one another's classes—nor is time generally made available for these sorts of activities (Darling-Hammond, 1996). She concludes, "Other countries are able to afford these greater investments in teachers' knowledge and time for collaborative work because they hire fewer nonteaching staff and more teachers who assume a broader range of decision-making responsibilities" (Darling-Hammond, 1996, p. 3). According to DuFour (2004), "Educators must stop working in isolation and hoarding their ideas, materials, and strategies and begin to work together to meet the needs of all students" (p. 5).

Collaboration

This reduction in teacher isolation is necessary to achieve a fundamental element in the framework of professional learning communities. The crucial element, collaboration, involves a

fundamental change in culture, as well. Teachers must work collaboratively to address issues that have significant impact on student learning, and ensure that learning occurs at high levels for each student.

It cannot be expected that teachers will collaborate simply because they are asked to do so. Taylor (2002) stated that changing the mindset of isolation to one of collaboration is a challenge even for strong leaders. There may be an underlying assumption that teachers know how to collaborate, but this is often a misconception. This collaboration must be developed and nurtured into purposeful dialog that focuses on student learning. Doerr (2009) states, “If they [teacher collaborative teams] are not focused on student achievement, the meetings can feel like another responsibility tacked on to an already overflowing workload” (p. 2).

Using multiple sources of data from a four-year evaluation of PLCs in an urban district, Supovitz found that an explicit focus on instructional improvement was necessary for PLCs to have a positive impact on improving teaching and learning (Learning Point Associates, 2009). Without such focus, PLCs may have a positive effect on culture and teachers' feelings of well-being, but not necessarily on student achievement. Researchers Supovitz and Christman found similar results in another large urban district (Learning Point Associates, 2009).

By making collaboration a part of *the way things are done*, teachers can collaborate in a manner that addresses the school's vision and values. By building time for collaboration into the day, giving a purpose to the collaboration time, and supporting and training teachers in their collaboration, a school can build the sort of collaborative teams necessary in a successful PLC (DuFour & Eaker, 1998). Doerr (2009) contends,

Administratively, the principal has the power of establishing the schedule to enable learning communities to meet. This takes some juggling, but will pay off as teachers have a committed time when they are expected to convene. When asked where and how

they were able to make time for teams to meet, principals often say, “We just did it.” (Doerr, 2009, p. 30)

Darling-Hammond (1996) recounted that teachers in schools that provided structured time for teachers to work together on professional matters such as planning and adapting lessons to student needs, observing one another’s classrooms, and providing feedback about their teaching reported that they felt less constrained by district routines or standardized curriculums. They were also more optimistic about their relationships with principals, their working conditions, and the educational performance of students. As Darling-Hammond (1996) stated, “Teachers in restructured schools were more confident about the professional status of teachers and more likely to view themselves as agents, rather than targets, of reform” (p. 4). Doerr concurs, saying, “A principal who establishes a climate where collaboration is both encouraged and expected has the best chance of success” (2009, p. 2).

In 1996, Darling-Hammond asserted that the attempts for changes allowing for designated times for collaboration were minimal, but that the possibilities for renovating how schools structure teacher time and responsibilities seemed greater at that time than they had ever been. Doerr (2009) laments, “The first and most critical responsibility that falls on the principal is to create and nurture a culture of collaboration in your school community. Unfortunately, this is also the most difficult to accomplish and often takes time and patience” (p. 2). For schools that stay the course and effectively implement purposeful collaboration, Doerr (2009) points out, “Ultimately, you will have a wonderful selling point that many schools do not. New teachers in your school will not be alone: they will have a support team ready to welcome them” (p. 3).

Advantages for Teachers

As recently as the 1980s, the mere concept that teacher knowledge was critical for educational improvement had little currency. Instead, “policymakers searched for the right set of

test prescriptions, textbook adoptions, and curriculum directives to be packaged and mandated to guide practice” (Darling-Hammond, 1996, para. 13). It was widely believed that the skill of the teacher had little influence on significant improvement of the school. In the last couple of decades, teacher preparation and induction programs have increasingly focused on helping prospective teachers and interns develop a reflective, problem-solving orientation. These training programs increasingly engage them in teacher research, school-based inquiry, and investigation into students’ experiences. These experiences are then used to build “an empirical understanding of learners and a capacity to analyze what occurs in their classrooms and in the lives of their students” (Darling-Hammond, 1996, p. 2). DuFour and Eaker (1998) assert that members of an effective professional learning community will strive to uphold the highest standards of their profession due to the nature of its characteristics. One of the distinguishing characteristics of a professional learning community is the collective attention that is given to analyzing and advancing the highest standards of the profession (p. 215).

The benefits of professional learning communities as indicated by Gregory and Kuzmich (2007) are many. There is an increased commitment to the school vision, mission, and values, and the collaborative teaming reduces the isolation of teachers. This in turn builds collective responsibility for the total development and success of all students. “As teacher educators, beginning teachers and experienced teachers work together on real problems of practice in learner-centered settings, they can begin to develop a collective knowledge base and a common set of understandings about practice” (Darling-Hammond, 1996, para. 14). As a result, there is also a higher likelihood that teachers will be well informed, professionally renewed, and inspired. These characteristics lead to considerable gains in modifying and improving teaching strategies. These combined advantages often lead to a higher morale, and are connected with

more satisfaction and lower absenteeism (Hord, 1997) as well as increased retention rates (AISR, 2004, as cited in Kaplan, 2005).

Community begins with a shared vision. It is sustained by teachers who, as school leaders, bring inspiration and directions to the institution. Who, after all, knows more about the classroom? Who is better able to inspire children? Who can more sensitively evaluate the educational progress of each student? And who but teachers create a true community for learning? Teachers are, without question, the heartbeat of a successful school (Boyer, 1995 as cited in DuFour & Eaker, 1998, p. 205) and a successful professional learning community.

Learning for All Students

It has been discussed how the characteristics of a PLC help to create better teachers, but how do they affect the students? Louis and Kruse maintained, “A core characteristic of the professional learning community is an undeviating focus on student learning” (Hord, 2004, p. 19). The PLC model focuses on the assumption that formal education is not merely to ensure that students are taught specified content to a high standard, but rather to ensure that they learn specified content at high levels (DuFour et al., 2005). DuFour and colleagues (2008) emphasize that in PLCs, the focus is on “Was it learned?” rather than “Was it taught?”(p. 19). Every emphasis in a PLC is focused on learning as opposed to simply teaching. Teachers develop and assess the required standards and proficient performance level. Then by way of collaborative teams, teachers use the collected data to develop strategies to ensure every student succeeds in meeting the standards at a proficient level (DuFour & Eaker, 1998). This is an important step in quickly identifying any students who are in danger of not meeting proficiency in a specified standard. The need for extra support is identified, and the team collaborates to determine the best course of action by which to address these early deficits. “Concerns about at-risk children

cannot be addressed without teachers prepared to meet the diverse needs of students with varying learning styles, family situations, and beliefs about what school means for them” (Darling-Hammond, 1996, p. 1). Teachers must collaborate and find the best methods for reaching these students using all possible means as early as possible in order to minimize future struggles.

“When a culture of learning is established in a school, teachers not only expect students to learn in a collaborative environment but also expect to model that collaborative learning for their students” (Doerr, 2009, p. 27). “You cannot have students as continuous learners and effective collaborators, without teachers having the same characteristics” (Fullan, 1993 as cited in DuFour & Eaker, 1998, p. 105). One collection of case studies reveals the student achievement gains in three schools during a five-year period. Students from minority and low-income families improved their scores on state achievement tests from less than 50% proficiency to 75% proficiency (Learning Point Associates, 2009). Strahan (2003, as cited in Learning Point Associates, 2009) conducted interviews from these three schools to examine the role that a collaborative professional culture may have played on instructional improvement. He found that working collaboratively in PLCs was a characteristic of each of these schools.

Higher test scores are not the only positive result of a professional learning community. Hord (1997) finds results ranging from a reduction in achievement gaps to decreased dropout and absenteeism rates, as well as the academic improvements. There is something beyond the effective activities in classrooms that are causing these improvements. The overall change in culture includes a community that celebrates a variety of accomplishments for students and educators, promotes continuous improvement, collaboration and lifelong learning. These positive cultural shifts cause students to begin to expect the same of themselves and their peers (DuFour & Eaker, 1998). According to Hord (1997), these cultural changes are having a positive effect

on students. She contends that although a collaborative team can consistently plan effective and engaging lessons over the years that result in significant academic gains, it is the sense of pride derived from learning in a school with shared values and an all encompassing culture that supports those values that are fundamentally accountable for improved attendance and reluctance to drop out.

Data Driven Instruction

In order to effectively reach all students, it is essential that educators continually seek evidence of student learning. “The results-oriented professional learning community not only welcomes data but also turns data into useful and relevant information for staff” (DuFour, 2004, p. 10). Through a school-wide structure of consistent monitors, current levels of student learning are evaluated in order to identify those students who may be in need of additional support. The data regarding student learning then drives the pyramid of possible interventions that will be planned for those students. After administering common assessments, teams also use that data as a springboard to identify the most effective teaching practices so that they may consistently improve their collective practices for the benefit of learning for all students. Classroom practices are often altered as a result of this consistent stream of data (DuFour et al., 2008). Results-driven education and school improvement are the focus of professional learning communities. Staff development activities are also planned based on the results of student learning data. All staff development must focus on providing support and knowledge for teachers in order to directly impact student learning. All efforts must be research based and focus on the steps that need to be taken in order to help students achieve the intended results of the curriculum (DuFour et al., 2008).

Celebrations as Vital Motivators

It has been stated many times that positive culture in a school is the foundation for an effective professional learning community. Celebration, ritual, and ceremony is closely tied to culture in many ways. “Ritual and ceremony allow us to act out what otherwise is hard to touch and comprehend. In doing so, we touch base with our core values and bond with each other” (Deal, 1999 as cited in Kaplan, 2005, para. 11). When a school celebrates the successes by teachers and/or students, it emphasizes the values that are important and the behavior that helped lead to this success (DuFour & Eaker, 1998). By finding ways to acknowledge many people for a variety of achievements, a school is sending a message about what it values. Both teachers and students will strive to gain that recognition for their own sense of pride.

Lee Bolman and Terry Deal (1995) describe the importance of celebration this way:

Ritual and ceremony help us experience the unseen webs of significance that tie a community together. There may be grand ceremonies for special occasions, but organizations also need simple rituals that infuse meaning and purpose into daily routine. Without ritual and ceremony, transitions become incomplete, a clutter of comings and goings. Life becomes an endless set of Wednesdays. (DuFour & Eaker, 1998, p. 141)

In addition, in order to sustain change, it is vital to provide evidence of short-term wins. Ceremonies and stories are an excellent avenue by which to acknowledge those wins (DuFour & Eaker, 1998). “Celebrations can be fun, and even the most serious commitment to school improvement should include time for play. As Senge et al. (1994) ask, “What’s the point of building [a learning] community if we can’t have fun?” (as cited in DuFour & Eaker, 1998, p. 144).

A Review of Professional Learning Communities

Strengths of Professional Learning Communities

Through the structure of successful professional learning communities, educators experience greater job satisfaction and the sense of accomplishment that comes with making a positive difference in the lives of students (DuFour & DuFour, 2003, as cited in Burant, 2009). Experts state that teachers need feedback and comparative data in order to assess their effectiveness and take steps to further enhance their instructional effectiveness (DuFour & Eaker, 1998; McLaughlin & Talbert, 2006). The professional learning community framework provides the structure necessary to promote effective collaborative learning through reflective practice. Blasé and Blasé (1998, as cited in Burant, 2009) suggested that the act of reflective practice increases awareness of one's professional functioning, resulting in an improvement of performance. A professional learning community provides an opportunity for collaborative teams of educators to examine the results of student assessments and other work, allowing for collective instructional coaching (Kise, 2006, as cited as Burant, 2009). The practice of collaborative teaming and collective learning may lead to an emergence of teacher leadership and an enhancement of effective shared leadership. This shared leadership encourages a variety of interactions and relationships that build capacity of change (Pankake & Moller, 2003, as cited in Burant, 2009).

Huffman and Hipp (2003) acknowledged that shared leadership offers shared responsibility, broad-based decision making, and more accountability throughout the school community. This results in a development capacity of teachers to help reculture schools to effectively function as professional learning communities. It is necessary for teachers to embrace the responsibility to determine how best to support the academic success of their students (Buffman & Hinman, 2006). Professional learning communities provide opportunities for

reflection and problem solving, allowing teachers to build capacity by using what they know about how students learn as well as the evidence of their students' progress (McLaughlin & Talbert, 2006).

Andrews and Lewis (2002, as cited in Burant, 2009) found that shared knowledge by way of professional learning can directly impact the practices and actions of teachers in the classroom. According to Andrews and Lewis, the new image of the teacher, as a result of developing a professional community, is strengthened by the concepts of collaboration, reflective dialogue, and an instructional leadership role. Fred Newmann and Gary Wehlage report that in successful school restructuring,

A shared sense of intellectual purpose and sense of collective responsibility for student learning were associated with a narrowing of achievement gaps in math and science among low-and middle-income students. However, the more powerful change comes in teachers' own views of their ability to teach and students' abilities to learn. (as cited in Doerr , 2009, p. 1)

Researchers Hughes and Kritsonis (2007, as cited in Learning Point Associates, 2009) selected a sample of schools from a database of schools that were possibly implementing PLCs and that had sent staff to PLC workshops. The mean length of time the sample schools (N = 64) reported functioning as a PLC was 2.5 years. During a three-year period, 90.6% of these schools reported an increase in standardized math scores, and 81.3% reported an increase in English/language arts scores between 5 points and 26 points.

PLCs as an Avenue for Professional Growth

Professional learning communities not only have a perceived positive impact on student learning, but they also have an influence on the professional growth of teachers. McLaughlin and Talbert (2006) indicated that most researchers agree that teachers learn best when they are involved in the activities that: (a) focus on instruction and student learning specific to the settings

in which they teach, (b) are sustained and continuous, rather than episodic, (c) provide opportunities for teachers to collaborate with colleagues inside and outside the school, (d) reflect teachers' influence about what and how they learn, and (e) help teachers develop theoretical understanding of the skills and knowledge they need to learn.

McLaughlin and Talbert (2006) also indicated that there is a wide range of statistical data that supports the claim that professional learning communities improve teaching and learning. The act of collaboration focused on student learning and the best practices in which to enhance student learning helps teachers develop a common understanding of what effective teaching looks like (Roberts & Pruitt, 2003, as cited in Burant, 2009). By focusing on student learning, teachers in professional learning communities strengthen their own practice in order to benefit student learning. Teachers learn best by studying, analyzing, observing, implementing, reflecting, and collaborating with other teachers. They do this through the act of observing students, one another, and experts as well as analyzing students and peer behaviors and assessment results and then sharing their reflections and personal perspectives with their team (Danielson & McGeal, 2000, as cited in Burant, 2009; Johnson & Altland, 2004). Discussions regarding teaching and learning are grounded in evidence and analysis rather than on opinion or preconceptions (McLaughlin & Talbert, 2006). All of these elements naturally lead to a community of learners. The traditional isolation of teachers does not encourage improvement (Schmoker, 2004). Teachers who teach in isolation do not tend to converse with colleagues regarding hesitations or concerns associated with their own teaching practices (Roberts & Pruitt, 2003). There must be a shift in practices steering away from isolated teaching and toward team collaboration in order to support professional learning. School leaders must also alter traditional practices of supervision and evaluation, in favor of becoming an instructional leader that

develops the capacity of teacher teams, entire schools and possibly even entire school districts to work collaboratively (DuFour et al., 2005). Schmoker (2004) stated that professional learning communities promote “competence” more than any other innovation seen in education institutions because teachers learn most effectively from one another. DuFour and DuFour (2003, cited in Burant, 2009) concur that the professional learning communities model is one of the most promising strategies for sustained and substantive school improvement. The elements of a professional learning community, as well as its structure and nature, open the door to needed school improvement.

In a professional learning community, teachers that are new to the profession have a pre-established support network that is purposeful and focused. For a new teacher, a professional learning community provides consistent social interaction and informal learning opportunities to gain knowledge of the standards, norms, and values of the profession (McLaughlin & Talbert, 2006). This immediately removes the feeling of teacher isolation. This imperative characteristic of collaboration within a professional learning community is also a significant contributor to a new teacher’s success within the profession (Roberts & Pruitt, 2003). The collaboration among veteran and new teachers is also vital because teachers who are new to the profession, school, or district are held to the same level of professional accountability as their veteran peers, and this model provides them with the resources necessary to support and teach them at that high standard (Danielson & McGeal, 2000, as cited in Burant, 2009). According to Slick (2002), these characteristics of professional learning communities offer an opportunity to encourage sustained happiness and satisfaction with their chosen career.

Hard Work and Persistence are Paramount

Hord (1997) explained the popularity of a quick-fix mentality in U.S. culture. She described it as a “microwave oven” (p. 3) theory of school improvement. Hord asserted that many schools are poorly prepared to implement change initiatives and frequently implement them in a hasty manner. A school aspiring to become a professional learning community could attempt to do all the right things in order to ensure successful implementation. They could hire the “right” teachers, create a common mission, vision, and values, and provide collaboration time for teachers. However, the most important changes need to be in the culture – the values and behaviors of the teachers, the very heart of the school. Once the values – the daily actions – of the community members, including teachers and students, has changed to embrace continuous improvement, result-driven decision making, and behaviors that encompass the values of the school, a professional learning community may exist. This, however, does not develop easily or quickly. This paradigm shift in culture may take an immense amount of time and patience from those within the learning community, but persistent modeling by the administration and teacher leaders will bring about a culture encompassed by the values and beliefs necessary for a professional learning community to thrive, resulting in student achievement and educational excellence (Kaplan, 2005). DuFour agrees:

Even the grandest design eventually translates into hard work. The professional learning community model is a grand design—a powerful new way of working together that profoundly affects the practices of schooling. But initiating and sustaining the concept requires hard work. It requires the schools staff to focus on the learning rather than teaching, work collaboratively on matters related to learning, and hold itself accountable for the kind of results that fuel continual improvement. (DuFour, 2004, p. 11)

He concludes,

when educators do the hard work necessary to implement these principles, their collective ability to help all students learn will rise. If they fail to demonstrate the discipline to initiate and sustain this work, then their school is unlikely to become more

effective, even if those within it claim to be a professional learning community. (DuFour, 2004, p. 11)

He contends that “the rise or fall of the professional learning community concept depends not on the merits of the concept itself, but on the most important element in the improvement of any school—the commitment and persistence of the educators within it” (DuFour, 2004, p. 11). This change and persistence can only occur when teachers let go of what has always been and embrace what could be. John Maynard Keynes stated, “The difficulty lies not so much in developing new ideas as in escaping old ones” (DuFour et al., 2008, p. 89). Many times the members of the professional learning community or an aspiring professional learning community, are its own worst enemy.

They can present many dangerous detours and potholes that can lead to a complete breakdown and cancellation of the trip of PLCs: (1) We need more training before we can begin, (2) Let’s find a way to shortcut key processes, (3) Someone else needs to do it, (4) We pick and choose programs rather than work at comprehensive cultural change and (5) We quit when the going gets tough. (DuFour et al., 2008, p. 413)

Implementing a new reform is difficult in any case, but the better prepared reform leaders are for these roadblocks, the fewer detours they have to confront later.

“Policymakers increasingly realize that regulations cannot transform schools; only teachers, in collaboration with parents and administrators, can do that” (Darling-Hammond, 1996, p. 1). The elements of PLCs require all participants to take ownership in a unified path toward a shared vision. “There is no more powerful engine driving an organization toward excellence and long-range success than an attractive, worthwhile, and achievable vision of the future, widely shared” (Nanus, 1992 as cited in DuFour & Eaker, 1998, p. 57). Rosabeth Moss Kanter concludes,

The final challenge – and the one that solidifies success – is to build so much momentum that change is unstoppable, that everything reinforces the new behavior, that even the

resistors get on board – exactly the momentum that develops in winning streaks. (as cited in DuFour et al., 2008, p. 411)

Challenges in Implementing and Sustaining PLCs

Many challenges are faced by schools implementing professional learning communities. The most significant challenge that becomes a roadblock to effective implementation is the effective paradigm shift in school culture. A central principle of DuFour, DuFour and Eaker's *Revisiting Professional Learning Communities at Work* (2008), "It is impossible for a school or district to develop the capacity to function as a professional learning community without undergoing profound cultural shifts." (DuFour et al., 2008, p. 91) Barth also emphasizes the significance of this aspect of PLCs:

The school's culture dictates, in no uncertain terms, "the way we do things around here." Ultimately, a school's culture has far more influence on life and learning in the schoolhouse than the state department of education, the superintendent, the school board, or even the principal can ever have. . . . The culture is the historically transmitted pattern of meaning that wields astonishing power in shaping what people think and how they act. (DuFour et al., 2008, p. 90)

Hargreaves (2004, as cited in DuFour et al., 2008) continued this train of thought when he observed, "A professional learning community is an ethos that changes every single aspect of a school's operation. When a school becomes a professional learning community, everything in the school looks different than it did before" (p. 92). Fullan (2007) clarifies the reasoning behind the difficulties in this reform framework. He explains that most strategies for reform focus on structures, formal requirements, and events-based activities in which culture is never addressed. As a result, the change process does not cause a conflict or struggle between the current values and practices versus the new values and practices that may be necessary. This restructuring is a reform method that occurs again and again, although it may be better to reculture instead. This

reculturing changes the way teachers view their beliefs and daily habits (Fullan, 2007 as cited in DuFour et al., 2008).

This change process does not have a quick turnover with immediate results.

Making the changes necessary to advance a vision will not happen overnight, and the result may not be immediately apparent. If a vision is a target that beckons, a school has a much greater likelihood of hitting a target that is stationary for a number of years than one that is constantly moving. (DuFour & Eaker, 1998, p. 83)

In order to stay focused and optimistic regarding the vision and mission, it is necessary to take small steps along the way. Senge suggests that all shared visions need goals that are specific and attainable within that vision. These goals are what members commit themselves to do, and they provide milestones that keep those members striving to meet the close targets within a short period of time (Senge et al. as cited in DuFour & Eaker, 1998, p. 87).

In addition, Fullan (2007) provides assurance that “conflict and disagreements are not only inevitable but fundamental to successful change” (as cited in DuFour et al., 2008, p. 96). It is typical for people working within a changing system to resist that change and take measures to preserve the status quo.

In fact, in the midst of the change process, educators are likely to perceive that their school has been weakened, their opinions are not valued, and that the stability of the school has been undermined. Periods of frustration, and even anger, are not uncommon. (Marzano, Waters, & McNulty, 2008 as cited in DuFour et al., 2008, p. 96)

“Effective leaders do not begin by focusing on changing assumptions and beliefs; they begin by focusing on changing *behaviors*” (DuFour et al., 2008, p. 108). John Kotter (1996, as cited in DuFour et al., 2008) of the Harvard Business School identified the eight most common mistakes in the change process in his book, *Leading Change*: (1) allowing too much complacency, (2) failing to create a sufficiently powerful guiding coalition, (3) underestimating the power of vision, (4) under communicating the vision by a power of ten, (5) permitting structural and cultural

obstacles to block the change process, (6) failing to create short-term wins, (7) declaring victory too soon and (8) neglecting to anchor changes firmly in the culture.

According to Kotter and Cohen (2002),

We fail at change efforts not because we are stupid, overconfident, and unemotional beings, although it can seem that way at times. We fail because we haven't sufficiently experienced highly successful change. Without that experience, we are too often left pessimistic, fearful, or without enough faith to act. So we not only behave in less effective ways, we don't even try. (as cited in DuFour et al., 2008, p. 104)

Changing the culture and behaviors within a school proves to be a momentous undertaking. According to DuFour and colleagues (2008), "Reculturing is extremely difficult, and neither top-down nor bottom-up strategies have proven effective in reculturing schools or districts" (p. 107). Instead, they suggest that leaders of change meld the two approaches together. "The most powerful concept for bringing about the necessary transformation to become a PLC is the concept of a simultaneously loose and tight culture" (DuFour et al., 2008, p. 108). Fullan (2008) contends, "The key to achieving a simultaneous tight-loose organization lies more in purposeful peer interaction than in top-down direction from the hierarchy. This does not require less leadership at the top, but rather more—more of a different kind" (as cited in DuFour, DuFour, Eaker & Karhanek, 2010, p. 179). A loose culture encourages those within the organization to pursue their own independent interests and initiatives in the belief that such freedom and autonomy will spread the energy and enthusiasm necessary for significant change. This loose leadership is often associated with the label of bottom-up leadership.

On the other hand, a tight leadership imposes a new regimen and demands that employees adhere to the direction that has been established from the top. This tight leadership is often referred to as top-down leadership (DuFour et al., 2008). According to DuFour et al., 2008, "Fullan (2007) contends that this question of loose versus tight leadership represents 'the

essential dilemma' of large-scale school reform, and after exploring that question throughout his distinguished career, he has concluded that *neither strategy works.*" (p. 105). Tyack and Cuban (1995) concur and "recommend leaders 'seek a *middle course* [italics added] between the top-down mode of reform . . . and the random approach of letting a thousand flowers bloom'" (as cited in DuFour et al., 2008, p. 106).

Another research team put this concept another way. Collins and Porras (1997, as cited in DuFour & Eaker, 2008) found that

ineffective organizations fell victim to the "Tyranny of Or," which they defined as "the rational view that cannot easily accept paradox, that cannot live with two seemingly contradictory forces at the same time." The Tyranny of Or would demand a district either be centralized *or* decentralized, value strong leaders *or* empowered teachers, promote organizational consistency *or* individual autonomy. (p. 106)

Instead, Connins and Porras found that successful and effective organizations rejected the Tyranny of Or and embraced the "Genius of And." This is the ability to embrace both extremes at the same time, having strong leaders *and* empowered teachers without taking the middle road (DuFour et al., 2008).

Barriers and Concerns for PLC Implementation

DuFour states, "What is striking in my mind is that thus far, the PLC process has avoided the inevitable rise and fall that seems to accompany educational reform. The process is far more in evidence today than a decade ago" (R. DuFour, personal communication, March 14, 2012).

DuFour insists,

I believe these ideas will endure. I don't foresee a day when research will support the argument that schools serve their fundamental purpose when students are merely given an opportunity to learn, when educators work in isolation, when evidence of student learning is used merely to assign grades, and when schools have an activity orientation rather than a results orientation. (R. DuFour, personal communication, March 14, 2012)

He concludes, “Terms may take on a negative connotation over time, and the term PLCs may come to be dismissed by skeptics. If that should occur, the PLC process will be reborn with a new name, but the fundamental ideas will endure” (R. DuFour, personal communication, March 14, 2012).

This presumption is evidenced in a study by Dr. Perry Wiseman and Dr. Hector Arroyo (n.d.). Wiseman and Arroyo noticed concerns linking professional learning communities and student achievement. This provided the impetus for their research, which evaluated a compilation of dissertations that had previously been conducted regarding professional learning communities and student achievement. According to Wiseman and Arroyo:

Much of the theoretical literature on PLCs indicates increased student outcomes with their implementation. This conclusion often lacks the empirical data to back it up, however. With the yearly mandated federal and state academic targets to be met, in combination with dwindling budgets, schools are being forced to make tough economic decisions that will hopefully yield the greatest academic results for students. Researching the connection between PLC implementation and student achievement is of vital importance. The goal of this study is to obtain quantifiable evidence regarding the relationship between PLC implementation and student achievement. In short, we need to know if PLCs are worthwhile, given the significant investment of time, money, and effort on the part of schools nationwide. (n.p.)

Wiseman and Arroyo conducted research on 13 dissertation studies between 2008 and 2010 that sought to investigate whether or not PLCs and student achievement were linked. The results indicated that nine out of the 13 (69%) studies designated a statistical significance in the relationship between the implementation of PLCs and student achievement. “In other words, PLCs had a positive impact on test scores” (Wiseman & Arroyo, n.d., n.p.). The other four studies did not find a relationship between the overall implementation of PLCs and student achievement; however, two of them (Smith, 2010; Verano, 2010 as cited in Wiseman & Arroyo) did find a positive relationship with certain sub-domains of a PLC. Based on the data results, Smith surmised that “Supportive Conditions-Structure” and “Shared and Supportive Leadership”

may be factors in improving student achievement. In Verano's study, it was determined that "Create Continuous Learning Opportunities" had a statistically significant positive effect on both reading and mathematics achievement" (Wiseman & Arroyo, n.d., n.p.). Each of the elements of "Supportive Conditions-Structure," "Shared and Supportive Leadership," and "Create Continuous Learning Opportunities" are characteristics of professional learning communities as well. On the other hand, Verano also determined a negative statistical significance in relation to "Empower People Toward a Collective Vision" and both reading and mathematics achievement.

Wiseman and Arroyo (n.d.) concluded that the evaluation of each of the professional learning communities throughout all 13 studies indicated that the implementation of PLCs is highly inconsistent. This led the researchers to the question, "What are the contributing factors leading to successful implementation and greater achievement of PLCs?" The authors acknowledged the need for further research on this topic but were able to summarize some of the data that they discovered to give some insight into this question (Wiseman & Arroyo, n.d., n.p.).

Wiseman and Arroyo concluded that when the data regarding successful implementation of PLCs were disaggregated, "Three overarching topics surfaced: (1) Understanding and implementation of PLCs, (2) Resources and structures for PLCs, and (3) Leadership within PLCs" (Wiseman & Arroyo, n.d., n.p.). All three of these factors were influential in PLC development and effectiveness. As a result, Wiseman and Arroyo suggested three recommendations for implementing and maintaining well-developed PLCs. Their first recommendation was based on the findings that PLCs, when put into practice properly, can increase achievement. They advocated that due to the success observed in their research, schools and districts should continue (or begin) to build their implementation of PLCs in order to

positively impact student achievement. Their second recommendation was regarding the preparation work that needs to be embarked on prior to implementing a PLC. They suggest,

an examination of literature should be conducted by all stakeholders to serve as foundation of understanding of the best framework or way to initiate a PLC. Implementation plans should be developed by each school and district and should also include a survey instrument to monitor the progress and maturing of the PLC. (Wiseman & Arroyo, n.d., n.p.)

Their third recommendation was that districts and schools that are using the PLC framework as a method to increase achievement should “construct formal and informal structures that support PLC implementation and authentic collaboration. The allocation of resources should also support these efforts” (Wiseman & Arroyo, n.d., n.p.). Their final recommendation included the need to support administration in the development of PLCs:

Educational preparation programs and district professional development should assist principals in practicing positive group dynamics and developing a culture of collaboration and creativity. This is done through the development of a leadership style that supports shared authority throughout the PLC. (Wiseman & Arroyo, n.d., n.p.)

Wiseman and Arroyo concluded,

the literature does show that PLCs can increase student achievement. However, the practice of developing and nurturing PLCs for the purpose of “increasing teacher quality and student learning” may look very different from one school or district to the next. (Sumner, 2011 as cited in Wiseman & Arroyo, n.d., n.p.)

Regardless, they suggest that schools and districts begin to implement the four recommended policies to develop or enhance their own PLCs (Wiseman & Arroyo, n.d.).

This study conducted by Wiseman and Arroyo (n.d.) found that although a dissertation may have determined that PLCs had not been effective in impacting student achievement, there were often PLC characteristics that had had a positive impact. It is each separate characteristic such as shared decision-making, common formative assessments given frequently, and shared goals within the PLC that has an impact on student achievement. The cumulative effect of all of

those characteristics can have an even greater impact when put together into one framework.

The problem remains that these studies are primarily qualitative, not quantitative. For some, the lack of quantifiable evidence with a reliance on qualitative evidence just is not enough to fully support the claims of the success of PLCs.

The effective implementation of true professional learning communities is a difficult and daunting task. DuFour explains, “The concept of a collaborative culture of a professional learning community is powerful, but like all powerful concepts, it can be applied badly” (DuFour, 2011, p. 61). The traditions in the educational systems make the implementation of any change difficult. In respect to PLCs, DuFour describes the detractors from effective implementation. He states,

Schools can create artificial, rather than meaningful and relevant, teams. Educators can make excuses for low student achievement rather than develop strategies to improve student learning. Teams can concentrate on matters unrelated to student learning. Getting along can be a greater priority than getting results. Administrators can micro-manage the process in ways that do not build collective capacity, or they can attempt to hold teams accountable for collaboration while failing to provide the time, support, parameters, resources, and clarity that are crucial to the success of teams.” (DuFour, 2011, p. 61)

Change is not an easy process by any means, and some educators search for the quick and easy path to immediate results. This may be the case for the implementation of PLCs in some schools. For some educational organizations, practitioners sorted through the PLC framework, picking out the bits and pieces that they deemed worthy, only partially implementing professional learning communities into their school. According to DuFour and Marzano (2011),

. . . many of the schools that proudly proclaim to be PLCs do none of the things PLCs actually do. It is difficult to implement a substantive process in any organization when people have a deep understanding of the process and its implications for specific action; it is impossible to do so when there is ambiguity or only a superficial understanding of what must be done. (DuFour & Marzano, 2011, p. 21)

Using only a particular assortment of attributes or failing to have a thorough understanding of professional learning communities causes a barrier to their successful implementation.

DuFour readily acknowledges the challenges of implementing a professional learning community. DuFour recalls that when reculturing Stevenson High School, he had to take it slowly. “It wasn’t all peaches and cream” (Richardson, 2011, p. 29). He contends, “Creating a PLC is fraught with difficulty” (DuFour, 2011, p. 61). There are many barriers to effective implementation of PLCs.

As previously mentioned, the most difficult aspect of this change process is addressing the change in the culture of a school. One roadblock that typically causes a barrier in the reculturing of schools is the longstanding traditions within a school. “The difficulty lies not so much in developing new ideas as in escaping old ones” (DuFour et al., 2008, p. 89). Many reculturing efforts are attempted from outside of the school, often in the form of structural changes. Policymakers tend to be particularly drawn to the concept of structural modifications because these kinds of changes are “immediate and visible” (DuFour et al., 2008, p. 89).

DuFour, DuFour and Eaker contend that most external efforts typically focus on these external structural changes which impact policies, procedures, rules, and relationships (2008). The effort to create improvements using outside structural changes was seen in the Excellence Movement and failed to produce results. Schools will fall to the same disappointing results if their implementation of PLCs focuses on structural changes and not cultural changes (DuFour et al., 2008).

According to Fullan (2007), reculturing is associated with the process of “how teachers come to question and change their beliefs and habits” (p. 25 as cited in DuFour et al., 2008, p. 91). DuFour, DuFour and Eaker (2008) refer to the assumptions, beliefs, values, expectations,

and habits as the factors that constitute the norm or culture for an organization. “Meaningful, substantive sustainable improvement” can occur only if improvements in these areas become “anchored in the culture of the organization” (DuFour et al., 2008, p. 90).

Because the major barrier to the successful implementation and sustainability of PLCs is the paradigm shift in school culture, it is important to note the term “disruptive change” as described by Phil Schlechty (2005). Schlechty contends that “disruptive change . . . calls upon the system and those who work in it to do things they have never done” (p. 3 as cited in DuFour et al., 2008, p. 92). Ken Blanchard proposes that a culture must be prepared before a change can even be attempted. He explains, “If a change is introduced that is not aligned with the current culture, you must alter the existing culture to support the new initiative or accept that the change may not be sustainable in the long term” (p. 246 as cited in DuFour et al., 2008, p. 91). Fullan’s ideas and Blanchard’s thoughts indicate that the culture, or staff beliefs and habits, must align with the philosophies underlying PLCs. If the school culture is not addressed, change efforts are likely to fail.

A lack of effective, focused collaboration is also a barrier to successful implementation of PLCs. According to Sparks (Erkins et al., 2008),

. . . poorly designed and unproductive team meetings create ripples through a school and create negative and unintended consequences. Conversations focus less on student learning and more on adult behaviors. Relationships become tentative and fragile. Few changes occur, and the end result of poor meetings is lack of trust, overt resistance, and disenfranchised teachers who see no value in the collaborative team process. (p. 31)

DuFour concurs: “We should not be issuing invitations to teachers to collaborate” (as cited in Richardson, 2011, p. 30). It should be an expectation because that is what is best for students. He is just as insistent about the use of team-developed common formative assessments. DuFour suggests that these assessments are the “linchpin for the entire process” (as cited in

Richardson, 2011, p. 30). He clarifies their importance, pointing out that “team members are able to provide timely intervention or enrichment for specific students on specific skills.

Furthermore, the transparency of results helps individual team member identify their strength and weaknesses and learn from one another” (cited in Richardson, 2011, p. 30).

Another perceived barrier to the success of the culture within professional learning communities is the decision-making practices. For a professional learning community to begin a successful journey, the primary path is through the people who work there. “Change the behavior and attitudes of the adults who work in schools in order to improve student learning” (Richardson, 2011, p. 27). “Reculturing is extremely difficult, and neither top-down nor bottom up strategies have proven effective in reculturing schools or districts” (DuFour et al., 2008, p. 92). To be successful, a school or school district must mesh the two together, forming a loose-tight culture. This allows teachers to maintain the autonomy of determining the best method and steps to get to the goal, while administrators encourage shared decision-making, guiding the direction of the learning community according to their vision.

Implementing PLCs or any other innovation is difficult. Schools may want to challenge their staff to do something new, but they may not have the funds to retain an expert whom they can consult throughout their journey. Perhaps if school leaders research the innovation or concept, they can gain enough insight to lead themselves. When schools embarking on PLCs determine the plan that they will implement, they may not follow the exact strategies recommended for a professional learning community. They may take what they need and leave some aspects behind. Or maybe when the new PLC school began their journey, they used most of the PLC framework, but tweaked and changed a little here and a little there, causing gaps in the process. Or they may have started off in an earnest effort to implement the professional

learning community, being loyal to all aspects of the PLC, but along the way some of the foundational pieces were altered. In this case, the final outcome may look nothing like the original plan. In any of these cases, frustration can outweigh the benefits that are waiting at the end of the process. When this happens, they may give up, failing to ever reach their target.

Since the publication of *A Nation at Risk*, the educational system has been in a constant state of reform with efforts to effectively increase student achievement. There was a critical need to find the right fix for the educational system. Schools became accustomed to the cycle of reforms. According to Sarason (1990), “The pressure to continue with new innovations leaves little time to give attention to good ideas” (p. 105). The adage “the grass is always greener on the other side” seems to exemplify the mindset of the educational system for the last quarter of a century. It is easy to discard one reform innovation, starting with a fresh, new, and exciting improvement, only for the excitement surrounding the new reform to wear off. Out it goes as well. As a result, it is also discarded. This repeated cycle has created an air of passivity and pessimism among teachers. According to Tyack and Cuban (1995), “When reforms fail to produce predicted results, pessimism often ensues” (p. 61).

Regardless of this flow of educational reforms, more recently schools adopting the framework of professional learning communities have taken a more ownership role in their improvement.

Bill Ferriter, a North Carolina language arts teacher who writes and presents frequently about PLCs, believes most teachers come to believe in PLCs because the concept recognizes that “the knowledge and expertise to improve rests within the hearts and minds of the teachers in a school.” (Richardson, 2011, p. 28)

DuFour also recognizes that practicing educators themselves were the key to the sustained success. He insists, “The rise and fall of the professional learning community concept depends not on the merits of the concept itself, but on the most important element in the

improvement of any school – the commitment and persistence of the educators within it” (DuFour, 2004, p. 11).

Evidence of Student Achievement and Recommendations for Implementation

Even though most educators generally believe the concepts within PLCs and the implementation of PLCs will improve student achievement, the Center for Comprehensive School Reform and Improvement stated, “It can be challenging to show direct relationships between PLCs and student outcomes” (Learning Point Associates, 2009 as cited in Romeo, 2010, p. 15). One explanation provided for this challenge was that it is necessary to show the actual existence of a true PLC prior to determining a connection between the PLC and measurable student achievement. The key to this is the establishment of a true PLC that fully adheres to and has effectively implemented all concepts embedded in the PLC framework. As acknowledged by Roberts and Pruitt (as cited in Romeo, 2010), the term “learning community” has taken on a variety of meanings in the literature. Doerr (2009) concurs, espousing that “‘professional learning community’ has become a catchphrase thrown around in education” (p. 2). She continues, “Ask 10 people what a PLC looks like and you are likely to get 10 different answers” (Doerr, 2009, p. 3). DuFour also agrees, suggesting, “In fact, the term has been used so ubiquitously that it is in danger of losing all meaning” (DuFour, 2004, p. 1).

In 2006, Vescio, Ross, and Adams proposed that the literature “provides modest evidence that professional learning communities impact teaching” (Romeo, 2010, p. 17). These researchers also examined previously conducted studies. They analyzed 10 studies and found six studies that “attempted to make those connections” (Romeo, 2010, p. 17). Vescio et al. concluded that although few in number, the overriding results of these studies indicated that there was evidence to conclude that there was an “assumption that student learning increases

when teachers participate in professional learning communities” (as cited in Romeo, 2010, p. 17). In today’s climate of school accountability for student achievement, reform methods that produce results are essential. It is necessary for student achievement to be documented in order for practitioners to continue to advocate for the success of professional learning communities.

The pathology of American schools is that they know how to change. They know how to change promiscuously and at the drop of a hat. What schools do not know how to do is to improve, to engage in sustained and continuous progress toward a performance goal over time. (Elmore as cited in DuFour et al., 2008, p. 89)

The Consortium on Productivity in the Schools (1995) concurred:

The issue is not that individual teachers and school do not innovate and change all the time. They do. The problem is with the kinds of changes that occur in the educational system, their fragile quality, and their random and idiosyncratic nature. (as cited in DuFour & Eaker, 1998, p. 47)

In 2004 DuFour stated, “The idea of improving schools by developing professional learning communities is currently in vogue” (p. 1). At that time he expressed concern regarding the future of the professional learning communities due to the succession of school improvement reform in American public education history. He lamented,

The professional learning community model has now reached a critical juncture, one well known to those who have witnessed the fate of other well-intentioned school reform efforts. In this all-too-familiar cycle, initial enthusiasm gives way to confusion about the fundamental concepts driving the initiative, followed by inevitable implementation problems, the conclusion that the reform had failed to bring about the desired result, abandonment of the reform, and the launch of a new search for the next promising initiative. Another reform movement has come and gone, reinforcing the conventional education wisdom that promises, “This too shall pass.” (DuFour, 2004, p. 6)

In order to avoid this cycle and reap the rewards of student achievement through professional learning communities, it is important to heed the advice of experts who have analyzed the implementation and waning of professional learning communities in authentic school settings. This research into those pieces of advice can be woven into the second of

Wiseman and Arroyo's (n.d.) recommendations regarding the preparation work necessary to fully understand the best way to implement the framework of PLCs.

Problems Linking PLCs to Achievement and Determining the Status of a PLC

Opposition to PLCs is based on the lack of quantitative data to support the success of professional learning communities. It has been suggested that because of this lack of data, PLCs cannot claim to be successful. On the other hand, PLC advocates suggest that even though there is not a large pool of data to support their claims, the qualitative data speaks for itself in support of PLC success in impacting student achievement.

It is very difficult to track the rise and fall of true professional learning communities throughout the nation due to the nature of the implementations of these reform frameworks. According to DuFour, it is impossible to estimate the number of schools implementing the PLC framework (R. DuFour, personal communication, March 14, 2012). In order to accurately determine the number of schools and school districts implementing the framework, it would be necessary to actually study each school or district and examine their practices to see if they “do what PLCs do – regardless of what they call it” (R. DuFour, personal communication, March 14, 2012). Without that in-depth examination, the actual number of PLCs is impossible to determine. That being said, DuFour contends that there are far more PLCs today than in the 2000s:

When Solution Tree created the www.allthingsplc.com website to honor schools that had steadily improved student achievement by implementing the PLC process around 2007, approximately 10 individual schools were honored. Today there are more than ten school districts where every school in the district has met the criteria. (R. DuFour, personal communication, March 14, 2012)

DuFour further explains the success of PLCs, giving additional evidence to support these claims.

Three of the four superintendents who were finalists for the national superintendent of the year process used the PLC process as the cornerstone of their improvement initiatives. AASA, who sponsors the award and selects the finalists from the 50 state superintendents of the year, contends that almost all of those recognized superintendents cite the PLC process as vital to the success of their district. (R. DuFour, personal communication, March 14, 2012)

DuFour also explains that in 2002 Rebecca DuFour, Bob Eaker, and himself were the only available consultants on the PLC at Work process. Today there are approximately 70 PLC at Work consultants working with schools in every state in the United States.

The Growing Demand and Support for PLC Professional Development

Although DuFour is well known now, it took many years for his ideas to gain acceptance and momentum. In 1992, while DuFour was serving as superintendent, he published the book, *Creating the New American School*, with Robert Eaker. The combination of these events led educational organizations and practitioners to begin to take note of the professional learning communities that he espoused.

In a March 1, 2012 interview, Dr. Dennis King, an independent consultant on professional learning communities, revealed,

I began to study the PLC framework over 20 years ago [approximately 1993] after listening to Rick DuFour (then principal at Stevenson High School) talk at a Kansas ASCD conference on his book, *The New American School*. I continued my study over the next 4-5 years and then when the opportunity presented itself, I began to build capacity for implementation. (D. King, personal communication, March 1, 2012)

Other education practitioners such as Dr. King drew faith and motivation from the successes that DuFour had had at Stevenson, deciding, “If he can do it, we can too!” Although Dr. King began his study of DuFour’s professional learning communities in the early to mid-1990s, he believes that it wasn’t until DuFour and Eaker’s 1998 release of *Professional Learning Communities at Work* that PLCs really started to gain momentum (D. King, personal communication, March 1, 2012).

In 1996, Darling-Hammond stated, “The attempts across the country are still embryonic and scattered rather than systematic” (p. 7). The growth of this embryonic concept was slow and steady with a strong growth spurt in 2002. The phrase “professional learning communities” spread quickly, but sustained implementation of the full concept did not. According to an interview of DuFour by Richardson (2011), DuFour indicated that the momentum didn’t really take off until 2002. Along this journey, DuFour was in partnership with his long-time colleague since the early years, Robert Eaker, professor of Education and former dean at Middle Tennessee State University (Richardson, 2011). In 2002 DuFour married his wife, Rebecca, a former elementary school principal who had implemented PLCs in her own small rural elementary school. Her knowledge of PLCs was derived from a different perspective than DuFour’s knowledge, which was that of secondary urban education. Her perspective made a vital contribution to the refining process and presentation of professional learning communities. Both Richard and Rebecca DuFour retired from their careers as public school administrators and went on the road to spread information about their beliefs regarding the effectiveness of and need for professional learning communities in all types of schools. The combination of the perspectives presented by both DuFours during their PLC tours evoked an increased demand for PLC information (Richardson, 2011).

In 2004, DuFour stated, “The idea of improving schools by developing professional learning communities is currently in vogue...In fact, the term has been used so ubiquitously that it is in danger of losing all meaning” (p. 6). The demand for information on professional learning communities continued its gradual growth. Wiliam (2007/2008) stated, “Teacher learning communities appear to be the most effective, practical method for changing day to day classroom practice” (p. 39). Michael Fullan (2007) also noted the implications of PLCs during

this time: “I believe we are closer than ever in knowing what must be done to engage all classrooms and schools in continuous reform” (p. 19 as cited in DuFour et al., 2008, p. 110). He believed that “breakthrough forces for educational change now seem to be in our midst” (p. 229 as cited in DuFour et al., 2008, p. 110). His optimism stemmed from his belief that “developing PLCs has turned out to be one of the leading strategies of reform and PLCs are becoming more prominent and more sharply defined” (p. 98 as cited in DuFour et al., 2008, p. 110).

The expansion in the demand for information about PLCs was not just a result of the combined efforts of the two DuFours. Another key contributor to this success was the partnership with Jeff Jones, president and CEO of Solution Tree, a professional development publishing company (Richardson, 2011). Dennis King states, “When Jeff Jones gained majority ownership [of NES], [he] began to support PLCs and began publishing work on PLCs.” (D. King, personal communication, March 1, 2012). DuFour and Jones met in 1998, soon after Jones and D. G. Elmore bought National Educational Services (NES). The Bloomington, Indiana-based NES had published a few books, including DuFour’s early books, and had done some professional development (Richardson, 2011). But Jones had bigger plans. He renamed the company Solution Tree, Inc. and began changing the company to fit his vision of a more wide-ranging service provider. They would not just be a publisher, but a marketer of the books, concepts, authors, and other services related to the books they published (Richardson, 2011).

Solution Tree acts as a wide-ranging agent for authors’ work and a full-service supplier for schools and districts that want to implement an author’s ideas (Richardson, 2011). Jones’s goal was for Solution Tree to advance the work of its authors with the mission statement, “Create schools where all children succeed” (Richardson, 2011, p. 31). It was from this point that “the fortunes of Rick DuFour and Solution Tree have been intertwined, each benefiting the other.

Without the marketing know-how of Solution Tree, DuFour's work might never have found the vast audience it has" (Richardson, 2011, p. 31). This mutually beneficial relationship brought a "marketing dimension to the work unequaled in education" (Richardson, 2011, p. 30).

This marketing and full service exposure worked for Richard DuFour. One of his first book-specific conferences in 1998 had only 90 participants, and in 1999 that number dropped to 76 participants. However, his books were still selling (Richardson, 2011). In 2002, with the combination of the marketing from Solution Tree and the on-the-road partnership with his wife, these numbers skyrocketed. "With both DuFours on stage, every PLC event was suddenly drawing about 500 educators. From then, the growth has been steady" (Richardson, 2011, p. 32).

It is clear that the marketing of a concept can effectively impact the growth in the number of listeners. Publishing companies – Solution Tree in this case – can help create an increase in the demand for topics. Magazine publishers can have the same impact. DuFour wrote a quarterly column for the *Journal of Staff Development* for nearly a decade. He has also written for journals such as *Phi Delta Kappan*, *School Administrator*, *Education Week*, *Principal*, *Journal of Extension*, and *Educational Leadership*. He was the lead consultant and author for ASCD's seven-part series on principalship (AEI Speakers Bureau, n.d.), and he has authored at least seven other videos (Solution Tree, n.d.). Many organizations have clearly benefited from the expertise of Richard and Rebecca DuFour as well as from that of many others who wrote about the concept of professional learning communities. The demand for more information regarding the need for, basics of, tools for developing, and tips for successful PLCs has been ever present. These organizations have made sure to give the public what it demanded, profiting while spreading this valuable information. The question is: Did they spread the information to remedy the concerns in education, to make a profit, or a little of both? In any case, these sources

can influence educational innovations and can gain from those innovations as well. In addition to publishing companies, many educational organizations have endorsed professional learning communities. “The National Staff Development Council believes in PLCs as a part of job embedded professional development and a key to continuous instructional improvement” (Doerr, 2009, p. 30). According to DuFour (2011), a handful of other organizations also show support of PLCs.

Almost all of the professional organizations in education, including the National Education Association and the American Federation of Teachers, have specifically endorsed the premise that educators should work collaboratively. In addition, advocacy organizations, such as the National Commission on Teaching and America’s Future (NCTAF), also call on educators to work as members of a professional learning community. (DuFour, 2011, para. 13)

NCTAF’s president wrote:

Quality teaching is not an individual accomplishment, it is the result of a collaborative culture that empowers teachers to team up to improve student learning beyond what any of them can achieve alone. . . . The idea that a single teacher, working alone, can know and do everything to meet the diverse learning needs of 30 students every day throughout the school year has rarely worked, and it certainly won’t meet the needs of learning in years to come. (Carroll, 2009, p. 13 as cited in DuFour, 2011, para. 13)

In 2003, The National Commission on Teaching and America’s Future described its hope for the future of education. DuFour and colleagues (2008) described this:

Much difficult work remains to be done, but perhaps we are nearing the tipping point described by The National Commission on Teaching and America’s Future (2003) when PLCs will no longer “be considered utopian” but will in fact “become the building blocks that establish a new foundation for America’s schools.” (DuFour et al., 2008, p. 110)

Rebecca DuFour also referred to this continued hope, stating, “As the National Commission on Teaching and America’s Future (2005) argues, to prepare students for success in the 21st century, we must develop the capacity of every teacher to ‘become members of a growing network of shared expertise’” (Erkens et al., 2008, p. vii).

Given the state of education, it is easy to see why schools would want a sure-fire fix to the ills of the American public school system. After the National Commission on Excellence released *A Nation At Risk* in 1983, schools all over the country were looking for ways to improve student achievement. Given the accountability for results and the urgency for change, some schools and school districts rashly adopted the PLC concept and began a quick implementation, while others did not. They waited, researched, and slowly took steps to implement PLCs in their schools (D. King, personal communication, March 1, 2012). Some schools have never adopted this concept to date.

PLCs are still functioning across the country today and professional development regarding PLCs is still in demand (Richardson, 2011). The data on the demand for PLC professional development from Solution Tree shows a growing need for PLC training. Table 1 shows the number of PLC conferences provided by Solution Tree, the leading provider of professional development on PLCs.

Table 1

PLC Conferences provided by Solution Tree

Year	Number of Events
2004	12
2005	12
2006	13
2007	13
2008	14
2009	14
2010	13
2011	13
2012	13

This shows a modest growth or status quo annually in the demand for PLC professional development. Table 2 illustrates the growth in the number of educators attending the aforementioned events.

Table 2

Number of educators attending Solution Tree events

Year	Number of Attendees at Each Institute	Number of Attendees at Each Summit
2004	7,842	
2005	8,635	1,391
2006	12,802	1,347
2007	13,177	1,294
2008	13,777	2,226
2009	13,891	1,679
2010	15,727	2,251
2011	16,107	2,377

Fullan and Eaker suggest, “PLCs have gained legitimacy among educators because of DuFour’s extended experience with it and because of the increasing evidence that it is working in schools of all sorts” (as cited in Richardson, 2011, p. 30). However, DuFour and Marzano (2011) express a concern:

The growing recognition of the potential of the PLC process to impact student achievement in a powerful and positive way has helped bring the term professional learning community into the common vocabulary of educators throughout the world. But while the term has become widespread, the underlying practices have not. (p. 21)

CHAPTER 4

DISCUSSION, ANALYSIS AND PREDICTION

Outside Influences on Education

As noted in chapter two, education is often a reflection of other factors in society of the time. Historically, social, political, and economic factors have had a significant impact on the state of education. In the colonial times, only the upper and middle class citizens were educated, typically by middle class white male teachers. The curriculum had a strong focus on religious, moral, and civic values. The intent was to prepare males to be productive citizens with strong biblical knowledge. This was a reflection of the social values of the time.

The appointment of Horace Mann to Massachusetts' State Board of Education brought in a movement of standardization in education. In the 1850s, immigration was dealt with by Americanizing students. The Civil War led to an increased focus on schools in the South. The Panic of 1873 drew a number of men and women from agriculture backgrounds, especially from the South, to embrace the teaching profession. The progressive movement was a direct reflection of industrialization occurring in the business sector. During World War II, the economy needed women to work, so the teaching profession became increasingly feminized during this time and society accepted this change because of the economic demand. World War II also resulted in the G.I. Bill, which forever changed the make-up of higher education so that social classes other than the wealthy had opportunities to earn a college degree. The political turmoil of the Civil Rights movement was played out in schools all over America. Sputnik and *A Nation at Risk* resulted in school accountability. After these two events, schools went through the Excellence Movement, the Restructuring Movement, and the Standards Movement, the latter of which resulted in the No Child Left Behind Act of 2002. All of these movements made attempts to

hold schools accountable for their students' learning and were brought about as a reaction to political concerns. Americans fear being inferior to other countries politically and economically. The education of the country's youth are the best manner in which to attain or maintain a sense of superiority in the world. The resulting demands made by the public are reflected in America's schools.

Professional learning communities are also a result of the political and economic demand for schools to show proof of meeting the learning needs of their students and being accountable through data driven results. The purpose of professional learning communities is to organize and collaborate in a manner that ensures that all students learn. This is exactly what our society is demanding at this time. Professional learning communities are growing in demand and this could be a reflection of the attempts of schools to organize in such a way that can tackle the accountability requirements that have been politically placed on them through federal and state governments.

Professional Learning Communities Today

This paper is a historical study, not an analysis of the effectiveness or ineffectiveness of professional learning communities. Professional learning communities have been implemented over the last quarter of a century and comprise a reform framework in use today, receiving attention from current researchers as well as from practitioners.

Innovations come and go in many organizations, and the field of education is no exception. As shown in the previous chapter, PLCs are an innovation in use and in demand in education today. In this study, the question is, how long will this innovation be relevant in education? Knowledge regarding the possible duration of PLCs would be beneficial to school

decision-makers when deciding whether or not to invest time, money, and effort into beginning, further developing, or refining this innovation in their schools.

In order to determine the current status of PLCs, it is useful to analyze the demand for professional development and the amount of research currently being conducted on professional learning communities and then compare this information to other known educational innovations. Figures 1 and 2 show the current number of citation results found in the Educational Resources Information Center (ERIC). Using the advanced search tool, two different searches were performed. The first search used the keyword *PLC* and the second search used the keyword *professional learning community*. Since these two phrases are used synonymously, a search for both is logical in order to gather relevant information. In addition to using the keywords in the advanced search, the specific date range for each year was designated. For example, in looking for citations for the year 2002, the starting date was 2002 with the stopping point of 2003. The results are shown in Figures 1 and 2.

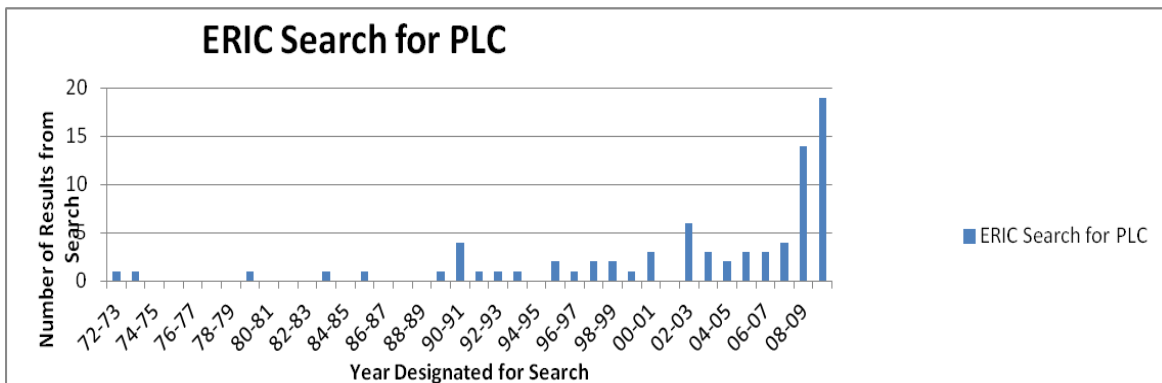


Figure 1. ERIC Search for PLC



Figure 2. ERIC Search for Professional Learning Community

Both figures show a recent rise in the number of ERIC citation results. This information correlates to the information provided in Table 1 and Table 2 regarding the number of PLC conferences. According to all of these results, the Solution Tree professional development, and the ERIC searches, PLCs are currently in demand.

Next, for this purpose, five different innovations or educational strategies that have passed their prime were chosen for representative purposes: 1) Madeline Hunter, 2) Block Schedule, 3) Whole Language, 4) Phonics Instruction, and 5) Basic Schools. A search for those topics was conducted in an identical manner as those for PLC and professional learning community, using the advanced search method. Each year was searched individually. The results are shown in Figures 3, 4, 5, 6, and 7.

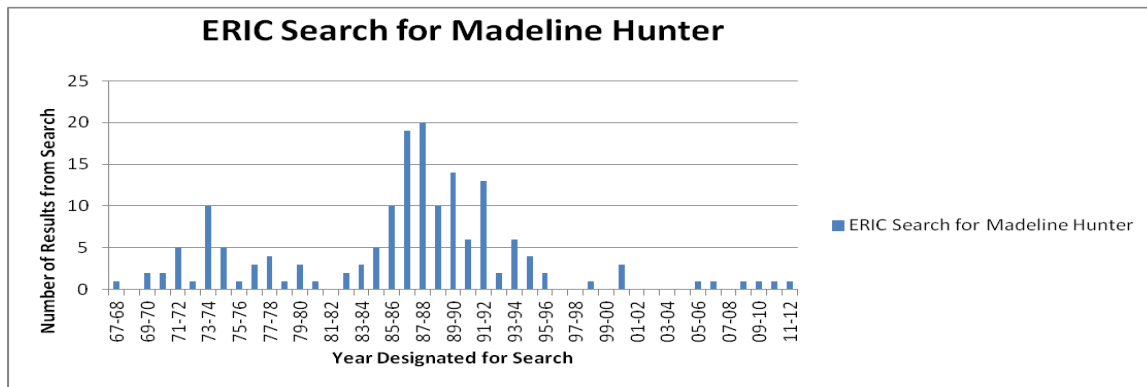


Figure 3. ERIC Search for Madeline Hunter

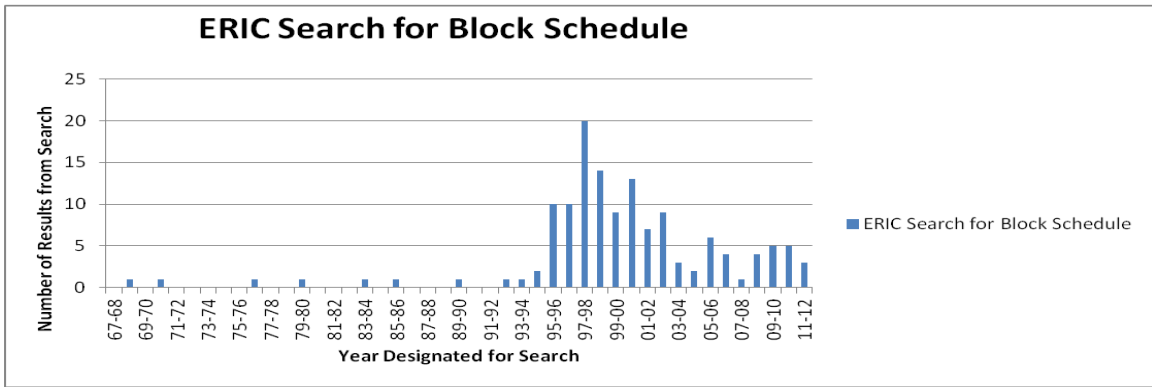


Figure 4. ERIC Search for Block Schedule

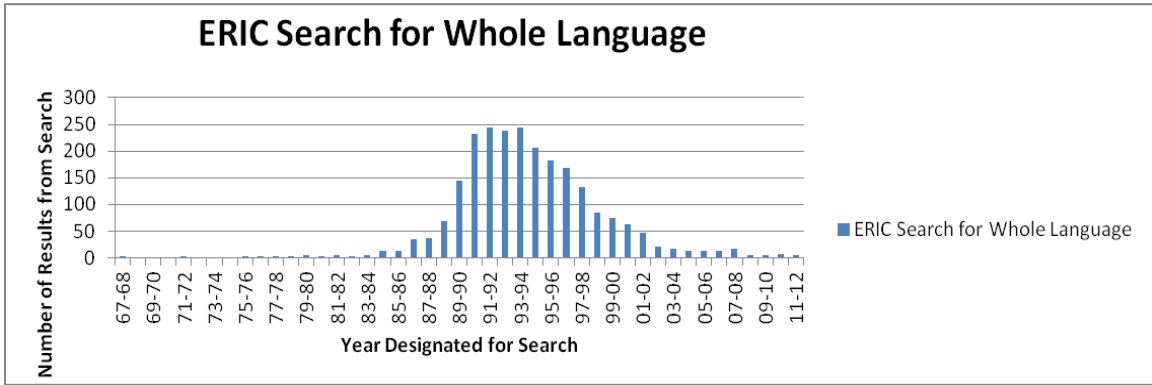


Figure 5. ERIC Search for Whole Language

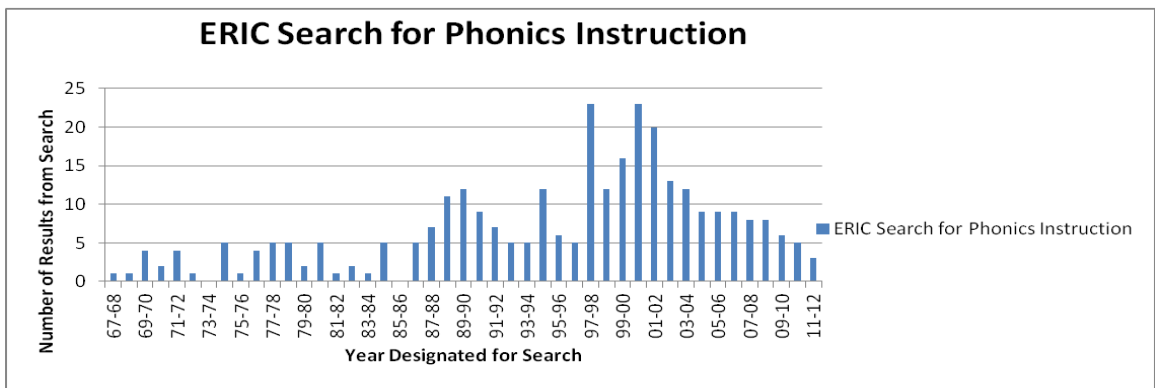


Figure 6. ERIC Search for Phonics Instruction

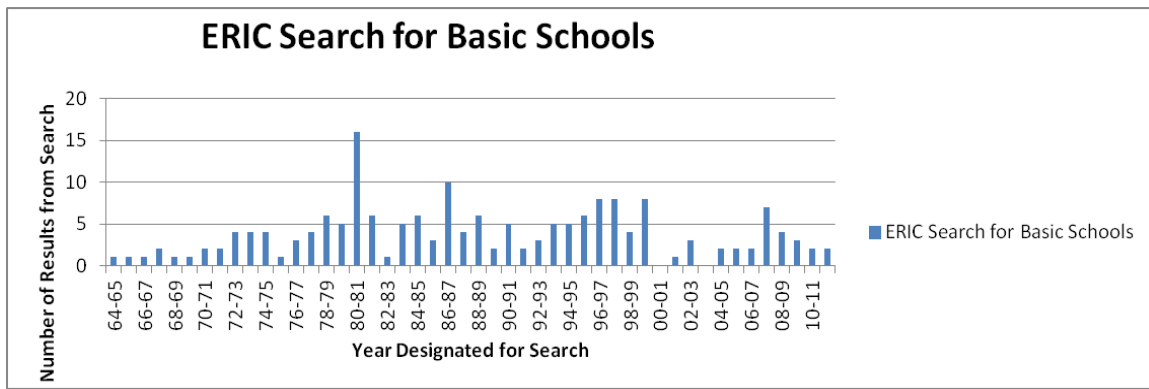


Figure 7. ERIC Search for Basic Schools

Figures 3 through 7 show some form of a rise of interest, a peak of interest, and decrease of interest in some manner. In the figures regarding Madeline Hunter, Block Scheduling, and Whole Language, the curve of the rise and fall of the number of citations is quite apparent. In the figures regarding Phonics Instruction and Basic Schools, the curve is more difficult to determine due to multiple peaks and valleys. This being said, a generalized trend in the rise and fall can still be identified. Table 3 indicates the years that each of these sample innovations was relevant according to the ERIC results, as well as the length of time that it shows relevancy. In addition, it indicates the years that each innovation was in its prime demand and the number of years it was in demand. This data indicate that on average these innovations lasted approximately 16 years with some relevancy and averaged six years at their peaks.

Using this information, the dates and length of the professional learning community innovation and the dates and length of its peak could be predicted. In Figure 2 regarding Professional Learning Community, it appears that the relevancy begins approximately in the year 2008. Given the average length of an innovation of 16 years, it could be approximated that this innovation may last until approximately 2024. It appears that the peak of interest began in 2010. Using the peak average of six years, the peak will last until approximately 2016.

Table 3

Duration and Peak of Educational Innovations

Innovation	Years in Curve	No. Years in Curve	Years at Peak	No. Years at Peak
Madeline Hunter	1984-1994	10	1986-1992	6
Block Schedule	1994-2006	12	1995-2003	8
Whole Language	1988-2001	13	1990-1994	4
Phonics Instruction	1986-2009	23	1997-2002	5
Basic School	1978-2000	22	1980-1987	7
Average		16		6

Using the same process, we can also project the approximate dates for relevancy and peak for the PLC search. The information in Figure 1 also indicates that the initial relevancy began in approximately 2008. Once the average of 16 years is applied, it predicts the relevancy ending in 2024 once again. However this search revealed that the peak began in 2008 which indicates that the peak will last until approximately 2014, only two years from now.

The year 2008 seemed to stand out in both Figures 1 and 2, related to professional learning communities. This is later than the date that Rick DuFour indicated that the demand for his public speaking increased substantially in 2002. There could be any number of factors for this discrepancy. It should be noted however, that the release of *Revisiting Professional Learning Communities at Work*, the updated version of *Professional Learning Communities at Work* (1998) was released in the year 2008, which may have had an impact on the demand and relevancy of PLC and professional learning community information.

Informational Cascades

In education, a vast number of new innovations are consistently introduced as the next great thing. Many claim to be the best way in which to help students learn to the best of their ability. How do educational leaders know which innovations to put their time and money into? How do they gather information on all of the possible innovations prior to making a choice? The truth is, they don't. It is impossible for any one person or even a group of people to study all possible innovations. Instead, educational leaders follow the same practice that leaders in most organizations follow: they pay attention to what others around them are trying. They watch other schools that have shown success and find out what they are doing to be successful. Then, they adopt that method, even though they may not have fully researched and most certainly did not research all other possible options because this would be, again, impossible. They simply do what other role model schools are doing, trying to imitate those schools. This adoption without full information, based on the observation of others, is called an informational cascade.

It is possible that the rise and fall of many innovations, including professional learning communities, may be a result of fads or informational cascades. The foundation of the theory of informational cascades relies on the concept of individuals revising decisions based upon the current information they have, including observations of a sequence of prior decision makers' actions and decisions. The instinct for imitation is embedded in the very nature of human beings. The urge to imitate others is an evolutionary adaptation that has allowed individuals and groups to take advantage of the "hard-won information of others" (Bikhchandani, Hirshleifer & Welch, 1998). According to Gibson and Hoglund (1992, cited in Bikhchandani et al., 1998), "animals imitate each other in choices of mate and territories; for example, female guppies are more likely to choose males to mate with who they have observed being selected by previous females" (p. 2).

A group or individual sequence of imitation can be called many names: conformity, fads, informational cascades, herd behavior, band-wagons, and social proof. Bikhchandani et al. (1992) define an information cascade as a sequence of individuals making decisions using limited information. These individuals rely on the actions of others to make their choice rather than relying on their own personal information. Cao and Hirshleifer (2000) state, “An informational cascade occurs if, based on his observation of others, an individual’s action does not depend on his private signal” (p. 7-8).

Often individuals making late decisions rely on the knowledge and decisions of others in the cascade because they do not have or make the time to research their own information. This is the very nature of informational cascades that makes them fragile in structure (Bikhchandani et al., 1992).

In the early stages of a cascade, some individuals begin with more precise signals than others.

Social psychologists report that people imitate the actions of those who appear to have expertise. This is probably part of what underlies the success of product endorsements in which athletes are seen to use a particular brand of athletic shoes or tennis racket. (Bikhchandani et al., 1998, p. 10)

For example, if prospective car buyers are choosing between two types of cars, and they witness Ed, a car mechanic, purchase one model, the following car buyers may be more inclined to choose the same model that Ed did because they infer that he has more precise signals regarding this subject matter. They may even believe him to be an expert. This expert can also be referred to as a fashion leader (Hirshleifer, 1997). In the fashion leader model, the decision by the first highly knowledgeable individual persuades everyone following to imitate that decision. According to Hirshleifer (1997) “the action of a single initial expert may cause millions to follow” (p. 7). Such a cascade can begin immediately following the choice by an

expert. Even though the combined information of the successive individuals may be more accurate, Ed may continue to have a long train of followers due to the perception that he has more precise signals than the others (Hirshleifer, 1997). According to the basic cascade model, “higher-precision individuals will tend to act first, since they have less to gain from observing others. Thus cascades should form extremely rapidly (after one individual), which may be disastrous” (Hirshleifer, 1997, p. 7).

Not only can individuals with more precise signals begin a cascade, they can also break or reverse cascades as well. This is especially true in the case when those who follow know that that individual has higher precision signals and are ready to ignore their own signals and follow the perceived expert (Lemieux, 2003). In addition, “If a higher-precision individual shows up late, he can shatter a cascade, because he is more inclined to use his own information signal. His action conveys valuable information to followers” (Hirshleifer, 1997, p. 7).

In reality, it is not expected that an informational cascade will last forever. According to David Hirshleifer (1997), “the fallibility of cascades makes them *fragile*” (p. 6). He states that there are many reasons that a cascade may crumble. Some of the following occurrences are noted as common precipitators of a crack in a cascade: (a) the entrance of individuals having more precise signals than others; (b) public news associated with the cascade is revealed at a later date; (c) the relative desirability of adopting versus rejecting changes; (d) individuals who can't perfectly observe or recall what predecessors did; and (e) individuals think their costs and benefits differ and so may be inclined to switch (Banerjee & Fudenberg 1995, cited in Hirshleifer, 1997; Cao & Hirshleifer, 1995, cited in Hirshleifer, 1997). One or more of these occurrences can easily reverse a cascade (Hirshleifer, 1997).

One shock that may occur is also reliant on individuals' recollections and perceptions. If an individual had difficulty observing or recalling the actions of predecessors, it can cause a breakdown in a cascade. This is due to the characteristics in the formation and continuation of a cascade. Cascades are formed on the basis of observations by predecessors. If these actions cannot be observed or recalled, the sheer essence of a cascade has diminished (Banerjee & Fudenberg 1995, cited in Hirshleifer, 1997; Cao & Hirshleifer, 1995, cited in Hirshleifer, 1997). In addition, if individuals feel that their cost and benefits from the adoption differ from others in the cascade or differ from the original costs and benefits at adoption, they are likely to switch (Hirshleifer, 1997). Hirshleifer (1997) also notes that cascades are susceptible to breakdowns due to their very nature of being fragile. He states, "The cascades theory emphasizes the voluntary nature of conformity, especially among the inexperienced and uninformed" (p. 16). The nature of cascades is that later participants are generally less informed thus more inclined to conform.

Informational cascades are readily apparent due to the cost to individuals of acquiring information on their own. Information is costly, not only in financial terms, but also in the aspect of time. Hirshleifer contends, "It's cheaper to rely on the decisions of others than to investigate yourself" (1997, p. 17). It is far less costly to wait until public information hits a precarious tipping point favoring one action over another. When individuals use this information rather than their private information, successors will imitate without investigating and acquiring information on their own. This can lead to a reduction in decision quality (Cao & Hirshleifer, 1995, cited in Hirshleifer, 1997). Additionally, individuals who form an opinion at a later stage are almost guaranteed to be in a cascade and would not have endured the cost of acquiring information. Late joiners in a cascade rarely ever acquire information on their own. "Rogers

and Shoemaker (1971) conclude from 12 empirical studies on diffusion of innovations that early adopters seek more information about innovations than later adopters” (cited in Hirshleifer, 1997, p. 17).

Hirshleifer (1997) succinctly summarizes the essence of informational cascades:

The theory of informational cascades helps explain how conventions arise, are maintained, and are broken. Since cascades start readily based on very weak information, the conformist outcome is often mistaken. While this cascade of conventional behavior can become quite *long*, it is not *strong*. A small shock, such as public information disclosure, a value change, or even the possibility of such a change, can lead to an abrupt shift. In some theories of change, actions are unstable only if the system coincidentally is balanced near a knife-edge. Under informational cascades the system *systematically* moves to a precarious position in which everyone is doing the same thing but just barely prefers to do so. (Hirshleifer, 1997, p. 18)

Cascades can be formed rapidly and shattered just as quickly. The direction that the cascade takes, up or down, depends on small variations in the initial conditions (Lemieux, 2003).

The Future of Professional Learning Communities

In chapter one, Terry Deal (1987) was quoted: “What can we legitimately expect from...reform efforts? If history is our guide, the outcome is fairly certain. Very little of any significance in school will be changed” (p. x). It is important for educators to break this cycle of status quo. Also, in chapter one, Tyack and Cuban (1995) noted that observing and studying those histories can help leaders learn from failures and build on successes as a means to change this “certain outcome” in order to create a paradigm shift. It is up to current educational leaders to take the steps necessary to create that paradigm shift. Tyack and Cuban (1995) also suggested that

History provides a whole storehouse of experiments on dead people. Studying such experiments is cheap...Many educational problems have deep roots in the past, and many solutions have been tried before. If some “new” ideas have already been tried, and many have, why not see how they have fared in the past. (p. 6)

Educational leaders must study the past, observing patterns and finding commonalities in the history of education. In chapter one it was noted that Miles and Huberman (1994, as cited in Kelly, 2000), identified analytical practices that may be used across different research studies. Several of these practices indicated making generalizations derived from a set of patterns and commonalities that had been observed in a database. In this study, patterns and commonalities have been identified regarding past reform efforts throughout the history of American education and in regard to past innovations in education as well. Finding these commonalities and making generalizations allows educational decision makers to apply this generalized knowledge to current innovations. This helps them to gain insight into the current and future impact of these innovations as well as the patterns of other reforms. Educational leaders can study the characteristics of the reforms and innovations to compare them to reforms in the past, predict whether the characteristics of an innovation will endure, and approximate how long an innovation may last. This allows them to make more accurate and effective decisions regarding the investment of their organization's resources, including time and money.

Studying the history and development of professional learning communities and comparing them with the patterns of other historic reforms and innovations allows educators to make generalizations about the path that may be seen for the future of professional learning communities. The amount of interest in and demand for information regarding professional learning communities has recently risen much like other innovations in the past. These other innovations, such as the Madeline Hunter lesson model, block scheduling, and whole language approach, also showed a rise, came to a peak, followed by a fall. Given this data showing how a typical innovation runs its course, comparing it to the data regarding the current state of professional learning communities, and then applying the basic theory of informational cascades,

it is quite possible that professional learning communities could be in a cascade. This innovation is currently on the rise and appears to be in a peak of interest. If the pattern of the other representative innovations holds up, then professional learning communities could expect a decline in interest in two to four years.

There are a number of factors that could impact the duration and peak of interest as well as the fall of a PLC cascade. The cascade theory indicates that the very nature of a cascade is fragile and prone to a crash. The innovation will rise to a precarious resting point, only to be easily tipped and knocked down. The cause of the crash does not have to be a major event; it could be minor but nonetheless, could be just as effective in causing a fall.

The duration, or lack thereof, of PLCs could be attributed to many factors. King states, "...what stops the process (of PLCs) is lack of understanding and education. Most people say, I know it (PLC processes) but fail to study the content, therefore implementation occurs based upon what they like versus fidelity." (D. King, personal communication, March 1, 2012). He states that lack of leadership by the principal, district, and teacher leadership will produce unintended results for PLCs. He also indicates that initiative overload negatively impacts PLC success. King clarifies, "Schools do not sustain, they continue to introduce new concepts looking for the magic bullet" (D. King, personal communication, March 1, 2012). Most importantly, he contends that "...it's hard. The culture of schools is not to focus on student learning and work in a collaborative setting. Therefore culture is a major factor in moving the work forward."

The change in culture seems to be the biggest roadblock for the successful continuation of PLCs. DuFour also contends that PLCs have currently not spread, "because it requires changing the structures and cultures of public schooling that have endured for over a century"

(R. DuFour, personal communication, March 14, 2012). Although some perceive PLCs to be a straightforward recipe for success, it can't be implemented in this fashion if it is to be successful. PLCs vary from district to district and school to school based upon the individual needs of that particular learning community. PLCs are not a one-size-fits-all reform for schools, which makes them more difficult to implement and sustain in schools, especially without persistence and dedication to the ideals encompassed in PLCs.

Richard DuFour is considered an expert on professional learning communities. It has been shown that the professional development events that he presents with Rebecca DuFour are currently in high demand. Although many professionals now provide PLC professional development as well, the DuFours are considered national experts and draw large crowds to their events. The retirement of the DuFours, or even just Richard DuFour, may cause the interest in professional learning communities to wane. Recipients like to hear the personal experiences of developing and successfully organizing PLCs from someone who has been in their shoes. They want to receive information and inspiration from the world-renowned, award winning expert, himself. If DuFour is no longer available to present professional development, the lack of a sense of learning from the best may result in a decline of interest in the subject. This was true in the case of the Madeline Hunter model, whose popularity declined shortly following the death of Ms. Hunter (Kelly, 2000). Without DuFour, in order for interest to persist, it might be necessary for another charismatic and highly qualified PLC expert to fill this void.

Another possible reason the professional learning community innovation could see a fall would be a decline in profitability for Solution Tree or a change in the relationship between the DuFours and Solution Tree, whose partnership has been mutually profitable. As long as Solution Tree is making a profit by supporting the PLC innovation, they are sure to support it. However,

they are unlikely to pour money into an innovation that is not making money. A small decline in profits could result in a reduction of marketing for the innovation, which in turn, could cause a further reduction in interest and hence profits. This cycle could eventually cause the complete fall of the PLC cascade.

A professional learning community cascade could also decline if educational leaders tire of it and move on to another innovation. As discussed, this is a common occurrence in the field of education. Innovations that were supposed to be the next best thing come and go quickly. PLCs take perseverance, time, and a willingness to change in order to be successful. For some educational organizations, implementing a PLC may take too long or end up being too difficult to tackle, so they will move on to the next innovation. These organizations are constantly searching for the silver bullet that will solve their problems and increase student achievement. Inevitably a new innovation will gain the attention of educational decision-makers, and interest in the current innovation, in this case PLCs, would fade.

A catastrophic change might also cause a decline in interest in professional learning communities. Historically, events such World War II, The Great Depression, and the Panic of 1873 have had an impact on education. A catastrophe immediately changes the focus of the country, and other issues become of less priority while more important issues are addressed. Social, economic, and political issues of the United States have historically had an impact on the field of education and will likely continue to do so in the future. Any significant social, political, or economic issues could change the educational reform effort to reflect these values at that time.

It should be considered that the duration of the peak of interest in professional learning communities could extend longer than a typical innovation because PLCs have multiple characteristics that aid in its success. As Wiseman and Arroyo (n.d.) discovered, multiple

research dissertations indicated that even if an entire PLC did not have a positive impact on student learning, there were separate strands of the PLC that did have a positive impact. PLCs are comprised of the following characteristics: 1) Shared mission, vision, and values, 2) Collective inquiry, 3) Collaborative teams, 4) Action orientation and experimentation, 5) Continuous improvement, and 6) Results orientation (DuFour & Eaker, 1998, p. 25). Each of these characteristics are logically beneficial to kids individually. PLCs have simply embraced all of them collectively, including multiple strategies in one package.

In their study of Chicago schools that showed marked success in improving the academic achievement of their students, Bryk, Sebring, Allensworth, Luppescu and Easton (2010) identified five essential supports that affects the capacity for school organizations to improve student engagement and learning. These five essential supports were: 1) school leadership, 2) parent and community ties, 3) professional capacity of the faculty and staff, 4) a student-centered learning climate, and 5) an instructional guidance system (Bryk et al., 2010). Most of these characteristics of successful school improvement are similar in nature to the characteristics of PLCs. Both have a student centered focus, use collaboration to improve and use systematic instruction for students, take steps necessary to advance each student, and provide professional development to teachers in order to assist them in improving their instruction.

As discussed, these individual strategies are not new. These concepts have been used in the business world in addition to being independently used in education. The PLC innovation is one of the first to gather all of these strategies together and put a name on the package. It is difficult to argue against these as beneficial, and therefore this innovation may retain its popularity longer than the typical innovation. DuFour (personal communication, March 14, 2012) contends, “I don’t foresee a day when research will support the argument that schools

serve their fundamental purpose when students are merely given an opportunity to learn, when educators work in isolation, when evidence of student learning is used merely to assign grades, and when schools have an activity orientation rather than a results orientation.” Schools may also favor particular strategies and therefore commit to the entire innovation in loyalty to those strategies. It is quite possible that even though the name of professional learning community might fade out, the elements of PLCs will remain in the field of education.

DuFour (personal communication, March 14, 2012) concludes,

I believe these ideas will endure...Terms may take on a negative connotation over time, and the term PLCs may come to be dismissed by skeptics. If that should occur, the PLC process will be reborn with a new name, but the fundamental ideas will endure. (personal communication, March 14, 2012)

DuFour acknowledges that professional learning communities could join the cyclic pattern of failed reform efforts. However, he notes that the ideas that provide the foundation of professional learning communities will continue. These ideas were found in the field of education prior to the development of PLCs and they will persist after the inevitable decline of PLCs. Professional learning communities employ common sense strategies that just make sense, and those ideas will survive and will likely find themselves in the package of another reform framework or innovation.

REFERENCES

- Adlai E. Stevenson High School. (2009). Retrieved from <http://www.d125.org/about/default.aspx>
- AEI Speakers Bureau. (n.d.) Retrieved from <http://www.aeispeakers.com/speakerbio.php?SpeakerID=1554>
- All Things PLC. (n.d.). Retrieved from <http://www.allthingsplc.info/about/evolution.php>
- Archived information: A nation at risk.* (1983). (n.d.). Retrieved from <http://www2.ed.gov/pubs/NatAtRisk/risk.html>
- Beal, G. M., & Bohlen, J. M. (2008). *The diffusion process*. Retrieved from <http://ageconsearch.umn.edu/bitstream/17351/1/ar560111.pdf>
- Bikhchandani, S., Hirshleifer, D., & Welch, I. (1992). A theory of fads, fashion, custom, and cultural change as informational cascades. *Journal of Political Economy*, 100(5), 992-1026.
- Bikhchandani, S., Hirshleifer, D., & Welch, I. (1998). Learning from the behavior of others: Conformity, fads and informational cascades. *Journal of Economic Perspectives*, 12(3), 151-170.
- Bryk, A., Sebring, P., Allensworth, E., Luppescu, S., & Easton, J. (2010). *Organizing schools for improvement: Lessons from Chicago*. Chicago: The University of Chicago Press.
- Buffman, A., & Hinman, C. (2006). Professional learning communities: Reigniting passion and purpose. *Leadership* 35(5), 16-19.
- Burant, S. E. (2009, August). The relationship of instructional supervision and professional learning communities as catalysts for authentic professional growth: A study of one school division. Saskatoon, Canada: University of Saskatchewan.
- Cao, H. H., & Hirshleifer, D. (2000, November 13). Conversation, observational learning, and

informational cascades. Dice Center Working Paper No. 2001-5.

doi:10.2139/ssrn.267770

Carboneau, C. (2005). Using diffusion of innovations and academic detailing to spread evidence-based practices. *Journal of Healthcare Quality*, 27(2), 48-52. doi: 10.1111/j.1945-1474.2005.tb01117.x

Chambers, J. G., & Hartman, W. T. (1983). *Special education policies: Their history, implementation, and finance*. Philadelphia: Temple University Press.

Coleman, J. S. (1966). *The Coleman report*. In D. Schugurensky (Ed.), *History of education: selected moments of the 20th century*. Available at:

http://fcis.oise.utoronto.ca/~daniel_schugurensky/assignment1/1966coleman.html

Cuban, L. (1984). *How teachers taught: Constancy and change in American classrooms 1890-1980*. New York: Longman.

Darling-Hammond, L. (1996). The quiet revolution: Rethinking teacher development. *Educational Leadership*, 53(6), 4-10.

Dewey, J. (1897). *My pedagogic creed*. New York: E. L. Kellogg & Company.

Doerr, H. (2009). PLCs demystified. *Principal*, 89(1), 26-30.

DuFour, R. (2003, May). Building a professional learning community. *School Administrator*, 60(5), 13-15.

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

DuFour, R. (2011). Work together but only if you want to. *Phi Delta Kappan*, 92(5), 57-61.

DuFour, R., & Burnette, B. (2002, Summer). Pull negativity by its roots. *Journal of Staff Development*, 23(3), 27-30.

- DuFour, R., DuFour, R., & Eaker, R. (2008). *Revisiting professional learning communities at work: New insights for improving schools*. Bloomington, IN: Solution Tree Press.
- DuFour, R., DuFour, R., Eaker, R., & Karhanek, G. (2010). *Raising the bar and closing the gap: Whatever it takes*. Bloomington, IN: Solution Tree Press.
- DuFour, R., & Eaker, R. (1987). *Fulfilling the promise of excellence: A practitioner's guide to school improvement*. Westbury, NY: J. L. Wilkerson Publishing.
- DuFour, R., & Eaker, R. (1992). *Creating the new American school: A principal's guide to school improvement*. Bloomington, IN: National Education Service.
- DuFour, R., & Eaker, R. (1998). *Professional learning communities at work: Best practices for enhancing student achievement*. Bloomington, IN: National Educational Service.
- DuFour, R., Eaker, R., & DuFour, R. (2005). *On common ground*. Bloomington, IN: National Educational Service.
- DuFour, R., & Marzano, R. J. (2011). *Leaders of learning*. Bloomington, IN: Solution Tree Press.
- Eaker, R. (2002). Cultural shifts: Transforming schools into professional learning communities. In R. Eaker, R. DuFour, & R. DuFour, *Getting started: Reculturing schools to become professional learning communities* (pp. 9-32). Bloomington, IN: National Education Service.
- Eaker, R., DuFour, R., & DuFour, R. (2002). *Getting started: Reculturing schools to become professional learning communities*. Bloomington, IN: National Education Service.
- Easley, D., & Kleinberg, J. (2010). *Networks, crowd, and markets: Reasoning about a highly connected world*. Cambridge, England: Cambridge University Press. Retrieved from www.cscornell.edu/home/kleinber/networks-book/networks-book-ch16.pdf)

- Erkens, C., Jakicic, C., Jessie, L, King, D., Kramer, S. V., Many, T. W.,...Twadell, E. (2008). *The collaborative teacher*. Bloomington, IN: Solution Tree.
- Finn, C. (2002). Making school reform work. *The Public Interest*, 148, 85-95.
- Finn, C., & Hess, F. M. (2004). On leaving no child behind. *The Public Interest*, 35-56.
- Fullan, M. (2001). *Leading in a culture of change*. San Francisco: Jossey-Bass.
- Fullan, M. (2006). Leading professional learning. *School Administrator*, 63(10), 10-14.
- Fullan, M. (2007). *The new meaning of educational change* (4th ed.). New York: Teachers College Press.
- Gelberg, D. (1997). The “business” of reforming American schools. Albany, NY: State University of New York Press.
- Gregory, G., & Kuzmich, L. (2007). *Teacher teams that get results: 61 strategies for sustaining and renewing professional learning communities*. Thousand Oaks, CA: Corwin Press.
- Hirshleifer, D. (1995). The blind leading the blind: Social influence, fads, and informational cascades. In M. Tommasi & K. Ierulli (Eds.), *The new economics of human behavior* (pp. 188-215). Cambridge, UK: Cambridge University Press.
- Hirshleifer, D. (1997). *Informational cascades and social conventions*. Working paper. UCLA: University of Michigan Business School & Anderson School of Management.
- Hirshleifer, D., & Welsh, I. (1998). *A rational economic approach to the psychology of change: Amnesia, inertia, and impulsiveness*. Working paper. University of Michigan Business School.
- Hord, S. (1997). *Professional learning communities: Communities of continuous inquiry and improvement*. Austin, TX: Southwest Educational Development Laboratory.
- Hord, S. M. (2004). *Learning together, leading together: Changing schools through professional*

- learning communities*. New York: Teachers College Press and National Staff Development Council.
- Huffman, J. (2003). The role of shared values and vision in creating professional learning communities. *NASSP Bulletin*, 87(637), 21-34.
- Imber, M., & Van Geel, T. (2004). *Education law*. Mahwah: Lawrence Erlbaum Associates.
- International Society for Bayesian Analysis. (2009). Available at: <http://bayesian.org/>
- Johnson, C. D., & Altland, M. V. (2004). No teacher left behind: The development of a professional collaboration. *Literacy Teaching and Learning*, 8(2), 63-82.
- Kaplan, L. (2005). *Schools as professional learning communities*. (Master's Thesis). Barrington, IL.
- Kelly, M. (2000). *The Hunter method as an informational cascade*. (Doctoral Dissertation). Lawrence, Kansas. UMI 3002355.
- Learning Point Associates. (2009). *What does the literature and emerging research tell us about the benefits of PLCs?* Retrieved from <http://www.centerforcsri.org/plc/literatur.html>
- Lemieux, P. (2003-2004, Winter). Following the herd. *Regulation*, 16-21. Retrieved from www.cato.org/pubs/regulation/regv26n4/v26n4-2.pdf
- Lohmann, S. (1994). Dynamics of informational cascades: The Monday demonstrations in Leipzig, East Germany. *World Politics*, 47(1), 42-101.
- Lortie, D. (1975). *School-teacher: A sociological study*. Chicago: University of Chicago Press.
- Marzano, R. J. (2003). *What works in schools*. Alexandria, VA: The Association for Supervision and Curriculum Development.
- McLaughlin, M., & Talbert, J. (2006). *Building school-based teacher learning communities: Professional strategies to improve student achievement*. New York: Teachers College

- Press.
- National Commission on Excellence in Education. (1983, April). *A nation at risk: The imperatives for educational reform*. Washington, DC: U.S. Department of Education.
- National Staff Development Council: Learning Forward. (2012). *Standards for professional learning*. Retrieved from <http://www.learningforward.org/standards/standards.cfm>
- Nelson, J. L., Palonsky, S. B., & Carlson, K. (2000). *Critical issues in education: Dialogues and dialectics* (4th ed.). Boston: McGraw Hill.
- Peterson, P. (2010). *Saving schools: From Horace Mann to virtual learning*. Cambridge, MA: Belknap Press.
- Ravitch, D. (2010). Leading educational scholar Diane Ravitch: No child left behind has left U.S. schools with a legacy of “institutionalized fraud.” *Democracy Now*. Retrieved from www.democracynow.org/2010/3/5/protests
- Reese, W. (2000). *Public school reform in America*. Bloomington, IN: Phi Delta Kappa Educational Foundation.
- Reese, W. J. (2001). The origins of progressive education. *History of Education Quarterly*, 1-24.
- Richardson, (2011, September). The ultimate practitioner. *Phi Delta Kappan*, 93(1), 27-32.
- Romeo, S. M. (2010). An exploratory study of teacher self-efficacy beliefs and professional learning community. (Doctoral dissertation). University of Kansas, Lawrence, Kansas.
- Rury, J. (1989). Who became teachers? The social characteristics of teachers in American history. In D. R. Warren (Ed.). *American teachers: Histories of a profession at work* (pp. 9-48). New York: Macmillan.
- Rury, J. R. (2009). *Education and social change*. New York: Routledge.
- Sarason, S. (1990). *The predictable failure of educational reform*. San Francisco: Jossey-Bass.

- Sass, E. (2012, January 2). *American education history: A hypertext timeline*. St. Paul, MN.
Retrieved from <http://www.cloudnet.com/~edrbsass/educationhistorytimeline.html>
- Schmoker, M. (2004). At odds: Strategic planning learning communities at the crossroads, towards the best schools we've ever had. *Phi Delta Kappan* 86(1), 84.
- Schmoker, M. (2005). No turning back: The ironclad case for professional learning communities. In R. Barth, & B. Eason-Watkins (Eds.), *On common ground: The power of professional learning communities* (pp. 135-154). Bloomington Press: Solution Tree Press.
- School: The story of American public education. (n.d.). Retrieved from http://www.pbs.org/kcet/publicschool/roots_in_history/index.html
- Schugurensky, D. (Ed.). (2011). *History of education: Selected moments of the 20th century*. [Online]. Available at: http://fcis.oise.utoronto.ca/~daniel_schugurensky/assignment1/
- Senge, P. (1996). The leader of the future. In M. Hesselbein, M. Goldsmith, & R. Beckhard (Eds.), *Leading learning organizations* (pp. 41-58). San Francisco: Jossey-Bass.
- Senge, P., Ross, R., Smith, B., Roberts, C., & Kleiner, A. (1994). *The fifth discipline fieldbook: Strategies and tolls for building a learning organization*. New York: Doubleday.
- Slick, S. (2002). Teachers are enthusiastic participants in a learning community. *The Clearing House*, 75(4), 198-201.
- Solution Tree (n.d.). Retrieved from <http://www.solution-tree.com/Public/ProfDev.aspx?ShowBio=true&authorid=1005>
- Sparks, D. (1984). Staff development and school improvement: An interview with Ernest Boyer. *Journal of Staff Development*, 5(2), 32-39.
- Sputnik: The fiftieth anniversary. (n.d.). Retrieved from <http://history.nasa.gov/sputnik/>
- Taylor, R. T. (2002). Shaping the culture of learning communities. *Principal*, 3(4), 42-45.

- Tierney, J. (2007, October 10). *Schopenhauer on cascades*. Retrieved from <http://tierneylab.blogs.nytimes.com/2007/10/10/schopenhauer-on-cascades/>
- Tyack, D., & Cuban, L. (1995). *Tinkering toward utopia*. Cambridge, MA: Harvard University Press.
- Washington, J. (1993). *Individually prescribed instruction: A study of planned change and technological innovation*. (Doctoral Dissertation). Retrieved from Dissertation Abstracts. (University Microfilm, Inc. No. AAC 9410397).
- Wells, C., & Feun, L. (2007). Implementation of learning community principles: A study of six high schools. *NAESP Bulletin*, 91(2), 141-160.
- William, D. (2007/2008). Changing classroom practice. *Educational Leadership*, 65(4), 36-42.
- Wiseman, P., & Arroyo, H. (n.d.). Retrieved from www.epiculv.org/papers/policy-paper-18.pdf