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Leadership to sustain Professional Learning Communities

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COLLEGE OF EDUCATION

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Kelly Gillespie

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2010

ABSTRACT

Leadership to Sustain Professional Learning Communities

By

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M.A., Fort Hays State University, 1986
B.S., Kansas State University, 1984

Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
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Administrative Leadership for Teaching and Learning

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ABSTRACT

Professional Learning Communities (PLCs) have shown promise as a means to meet the challenge of the No Child Left Behind Act of 2001. A problem that has surfaced is the inabilty of schools to sustain PLCs. This project study examined leadership characteristics of elementary school principals in selected school districts to determine how these characteristics shape organizational culture and provide support for sustaining professional learning communities. At the center of this initiative have been the school principals and their leadership skills. The theoretical underpinnings of this study were based on the work of DuFour and DuFour, which places leadership of the principal at the forefront of successful school improvement. A mixed-methods approach with a sequential-transformative strategy was used. Quantitative data were collected by administering the Leadership Capacity School Survey to 30 elementary principals. Descriptive statistics were used to determine which of Lambert's six critical constructs were most and least commonly practiced among the schools in the study. Qualitative data gathered through a focus-group discussion were analyzed through the typological process. Quantitative and qualitative findings indicated that broad-based, skillful participation in the work of leadership (Construct 1) was the most important leadership construct to the success of sustaining PLCs. The outcome of this project study was a professional-development model that will provide knowledge and understanding of the key leadership elements needed to develop an environment for sustaining PLCs. The potential social impact of this study includes improved student achievement as a result of improved leadership by principals.

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Section 1: Introduction to the Study

Introduction

No Child Left Behind (NCLB, 2002) has challenged educators with a historic task. Before NCLB, educators in the United States had never been asked to ensure high levels of learning for all students (U.S. Department of Education, 2001). Developing the aptitude of educators to engage and restructure education for the benefit of students continues to be a challenge for schools (Donaldson, 2006; P. Hall & Simeral, 2008; S. M. Johnson & Donaldson, 2007; Lambert, 2003). Professional learning communities (PLCs) have emerged as one of the ways for schools to have continuous improvement in student achievement (DuFour, DuFour, & Eaker, 2008; Haberman, 2004; Loertscher, 2005; Schmoker, 2006). PLCs require teachers to meet regularly to discuss effective instruction, analyze student data, and plan for future instruction based on the data (Andrews & Lewis, 2006; Haberman, 2004). According to Schmoker (2006), these concepts should be a priority for educators for school improvement. PLCs can be a solution for schools needing to increase student achievement (DuFour, Eaker, & DuFour, 2005; Eaker, DuFour, & DuFour, 2002; Hord, 2004; Lambert et al., 2002; Marzano, 2003).

The leader's role in a PLC is vital to its successful implementation and sustainability (N. Protheroe, 2005). Strong principals empower and support teacher leadership to improve teacher practice (DuFour, 2004b; McLaughlin & Talbert, 2006). Leithwood, Seashore Louis, Anderson, and Wahlstron (2004) indicated that leadership matters and is second only to teaching among school-related factors in its impact on student learning. A highly effective school leader can have a powerful influence on the

academic achievement of students (Leithwood, Jantizi et al., 2004; Marzano, Waters, & McNulty, 2005). For PLCs to function, leaders must promote the understanding that successful teamwork is essential to success (McLaughlin & Talbert, 2006; Taylor, 2002).

Effective leadership in a PLC requires that leaders prepare teams to solve problems (DuFour et al., 2008). Principals play a key role in creating the conditions needed to become a PLC (Deal & Peterson, 1999; Kouzes & Posner, 2006). Haycock (2005) stated that inadequate instructional practices will be prevalent if the decisions about curriculum and instruction are made by individual teachers behind closed doors with no communication or collaboration. Educators involved with effective PLCs work together to clarify what students need to learn, frequently monitor students' progress, provide systematic interventions as necessary for individual student's needs, and enrich learning when a student has mastered the intended content (DuFour et al., 2008). These actions encourage continuous improvement (Buffum, Mattos, & Weber, 2009).

The idea of a PLC is not new. Its origin can be traced back to the work of Barth (1990), who developed the concept and coined the term *community of learners*. He described it as "adults and children who learn simultaneously, and in the same place to think critically and analytically, and to solve problems that are important to them" (p. 43). Barth's work focused on determining the type of culture a leader must develop for principals, students, and teachers to become committed lifelong cooperative learners. Since Barth's early work on learning communities, PLCs have become one reform initiative endorsed by the majority of educational leaders (DuFour et al., 2008; Hord, 2004; Schmoker, 2004).

Problem Statement

DuFour and Eaker (1998) noted that developing school staff to function as a PLC offers the most promise for meaningful and substantive school improvement. Hargreaves and Fink (2006) asserted that PLCs are hard to create because they demand leadership qualities and teacher abilities that may not be available. Giles and Hargreaves (2006) shared that "innovative schools historically contain some of the properties of a professional learning community but have a weak record of sustaining success over time" (p. 124). Studies of successful school reform have recommended addressing sustainability through effective leadership (Colburn, 2003; Hargreaves & Fink, 2006). The central focus on sustaining change is the impact on the school culture through effective leadership (DuFour et al., 2008; Moffet, 2000; Roy, 2006). While the elements of an effective PLC have been well documented, the factors that sustain the momentum and allow the initiative to become what Bridges (2003) called a "new beginning" (p. 32) are less clear. Leaders are crucial in a sustained cultural change (Depree, 2004; Dooner, Mandzuk, & Clifton, 2008; DuFour et al., 2008; Lafee, 2003).

I have been involved with PLCs for 10 years. This involvement includes attending and hosting a number of trainings presented by DuFour and DuFour. Specifically I have attended the following trainings: Building Professional Learning Communities Institute of Teaching and Learning; The Power of Professional Learning Communities; Leadership for School Change via Interactive Distance Learning Network; and Creating, Leading, and Sustaining Learning Communities. Through these experiences, I have developed a personal relationship with DuFour and DuFour. Through my conversations with DuFour and DuFour, the topic concerning principal perceptions and understandings of leadership

characteristics that sustain PLCs emerged. As I have began to work with school districts to implement PLCs, it quickly became apparent that the leader of the building is the key to the success in both implementing and sustaining PLCs (DuFour et al., 2008; Hord, 2004; Schmoker, 2006).

A problem that exists in many schools in southwest Kansas is the lack of a clear understanding of the leadership constructs that sustain PLCs. Currently, these schools are successful in implementing PLCs but struggle to sustain them over time. This problem affects principals, teachers, and students because PLCs are a research-based school-improvement initiative that will positively influence student achievement if the districts are able to move beyond the initial implementation of PLCs. There are many possible factors contributing to this problem, among which are the lack of knowledge and training of principals regarding leadership constructs that sustain PLCs (DuFour et al., 2008; Fullan, 2007). This study contributes to the body of knowledge needed to address this problem by identifying key leadership constructs that support the sustainability of PLCs.

Evaluations of Southwest Plains Regional Service Center (SWPRSC, 2008) PLC workshops in 2008, prior to the research study, indicated the need for more leadership training to sustain PLCs. In addition, informal focus-group discussions held at regional principals' council meetings (Southwest Plains Principals Council, 2008) indicated the lack of knowledge of the critical leadership constructs that would sustain school-improvement efforts such as PLCs.

Although educators are working to develop, implement, and sustain PLCs, the process is difficult because of the complexity of involving all individuals in the school building. This problem affects the students in the schools of southwest Kansas. There are

many possible factors contributing to this problem including lack of vision, lack of time for teacher collaboration, shortfalls in professional development, and high turnover of certified staff members (DuFour et al., 2008). Most likely, these problems are not due to unmotivated or unconcerned leaders; rather, school leaders may lack the required information and tools to implement change (Pfeffer & Sutton, 2000). Therefore, despite these challenges, if the leadership in the building has the skills, training, and passion for the process, PLCs can be sustained (DuFour et al., 2008; Marshall, 2007; Schmoker, 2006).

This project study contributes to the body of knowledge needed to sustain school-improvement initiatives such as PLCs. It examined leadership constructs of elementary-school principals in selected southwest Kansas school districts and how these constructs shape organizational culture and provide support for sustaining PLCs (see Section 2 for a detailed discussion). The outcome of this project study is a professional-development model that provides knowledge and understanding of the key leadership constructs needed to develop an environment for sustaining PLCs (see Appendix A). School leaders have been inundated with theory, knowledge, and research on the subject of PLCs. What is needed is professional development that provides support on how to sustain the PLC model at the building level or, as Fullan (2005) noted, provides "a definitive guide to the why, what, and how of PLCs" (p. 221). This project study developed a definitive guide with training and supporting materials for leaders of PLCs.

Rationale

Previous research concerning learning communities (DuFour et al., 2008; Hord, 2004; Kruse & Louis, 2001; Schmoker, 2006) investigated schools that were

implementing or had established PLCs. These studies attempted to determine what a school was already doing. These studies failed to address sustainability and did not provide school practitioners a consistent message and clear sense of direction for PLCs (DuFour, as cited in Gillespie, 2008). Researchers both inside and outside of education offer similar conclusions regarding best practices for implementing and sustaining PLCs (DuFour et al., 2005; Hord, 2004; Lambert et al., 2002; Marzano, 2003; Senge, 2006).

Studies also examined characteristics surrounding PLCs. Grossman, Wineburg, and Woolworth (2001) examined the growth of a PLC from initial to mature stages. Hobson (2001) reported that teachers find it difficult to dedicate the time for collaborative dialogue. Tafel and Fischer (2001) concluded that enhanced communication and empathetic understanding were important to the success of a PLC. The Individuals with Disabilities Education Improvement Act (2004) has pushed educators to think beyond compliance and to examine outcomes for students; a PLC pushes educators to think beyond teaching and to examine learning (Buffum et al., 2009; Vescio, Ross, & Adams, 2008).

Individual and collective learning is one of the key characteristics of effective PLCs (Bolam, McMahon, Stoll, Thomas, & Wallace, 2005; Many, 2009). Sergiovanni (2005) prompted educators to think about the ideal PLC. DuFour and Eaker's (1998) work provided the framework for examining what a learning community looks like. However, support for the PLC leader is lacking, and the challenges facing the modern educational leader are different from past challenges. Early retirements, fewer people selecting education as a career, and low teacher pay are forcing younger, less experienced individuals to move into the ranks of administration sooner. High turnover rates

challenge today's leaders (DuFour et al., 2008; Ferrandino, 2001; Thompson, Gregg, & Niska, 2004). The lack of educational knowledge and expertise to lead and sustain a PLC affects students in classrooms across the nation. This project study developed a research-based, targeted, and supported professional-development model to assist educational leaders of PLCs in understanding the skills needed to lead and sustain their PLCs.

This study led to the development of a leadership framework for PLCs that can be replicated. Furthermore, this framework was used to create a professional-development model to be delivered in targeted and rigorous training sessions with a training guide and support materials. The training will direct principals' behavior and provide them with constructive direction as they build and sustain their PLCs. Thus, this project study conducted and synthesized research pertaining to specific leadership behaviors that contributed to a new professional-development model designed to facilitate and sustain PLCs.

Definition of Terms

Broad-based skillful participation. "A vast majority of teachers, and large numbers of parents and students are all involved in the work of leadership" (Lambert, 2003, p. 4).

Collaboration. Working interdependently toward a common goal (Glaser, 2005, p. 34).

Collective learning. Learning that involves all staff members working together to improve their instructional skills and content knowledge (Hord, 2004, pp. 9–10).

High leadership capacity. A term used to describe those schools that are "characterized by collaborative, skillful work that results in high or steadily improving

levels of student achievement" (Lambert, 2003, p. 4). The descriptors of a school with "high" leadership capacity composed the six critical constructs measured by the Leadership Capacity School Survey (LCSS; Lambert, 2003).

Leadership. "The reciprocal learning processes that enable participants to construct and negotiate meanings leading to a shared purpose of schooling" (Lambert, 2003, p. 1).

Leadership capacity. "Refers to an organization's capacity to lead itself and to sustain that effort when key individuals leave" (Lambert, 2003, p. 4). A low score on the LCSS (Lambert, 2003) represents a low degree of leadership capacity whereas a high score represents a high degree of leadership capacity.

Leadership Capacity School Survey. A survey developed by Lambert in 1998 and revised in 2003 for measuring the leadership aptitude present in a school (Lambert, 2003).

Professional learning community. A group of professionals who continually seek and share learning to increase their effectiveness for students and who act on what they learn through collaboration (DuFour et al., 2008; Henderson, 2008; Hord, 2004).

School culture. Attitudes and beliefs, cultural norms, and relationships in a school (Boyd, 1992).

Shared practice. The review of a teacher's work by colleagues, including feedback and assistance to improve design (Hord, 2004).

Shared values and vision. A set of goals and aims for the learning community that is geared toward making teaching more student centered by sharing best practices (DuFour et al., 2008; Hord, 2004).

Supportive conditions. Conditions that exist when physical conditions and human capacities promote collegiality and collective learning (DuFour et al., 2005; Hord, 2004).

Significance of the Study

The significance of the study is divided into three parts: knowledge generation, professional application, and social change. All three of these are necessary to establish a thorough comprehension of the study's significance.

Knowledge Generation

This project study examined leadership constructs of elementary-school principals in selected southwest Kansas school districts and how these constructs shaped organizational culture and provided support for sustaining PLCs. The outcome of this project study was the creation of a professional-development model that provides knowledge and understanding of the key leadership elements needed to develop an environment for sustaining PLCs. It was important to examine effective professional development to determine the delivery model for this project (Hord, 2004).

This project study has increased knowledge and understanding of leadership constructs that are effective in implementing and sustaining PLCs. It has also contributed to the examination of critical leadership constructs in elementary schools. The conclusions drawn from this study have provided school leaders with a framework for increasing student achievement (Gillespie, 2006, p. 6). Outcomes of this research project have provided elementary principals a tool to create social change through the creation of a professional-development model that sustains PLCs.

This study has also provided significant personal and professional growth as I continue to strive for excellence as a professional leader in the field of education.

Through ongoing reflection of the research and survey results, I have continued to build strengths and improve weaknesses as an educational leader. As PLCs establish a new and improved approach to learning, they have the potential to induce positive social change because of the mutual cooperation, emotional support, and personal growth that PLCs provide that cannot be accomplished by individuals alone (DuFour et al., 2008; Schmoker, 2006).

Professional Application

Research has investigated effective ways to begin a PLC and the perceptions of administrators and teachers about the PLC process (DuFour et al., 2008; Hord, 2004; Phillips, 2003). The unique perspective of this project study is the identification of critical leadership constructs necessary to sustain PLCs.

The participants (principals) in the study have been implementing PLCs for at least 3 years. Educational leaders in southwest Kansas have expressed a desire through regional principals' councils for research that will provide information about successfully sustaining PLCs. The expectation of increased student achievement required by NCLB has resulted in a growing interest throughout the state of Kansas and the nation about the benefits of schools as PLCs (Buffum et al., 2009). The results from this project study informed schools through professional development about the critical leadership constructs needed for sustained PLCs.

Social Change

Sergiovanni (2005) supported the idea of community as a group of people linked by common interests. The bond of people and their connections to shared values and ideas is the defining characteristic of PLC schools. Integrity and leadership can be

fostered through PLCs (Buffum et al., 2009; Many, 2009, N. Protheroe, 2006). Teachers become responsible for collecting and analyzing data about student learning, thinking systematically about their instructional practice, and learning from other members in the PLC (DuFour et al., 2008). This type of educational system will benefit not only the teachers and students within the system itself but also communities and societies in which these collaborative teams exist.

DuFour et al. (2008) noted that collaboration is not an end itself but rather a means to an end. Creating conditions for collaboration is difficult, but it can be done. If educators desire to help more students achieve at higher levels, as mandated by NCLB, they must separate themselves from conventional educational practices and embrace the concepts surrounding PLCs. Teachers must develop what Fullan (2007) called "the new professionalism, which is characterized by collaboration, openness, and the ability to look outside the school, which will foster positive learning environments" (p. 297). Garcia (2005) believed the PLC approach can be uplifting. He believed it is important to give teachers a chance to talk as practitioners. These positive learning environments influence positive social change in education (Maxwell, 2005; Mullen & Hutinger, 2008; Taylor, 2002).

Much has changed in public education over the past decade. State standards have attempted to clarify what students must learn, state assessments are being used to monitor schools, and sanctions and penalties are now being imposed on schools and students based on test results (DuFour et al., 2008; Schmoker, 2006). While the term PLC has become commonplace, the actual practices of a PLC have yet to become a norm in education (Fullan, 2005; Haberman, 2004; Schmoker, 2006). This project study provided

support to facilitate positive change in classrooms, buildings, districts, and communities. Educational leaders included in the focus group benefited from both greater clarity about PLCs and specific strategies for implementing and sustaining the learning-community concept. The professional-development model proposed by this project study provides both.

The Mission of Walden University

The impact of this project study on student achievement supports the Walden University mission for social justice and change. When teachers collaborate to improve education, they model collective inquiry to their students. There is widespread recognition among social theorists and policy advisors that a high-quality public education is essential (Hargreaves & Fink, 2006). The concept of people working and learning together to improve their lives, as demonstrated in a learning community, has value to society.

Educators who cultivate PLCs must engage in an intentional process to affect the culture of their schools. When educators are successful, their classrooms will undergo profound cultural shifts (Fullan, 2005; Hirsh & Hord, 2009). Implementation of the professional-development model created through this research study will advance the goal of cultural change in classrooms in southwest Kansas. The delivery of the program will allow current educational leaders to participate in professional development to support the creation of a culture that fosters shared understanding, high levels of involvement, collective inquiry, and a clear consistent vision, all of which are necessary to sustain a PLC (DuFour et al., 2008).

Research Questions

This mixed-methods project study examined leadership constructs of elementary school principals in selected southwest Kansas school districts and how these constructs shaped organizational culture and provided support for sustaining PLCs. A summary of the research (DuFour et al., 2008; Haberman, 2004; Loertscher, 2005; Schmoker, 2006) shows that although a significant number of studies have been conducted on developing and implementing PLCs, information on sustaining PLCs remains a void in the literature. Multiple books and journal articles have been written on topics such as the building blocks of PLCs (mission, vision, and values), how to adjust schedules to support teacher collaboration, and collective data analysis for instructional adaptation (Blankstein, 2004; Day, 2000; Kouzes & Posner, 2006; Lambert, 2003; Senge, 2006). Clearly, research shows that PLCs have emerged as one of the initiatives for supporting continuous and increased student achievement. The gap in the current literature occurs in the determination of how to sustain a PLC over time and how leadership influences this process. The research needed to address this gap was developed around the following research questions:

Quantitative Research Questions

1. What were the mean, median, variance, and standard-deviation scores of the participants on the Lambert (2003) LCSS?
2. Which principals scored the highest and lowest on the Lambert (2003) LCSS?
3. Which of Lambert's (2003) six critical constructs were most commonly practiced among the schools in the study?

4. Which of Lambert's (2003) six critical constructs were the least commonly practiced among the schools in the study?

Qualitative Guiding Questions

1. Among the 3 principals who scored highest on the Lambert's (2003) LCSS, what perceptions of leadership were most important to sustaining a PLC?
2. Among the 3 principals who scored lowest on the Lambert's (2003) LCSS, what perceptions of leadership were the most important to sustaining a PLC?
3. Which of Lambert's (2003) six critical constructs did the principals consider the most practiced and why?
4. Which of the Lambert's (2003) six critical constructs do the principals consider the least practiced and why?

Much has been written to advocate that schools be restructured into a PLC model (DuFour et al., 2008; Hord, 2004; J. Protheroe, 2003). Educational researchers and organizational theorists agree that developing the capacity of educators to function as members of PLCs will lead to widespread improvements in teaching and learning (Marshall, 2007). A missing component in southwest Kansas in successful PLCs is the leadership that allows PLCs to be implemented and sustained over time. Fullan (2007) noted that the principal as the school leader is key to sustained school improvement. Further evidence to support the importance of principal leadership was found in a review of literature written by Crawford (2004), who concluded that leadership of principals has significant effects on student learning. The professional-development component of this

project study provides principals with the information from synthesized research regarding the critical constructs of leadership needed to sustain school-improvement initiatives like PLCs.

Literature Review

The literature review is divided into two sections. The first covers theoretical research that examines the leadership role in sustaining a PLC. The second section provides a critical review of the research. This includes an analysis of research studies and opinions of writers in the area of PLCs. Literature on PLCs began to appear in 1990 with the work of Senge (1990). Literature from 1990 to the present is discussed.

The historic, contemporary, and research-based rationale for PLCs was ensured by a review of seminal works. Additionally, the SWPRSC library, Fort Hays State University library, Kansas State University electronic library, and Walden University electronic library were used to locate resources. Databases such as Articles First, ProQuest, EBSCOhost, Educational Resources Information Center, Southwest Educational Development Laboratory, and North Central Association were incorporated to retrieve online journals and research studies. Personal contact with DuFour and DuFour (2009) for information and resources also proved to be invaluable in the completion of this literature review.

Theoretical Perspectives

In 1983, the National Commission on Excellence in Education made national headlines with its assessment of education in the United States. Critical words such as *decline, deficiencies, risk,* and *plight* were used frequently in the report. The opening paragraphs of the report set the tone:

> Our nation is at risk. Our once unchallenged preeminence in commerce, industry, science, and technological innovation is being overtaken by competitors throughout the world. . . . The educational foundation of our society is presently being eroded by a rising tide of mediocrity that threatens our very future as a nation and as a people. (p. 5)

A Nation at Risk (1983) served as an impetus for a "flurry of school improvement initiatives throughout the United States that jointly became known as the excellence movement" (DuFour et al., 2008, p. 34). This movement offered consistent direction for schools, but it was not a new direction (DuFour & Eaker, 1998, p. 2). Schools needed to do more (DuFour et al., 2008). This intensification of existing practices without the incorporation of any new ideas led to the failure of the excellence movement (DuFour & Eaker, 1998, p. 6).

Changing any organization is difficult (Senge, 1990), but changing a complex entity like the education system of the United States is an overwhelming task. The U.S. educational system is fundamentally conservative and one that embraces the status quo in its hierarchical operation and the way teachers are trained (Fullan, 1993). In the late 1980s, researchers examined the influence of the work setting and culture on workers in the worlds of business and education. Senge (1990) suggested that empowering people to generate creative solutions to problems as teams was a far better solution than having them perform for the approval of someone else. Senge argued that early in the life of a learner, society encourages the learner to break problems apart and work independently to complete tasks. While working alone on complex tasks makes them more manageable, Senge believed that by working this way, people do not see the consequences of their

actions and are disconnected from the larger whole. Once people complete their tasks, they will attempt to reconnect the findings to the whole. However, it is difficult to put all of the pieces back together, and people give up trying to do so.

Rosenholtz (1989) found that "teachers who felt supported in their own learning and improvement of classroom practice were more committed and effective than those who did not" (p. 51). This support might be found in teacher networking, cooperation among colleagues, or expanded roles. Thus, learning communities should be implemented in an organization to ensure that all educators remain focused and connected to the whole (Andrews & Lewis, 2006; Senge et al., 2000). Senge described this new learning organization as one where (a) people continually seek to expand their capacity to create desired results, (b) new ways of thinking are nurtured, and (c) people continue to learn how to learn together. According to Senge et al., (2000), a collaborative culture encourages everyone to express their aspirations, builds their awareness, and encourages them to develop their capabilities together. Senge (1990) found that a learning community helps an organization continually expand its capacity to create its future. The learning that takes place in these communities helps enhance their organization's ability to create change. PLCs in schools bring together teachers and administrators to foster a collaborative culture that seeks innovative approaches to increasing student achievement (Barlow, 2005; Brownell, Adams, Sindelar, Waldron, & Vanhover, 2006).

Much of educational research on PLCs centers around the impact on student achievement. Studies by Jensen (1995), Dougherty (2005), and Vinella (2007) analyzed promising practices employed by principals to support teachers, sustain change, and

increase student achievement. These studies found a relationship between Senge's (1990) five disciplines of learning communities and achievement in students. These five disciplines are (a) personal mastery, (b) mental models, (c) building shared vision, (d) team learning, and (e) systems thinking.

Jensen. Jensen (1995) conducted a 6-month qualitative study analyzing an organization's ability to effectively incorporate and sustain change. During that time, the researcher conducted a survey and interviews to gather data relating to the impact of training and to the ability of the individuals in the organization to use the tools provided to solve problems (p. 3). Data were collected to assess the participants' perceptions about behavioral changes and tangible results of the training. The study analyzed data according to Senge's (2006) research-based model for organizational learning.

The results of Jensen's (1995) research confirmed that change cannot be mandated and that system-wide change is undeniably more easily discussed than realized (p. 157). The findings indicated that change is not easily accomplished. Supported by the research of Colburn (2003) and G. Hall and Hord, (2001), results showed change is difficult and should be seen as a process, not an event. Results confirmed that a systems' perspective is effective for leading and influencing actions in change efforts. Colburn's study had important relevance to the present research project; I was specifically considering leadership characteristics that sustain PLCs. Application of Jensen's research and the confirmation it brought that systematic change is difficult needs to be assimilated into current philosophy.

The results of Jensen's (1995) study affirmed that current elementary principals could use Senge's (1990) theory of learning organizations by integrating the five

disciplines into their leadership styles (p. 171). Jensen's findings should be considered for successful and sustained change. Great leaders must be willing to invest time in the individuals in their organizations (Collins, 2001; J. Protheroe, 2003). Providing staff with time for professional development, practicing new instructional strategies, gathering data, and reflecting on findings can lead to greater levels of personal mastery and, therefore, to high levels of student achievement. Jensen's findings concurred that change is a difficult process and that dedicating the time to the development and implementation of change is necessary for success (p. 171).

Dougherty. Dougherty's (2005) descriptive research study described and compared the perceptions of elementary-school principals at high-achieving and low-achieving schools about the degrees to which their schools had developed learning communities according to Senge's (1990) research (p. 7). Dougherty believed that by looking at the leadership of principals in high-achieving schools, successful practices could be determined to raise student achievement. By showing that behaviors found in learning communities impact and improve student achievement, Dougherty hoped to provide a model that other principals could replicate in developing PLCs in their schools.

Dougherty (2005) used the 30-question LCSS by Lambert (2003) to measure the development of learning communities in elementary schools. The population for this study included elementary school principals with school scores of 1, 2, 9, or 10 on the California State Assessment. In surveying 80 principals from high- and low-achieving schools in California, Dougherty found a significant difference between them in survey questions 32 of 40 times (2005, p. 45). Elementary principals from high-performing schools perceived their schools to be PLCs at a much higher level than their colleagues at

low-performing schools. The findings validated the importance of creating PLCs to improve student achievement. Dougherty's results were clear that principals from high-performing schools perceived that they had developed sustainable PLCs. Dougherty concluded that learning communities in schools can empower teachers to create a culture that will shape their future work and increase student achievement (2005, p. 83).

This project study examines leadership constructs of elementary-school principals in selected southwest Kansas school districts and how these constructs shaped organizational culture and provided support for sustaining PLCs. The results from Dougherty (2005) supported the proposition that schools wanting to improve student achievement should implement PLCs. Learning communities should be put into action in an educational system to ensure that all team members remain focused and connected to the whole (Buffum & Hinman, 2006; Dooner et al., 2008). This awareness of connectedness will eventually lead to higher student achievement (DuFour et al., 2008; Hargreaves & Fink, 2006; Taylor, 2002).

Vinella. Vinella (2007) explored the relationship between creating PLCs in public schools and increasing the level of student achievement. The purpose of this study was to measure, compare, and contrast the perceptions of principals about the degree to which their schools had developed learning communities based on Senge's (2006) philosophy (p. 25). Vinella (2007) used a descriptive research design to gather quantitative data using Senge's 40-question Learning Organization Survey. A sample of 100 principals was used to develop an equal-sized, stratified, random sample based on student performance on the state proficiency assessment. An independent *t* test was used to test for statistical significance between the mean scores of high-achieving and low-achieving schools. A

two-sided test of significance was used at the .05 level to determine the confidence interval for the sample population (Vinella, 2007, p. 92). Findings indicated a statistically significant difference on 36 of the 40 questions surveyed (Vinella, 2007, p. 93). The results showed that based on their principals' perceptions, high-achieving schools have significantly more established learning communities than low-achieving schools.

The current project study examined leadership constructs of elementary-school principals in selected southwest Kansas school districts and how these constructs shaped organizational culture and provided support for sustaining PLCs. The results found in the research study by Vinella (2007) of principals' perceptions of the effective use of Senge's (2006) research and higher student achievement support the need for more widespread integration of PLCs in the educational community. The outcome of this project study was to create a professional-development model that provided knowledge and understanding of the key leadership elements needed to develop an environment for sustaining PLCs.

Critical Review

The literature reviewed provided evidence of the benefits of organizing schools as PLCs. Support exists among educators to organize schools in a manner aligned with the foundational structures and characteristics of a PLC (DuFour et al., 2008; Hirsh & Hord, 2009). The role of the principal in a learning community is vital to a school's ability to function and sustain a PLC (Deal & Peterson, 1999; S. M. Johnson & Donaldson, 2007; Kouzes & Posner, 2006).

Although districts in southwest Kansas have worked to implement PLCs, success has been limited. Through focus-group discussions (Southwest Plains Principals' Council, 2008), administrators have shared their frustration and disappointment with their

lack of success in sustaining PLCs. This frustration is compounded because they understand the lasting impact the PLC model will have on the culture of their schools and ultimately the students in the buildings (DuFour et al., 2008; Hausman & Goldring, 2001). This project study will assist school districts by providing the tools needed to improve their skills in sustaining their PLCs.

Professional Learning Communities

The term PLC emerged from educational research and theory (DuFour et al., 2008; Marshall, 2007). PLC characteristics have been compared to Senge's (2006) concept of a learning organization as discussed previously. DuFour, DuFour, Eaker and Many (2006) defined PLCs as "educators committed to working collaboratively in ongoing processes of collective inquiry and action research to achieve better results for the students they serve" (p. 4). Strong PLCs foster school environments of hope and achievement for students (McThige, 2008; Saphier, 2005). This project study examined leadership constructs of elementary-school principals in selected southwest Kansas school districts and how these constructs shaped organizational culture and provided support for sustaining PLCs.

Organizing schools as PLCs has become a widely supported school initiative (Cotton, 2003; Hirsh & Hord, 2009). Marzano's (2003) meta-analysis of research on student achievement supported the conceptual framework of PLCs. In the analysis, Marzano found more than 5,500 articles and studies that addressed leadership, student achievement, and best practices. Marzano employed binomial effect-size display, which the author contended is a practical and relevant way to interpret research findings reported in terms of percentages of explained variance. Sixty-nine of these studies

examined the quantitative relationship between leadership, instructional practice, and student achievement. Marzano concluded through his research that there were five school-level factors, three teacher-level factors, and three student-level factors that affect student achievement. School-level factors include (a) guaranteed and viable curriculum, (b) challenging goals and effective feedback, (c) parent and community involvement, (d) a safe and orderly environment, and (e) collegiality and professionalism. Teacher-level factors are (a) instructional strategies, (b) classroom management, and (c) classroom curriculum design. Each school-level and teacher-level factor folds into the PLC model. As indicated, no studies were found that specifically examined principal behaviors in a PLC that related to student achievement. Although Marzano's findings did not produce large correlations between leadership behaviors (average $r = .25$), when combined with the increase in leadership ability, this relationship can have a noticeable impact on student achievement. For example, with reference to a figure provided by Marzano, when a principal's leadership ability moves from the 50th percentile to the 84th percentile at the $r = .25$ level, one could predict a 10% increase in student achievement (Marzano, 2003, p. 32). Although Marzano did not specifically refer to the conceptual framework of PLCs, his meta-analysis provided evidence that strongly supports organizing schools in such a manner.

In the present research study, I considered how elementary-school principals in selected school districts shape organizational culture and provide the critical leadership constructs that sustain PLCs. The outcome of this project study was to create a professional-development model that provides knowledge and understanding of the key

elements of leadership needed to sustain PLCs. Incorporating Marzano's (2003) meta-analysis of research on student achievement added credibility to this project study.

Educational organizations have endorsed PLCs. In 2007, the National Staff Development Council (NSDC) recognized the value of a PLC in the standards they developed. PLCs are specifically addressed in one standard: "Professional development that improves learning for all students organizes adults into learning communities whose goals are aligned with those of the school and district" (p. 13). The National Commission on Teaching and America's Future (2005), an organization whose mission is to recruit and prepare an exemplary teaching force, stated, "Quality teaching requires strong PLCs" (p. 17). The National Association of Secondary School Principals (2004) has characterized the position of the educational leader as "leading learning communities" (p. 24) and has called on the educators in its membership to develop, implement, and sustain PLCs as a key strategy to improving student achievement.

The Role of the Principal

Early studies on effective leadership were conducted in the 1970s and concluded there were four correlates of effective schools: (a) high expectations, (b) clear and focused academic goals, (c) a safe and orderly environment, and (d) frequent monitoring of student learning. These correlates could not be brought together without strong administrative leadership from the principal (Brookover & Lezotte, 1979; Phillips, 2003; Schmoker, 2006). These findings created conditions for school improvement in the last 30 years. Current research continues to find that principals are crucial to school reform (Blasé, 2000; King, 2003; Lambert, 2003; Leithwood, Jantizi, et al., 2004; Saphier 2005).

Leadership is essential for implementing and sustaining school-wide support of PLCs (Barth, 1990; DuFour et al., 2005; Hargreaves & Fink, 2006). Reliance on the principal to collaborate with faculty is a significant factor in the success of implementing, developing, and sustaining PLCs (DuFour et al., 2005; Hord, 2004; Thompson & McKelvey, 2007). The case for strong administrative leadership has also been found in effective schools research by various authors (e.g., Brookover & Schneider, 1975; Kouzes & Posner, 1987; Levine & Lezotte, 1997; Schlechty, 1990). According to Fullan (2006), leaders are more effective when they concentrate on building the leadership capacity of others (p. 21). Shared leadership and empowerment are essential in influencing systematic change. Furthermore, Fullan suggested that effective schools rely on principals to foster a culture in which teachers retreat from a paradigm of isolation and alienation and embrace a culture of collaborative decision making and shared values, where the entire staff shares responsibility for improving teaching and learning.

The outcome of this project study was to create a professional-development model that would provide knowledge and understanding of the key leadership elements needed to develop an environment for sustaining PLCs. The professional-development component of the project study will provide principals the synthesized research needed to apply the critical leadership constructs that sustain a PLC. The professional-development model was designed for educational leaders in buildings implementing PLCs.

DuFour et al. (2008) contended that there are five characteristics of a principal who is effectively leading a PLC. The principal must do the following:

1. Lead through shared vision and values rather than through rules and procedure (p. 184).

2. Involve faculty members in the school's decision-making processes and empower teachers to act (p. 185).
3. Provide teachers with information, training, and guidelines they need to make data-driven decisions (p. 186).
4. Establish credibility by modeling behavior that is congruent with the established vision and values of the school (p. 194).
5. Function as a results-oriented team (p. 194).

A Model of Principal Leadership in a PLC

Researchers have also suggested that there is a connection between principal leadership behaviors consistent with the five characteristics of PLCs and high student achievement (Blankstein, 2004; DuFour et al., 2008; Hord, 2004; Lezotte, 2005; McLaughlin & Talbert, 2006). They believed that when principals encourage these behaviors, the conditions exist for a school to develop and sustain a PLC. Based on DuFour and Eaker's (1998) conceptual framework, the following model was developed.

Figure 1 illustrates how principal leadership influences student and staff learning. Each bubble in the graphic organizer represents a vital component that needs to be included in effective principal leadership. These behaviors lead to higher and higher competency for teachers and students.

Figure 1. Graphic organizer showing the five leadership characteristics of a leader in a PLC.

The five characteristics shown by principals of successful PLCs create a favorable learning environment for students and for teachers (DuFour et al., 2008). Each characteristic and its link to student achievement will now be discussed.

Shared Vision and Values

The development of a vision statement is critical to an organization's overall success (Covey, 1990; King, 2003; Thompson & McKelvey, 2007). The process through which an organization's vision is developed is vital to the success of its sustainability. The common beliefs and values of the collaborative group shape the design of the vision, which emerges over time.

For educators, the vision of an organization outlines a hopeful future and provides direction (Hord, 2004). By its nature, vision is linked to the future (DuFour et al., 2008). DuFour and Eaker (1998) noted that an effective vision statement is specific about the organization's future and motivates a school's members to work together to fulfill the vision. Visions can be defined by asking stakeholders what kind of school they want to become (Fullan, 2005). However, any principal who holds a vision without considering the past is missing a chance to honor history and reflect on successful past practices (Maxwell, 2005).

According to DuFour and Eaker (1998) and Leithwood and Riehl (2003), school-improvement efforts depend on the school having a clear vision, values, and goals. Effective school leadership ensures that all efforts are aimed at clear, concise goals (Leithwood & Riehl, 2003; Marzano et al., 2005, Roy, 2006). In a meta-analysis of 44 studies involving 1,619 schools, Marzano et al. found that focus, defined as establishing clear goals and keeping those goals in the forefront of the school's attention, had a positive, although low relationship with student achievement (r = .24; p. 7).

Involving all stakeholders in the creation of the vision increases the probability that the vision will be successfully implemented. Blanchard (2007) pointed out that the process used to develop a vision is as important as the vision itself. Blanchard's point is illustrated by DuFour et al., (2008), who coupled the word "vision" with the word "shared" (p. 130). If a leader dictates the vision rather than involving staff in its development, staff is likely to resist the vision (Maxwell, 2005). As applied to schools, the more educators invest in a vision, the more they feel responsible to see it through.

However, this type of environment does not exist in most of today's schools (DuFour et al., 2008).

The professional-development component of the present project study provides principals the synthesized research needed to apply the critical leadership constructs that sustain a PLC. This will help solve the identified problem in this research study: How do elementary school principals in selected school districts shape organizational culture and provide the critical leadership constructs that sustain PLCs?

Shared Leadership

DuFour and Eaker (1998) suggested that effective schools are schools in which teachers are empowered. In addition, capable leaders involve others in decision-making processes and empower them to act on their ideas. Shared decision making is essential in schools functioning as PLCs. Principals should encourage teachers' participation in collaborative decision making by (a) enabling teachers to take risks and try new things, (b) providing positive reinforcement and encouragement, (c) supporting professional-growth opportunities, and (d) providing time for teachers to mentor, dialogue, and support one another (DuFour et al., 2008; Haberman, 2004; Hord, 2004).

Including teachers in shared decision-making processes leads to greater commitment toward school-improvement initiatives. DuFour and Eaker (1998) indicated that teacher competency is likely to improve when authority is delegated to those closest to the task. Because teachers are in this position, they become responsible for identifying problems and initiating solutions. Therefore, their level of commitment and accountability increases, causing a deeper sense of ownership to school-learning goals and commitment to professional growth. As DuFour and Eaker maintained, shared

decision making increases teacher leadership capacity by building a culture of continuous improvement. This commitment to growth leads to an increase in the level of knowledge of teachers, resulting in higher student achievement.

Marzano et al. (2005) identified several studies that support a shared decision-making model to improve student achievement. This meta-analysis of 16 studies involving 669 schools found that teacher input, defined as "the extent to which the school leader involves teachers in the design and implementation of important decisions and policies, has a positive relationship on student achievement" (Marzano et al., 2005, p. 152). Shared leadership is a vital task for principal leaders of PLCs to master.

Collaboration

Educators in a PLC must continually seek the best instructional strategies for helping students learn to their highest potential. This occurs only when teachers work together in a collaborative environment (Bridges, 2003; Buffum et al., 2009; Hargreaves & Fink, 2006; McThige, 2008). This collaborative environment allows for the exchange of ideas, resources, and knowledge from one teacher to another. Groups work together to create and maintain an effective environment for collaboration and interdependence. Rasberry and Mahajan (2008) shared that "in PLCs, teams are open to critical thinking, reflective dialogue, self-examination, and resolving issues that impeded student success" (p. 6). As professional development is highly valued in a PLC, these collaborative groups of teachers can learn from each other during the time given to them to analyze data, dialogue, and reflect. Principals in PLCs must be diligent in providing the time and support for this environment and must identify outcomes and accountability for the collaboration time (Hord, 2004, p. 34).

Studies about schools operating as learning communities have yielded empirical evidence that teacher collaboration leads to increased student achievement. For example, in a study of 11,000 students in 820 schools nationwide, Lee, Smith, and Croninger (1995) found that schools teaching in a collaborative environment saw changes in classroom pedagogy, which in turn, resulted in increased student engagement in higher level tasks. The researchers also reported a sense of collective responsibility among faculty for students' success. When provided with collaborative time and given the knowledge and the tools on how to use this time effectively, teachers learned together how to meet the individual instructional needs of their students. Lentz, 2008 Kansas Superintendent of the Year, has been building PLCs in districts where he has worked for that last 20 years. Lentz summed, "The real secret to improved student learning is better collaboration and sharing of knowledge that already exists among and between staff members of the school" (J. Lentz, personal communication, June 19, 2009).

The professional-development component of the present research study provided principals the information they needed on developing, implementing, and sustaining collaborative environments. This helped solve the identified problem in this research study: How do elementary school principals in selected school districts shape organizational culture and provide the critical leadership constructs that sustain PLCs?

Collective Inquiry

"Members of a professional learning community are action oriented: They move quickly to turn aspirations into action and visions into reality" (DuFour et al., 2006, p. 4). Educators in a learning community are relentless in questioning the status quo, seeking new methods of instruction, and conducting action research on those methods. PLC

educators engage in collective inquiry and continuous improvement to "raise the bar" and "close the gap" of student learning and achievement (Fullan, 2005, p. 209). Collective inquiry enables team members in a PLC to develop new skills, which in turn, leads to fundamental shifts in attitudes and beliefs. Educators in a PLC engage in collective inquiry around three topics: (a) best practices in teaching and learning, (b) a candid clarification of their current practices, and (c) an honest assessment of their students' current level of learning (DuFour et al., 2008, pp. 147–151).

Leaders must provide teachers with the information and background knowledge needed to make sound, effective decisions about students. When this happens, "teachers begin to think of themselves as primary agents for necessary changes in teaching and learning" (Wood, 2007, p. 289). Facilitating the interpretation and use of data, creating schedules and opportunities that provide time for staff to reflect and discuss student results, and providing time to consult educational research foster a culture of continuous improvement. When teachers make informed decisions based on reliable data, they are more likely to initiate change that increases student achievement. Articulating clear guidelines and expectations helps ensure that teachers work collectively toward common goals. Professional growth then becomes directed toward these goals. Targeted, rigorous professional development increases the probability of reaching higher student achievement (Crawford, 2004; DuFour & Eaker, 1998).

Results Oriented

Effective PLC principals must be focused on results (DuFour & Eaker, 1998; Hirsh, 2003b). Leaders are responsible for providing teachers critical data that will organize information on student achievement and identify areas that need improvement.

Assisting teachers in progress monitoring and improving their skills through data-driven dialogue will have significant results on student achievement. Principals of PLCs continually create a sense of urgency to get better student-achievement results. They expect grade-level teams to teach common curriculum and administer common assessments (Cotton, 2003; Glaser, 2005). Frequent monitoring of student progress using formative assessments is an essential component to a results-oriented environment (Marzano, 2003). Results-oriented processes help teachers determine appropriate interventions and positively impact student learning (Buffum, 2009).

Implications

Since the 1980s, education has undergone multiple school-reform initiatives. Stakeholders have called for increased accountability while schools have struggled with reduced budgets and fewer people choosing the field of education as a career (DuFour et al., 2008; Fullan, 2007). Principals can no longer afford to commit time, effort, and resources to initiatives that are ineffective or lack a strong research base (Schmoker, 2004). One promising practice for combating this identified resource shortage while continuing to focus on improving student achievement is the PLC. This study has implications for positive social change in schools that wish to implement and sustain PLCs in their buildings. The study provides a framework for leadership capacity that will assist elementary principals in sustaining PLCs.

The research has implications for project development, as it assisted in identifying the level of impact of the individual leadership-capacity components identified by Lambert (2003). The research findings drove the design of the professional-development model, developed as the project for this study. The research can be applied by school

leaders just beginning PLCs or school leaders who are already implementing PLCs. The ability of a school to implement and sustain PLCs will help to bring about educational reform in individual schools, which will, in turn, promote social reform on a much larger scale, as teachers collaborate in learning communities to ensure that all students learn. Results from the present study directed the development of a PLC leaders' training guide that will assist principals and other leaders of PLCs in understanding critical leadership constructs to guide them in implementing and sustaining PLCs.

Summary

When teachers and administrators communicate frequently and precisely about teaching practice, school improvement in the form of increased learning is likely to occur (Joyce, 2004). PLCs focus a school on commitment to children and their individual learning. Instruction is the single greatest factor in improving learning, and there is general agreement that PLCs are the best means to continuously improve instruction and student performance (Schmoker, 2006, p. 106). A PLC is a resource for social change in education and affords opportunities for teachers that they could not accomplish alone.

In Section 2, the mixed-methods research design of the study, the instrumentation, research sample, and materials are described. Data collection and analysis procedures are discussed, and assumptions, limitations, and delimitations are outlined. An analysis of the results of the research project is also presented in this section.

Section 3 outlines the project-study description, goals, and rationale. Section 4 provides reflection on the process, draws conclusions, and provides suggestions for future research.

Section 2: Research Method

Introduction

According to Mohr et al. (2004), decisions about programs, curriculum, budgets, and staffing must be based on complete data. However, having the data is not enough. Schools need to analyze and discuss their data. PLCs are a vehicle to do so; consequently, PLCs have been identified as a key to successful school reform (DuFour et al., 2008; Haberman, 2004; Hord, 2004; Schmoker, 2006). PLCs provide a comprehensive framework for schools because they use numerous data sources for making student-centered decisions regarding school improvement (DuFour et al., 2008; Hord, 2004). This project study examined leadership constructs of elementary school principals in selected southwest Kansas school districts and how these constructs shaped organizational culture and provided support for sustaining PLCs. The outcome of this project study was the creation of a professional-development model that will provide knowledge and understanding of the key leadership constructs needed to sustain PLCs.

Although teachers in a PLC may be ardent consumers of quantitative data, there is a need for more research about the experience of PLCs in a variety of schools to support and validate already existing data (Hord, 2004). This research-project study contributes to the body of knowledge about PLCs.

Research Design

To offset the inherent weaknesses of strictly quantitative or qualitative data collection, a sequential mixed-methods strategy was used in this study (Creswell, 2003). Using this research model allowed identification and comparison of the critical constructs

of leadership needed to provide an environment for sustaining PLCs. The quantitative data were collected and analyzed, followed by the collection and analysis of the qualitative data. The entire data set was then interpreted.

The descriptive research design was chosen to gain more information about leadership characteristics that sustain PLCs. Descriptive research is used to systematically describe an area of study factually and accurately (Isaac & Michael, 1997). According to Creswell (2003), a descriptive study may be used to develop theory, identify problems with current practice, justify current practice, make judgments, or identify what others in similar situations may be doing. In a descriptive research project, the subjects are measured only once to establish associations between variables. Descriptive research entails gathering data to answer research questions regarding the current state of the subjects of the study (Gay, 1992). Descriptive research provides a simple design that may yield valuable knowledge needed to draw accurate conclusions (Creswell, 2003). Through the data collection in this research study, problems with current practices were identified, and recommendations were made for the future regarding leadership constructs that will sustain PLCs.

Strategy for Data Collection

The sequential-transformative strategy was used for the data collection in this mixed-methods research study (see Figure 2). In the sequential-transformative model, data are collected in two phases. In this project study, the quantitative data were collected and analyzed first. Once that was accomplished, the qualitative portion of the research study began. By using the two phases, I was "able to give voice to diverse perspectives, to better advocate for participants, or to better understand a phenomenon or process that

is changing as a result of being studied" (Creswell, 2003, p. 216). The results of the two approaches were integrated during the interpretation phase of the study.

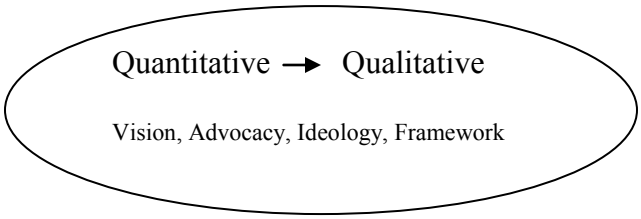

Figure 2. Sequential transformative design.

Multiple Forms of Data Collection and Analysis

This section shares an overview of the research accomplished in this study. Quantitative information is presented first, followed by qualitative information.

Quantitative. Lambert's LCSS (Lambert, 2003) was used to collect quantitative data (see Appendix B). Permission to use this survey was granted by the Association for Supervision and Curriculum Development (2005; see Appendix C). Participation by elementary-school principals was granted by school superintendents (see Appendix D). Lambert's survey was designed to assess the leadership-capacity conditions that exist in the school. The survey consisted of 30 multiple-choice items and used a 5-point Likert scale, with 1 representing *no evidence of the practice in the school*, and 5 representing *successful implementation*.

Qualitative. Following the collection and analysis of the initial survey data, I delved deeper into the data using a constructivist-phenomenological approach. Researchers adopt and use one or more strategies of inquiry as a guide for the procedures in a qualitative study. The phenomenological strategy describes the meaning of individuals' lived experiences of a particular phenomenon (Creswell, 2007). Studies

using this approach focus on describing what all participants have in common. The human experience plays a significant part in the information that is gathered. The basic premise of phenomenology is to reduce individual experiences with a phenomenon to a description of the universal essence (Creswell, 2007). In this study, the phenomena to be studied were the critical constructs of leadership that sustain a PLC.

The qualitative portion of this research study used a focus-group discussion consisting of the 3 participants scoring highest on Lambert's (2003) LCSS and the 3 participants scoring lowest. This additional information has significantly strengthened the research study because multiple sources of data enabled me to provide rich descriptions in the analysis (Creswell, 2007). A letter of introduction and a consent form for participation in this focus group was given to each participant (see Appendix F). Open-ended discussion questions encouraged the participants to describe their perceptions and understandings of critical constructs of leadership that sustain PLCs in their schools (see Appendix F).

Following the conclusion of the focus-group discussion, a professional transcriptionist transferred the information from the audiocassette to a written document. The transcriptionist signed a confidentiality agreement to ensure the privacy of the participants (see Appendix G). Qualitative typological data analysis (Hatch, 2002) was employed. In typological data analysis, the overall data set is divided into categories or groups based on predetermined typologies that come from theory, common sense, or research objectives (Hatch, 2002). The five major themes of PLCs (DuFour et al., 2008; Hord, 2004) provided the conceptual framework for this study, the typologies for this

qualitative analysis. By using this process, specific leadership data regarding PLCs were extrapolated for this study.

Justification for Design and Approach

The research portion of this project study examined leadership constructs of elementary-school principals in selected southwest Kansas school districts and how these constructs shaped organizational culture and provided support for sustaining PLCs. Both quantitative and qualitative approaches were used to answer the research question. Reasoning for using two distinct research methods was based on the work of Palys (2003), who noted that a singular approach to research is limited and that using other perspectives enriches research. Therefore, incorporating both quantitative and qualitative methods in this study ensured a deeper understanding of the leadership constructs needed to create a culture to sustain PLCs in southwest Kansas.

Data Integration

This mixed-methods research study applied a sequential-transformative strategy to the data collection and analysis process. Based on the quantitative results, 6 participants were invited to participate in the qualitative portion of this research study. Quantitative data were collected and analyzed in Phase 1. In Phase 2, qualitative data were collected and analyzed. Based on these compared results, conclusions, inferences, and recommendations have been offered.

Research Questions

The research problem addressed in this study was the inability of school leaders in southwest Kansas to sustain PLCs to a satisfactory level. This study led to the development of a leadership framework for success that can be replicated. Furthermore,

this framework was used to create a professional-development model that was delivered in a research-based, targeted, and rigorous training model. The training includes a training guide and support materials to direct principals' behavior and provide constructive direction as they build and sustain their PLCs. Thus, this project study conducted and synthesized research pertaining to specific leadership behaviors. That contributed to a new professional-development model designed to facilitate sustained PLCs.

Quantitative Research Questions

1. What were the mean, median, variance, and standard deviation scores of the participants on the Lambert (2003) LCSS?
2. Which principals scored the highest and lowest on the Lambert (2003) LCSS?
3. Which of Lambert's (2003) six critical constructs were most commonly practiced among the schools in the study?
4. Which of Lambert's (2003) six critical constructs were the least commonly practiced among the schools in the study?

Qualitative Research Questions

1. Among the 3 principals who scored highest on the Lambert's (2003) LCSS, what perceptions of leadership were most important to sustaining a PLC?
2. Among the 3 principals who scored lowest on the Lambert's (2003) LCSS, what perceptions of leadership were the most important to sustaining a PLC?

3. Which of Lambert's (2003) six critical constructs did the principals consider the most practiced and why?
4. Which of the Lambert's (2003) six critical constructs did the principals consider the least practiced and why?

Quantitative Setting and Sample

Quantitative Population

The proposed research sites were public elementary schools located in southwest Kansas. The results of this research were significant to these specific stakeholders. Principals participating in the research study had a minimum of 3 years of leadership involvement with a PLC.

Quantitative Sampling Method

Borg and Gall (1971) defined a population as "all the members of a real or hypothetical set of persons, events, or objects" (p. 115). The sampling technique used for the quantitative portion of this study was a convenience sample with the population of interest being elementary-school principals in southwest Kansas. A convenience sample consists of sites or individuals that are easily accessible for data collection (Creswell, 2007, p. 126). The sample was not controlled for age range, gender, or race. It was important for me to strive toward "building a working relationship with the participants" (Hatch, 2002, p. 52) for a successful qualitative study.

Quantitative Sample Size

Determining sample size is as important a decision in the data-collection process as a sampling strategy (Creswell, 2007). Determining the number of participants in a research study is a systematic procedure. The first step before collecting any data is to

determine the sample (Light, Singer, & Willett, 1990). The population of this study was principals in southwest Kansas who had been leading PLCs for a minimum of 3 years. The quantitative portion of this study included 30 elementary principals. Descriptive statistics was used to describe the basic features of the data in the study. This process provided simple summaries about mean scores (*M*), median, variance, and standard deviation (*sd*).

Quantitative Eligibility and Characteristics of the Selected Sample

The criteria for selecting participants for the quantitative portion of this study was based on the following: (a) be located in southwest Kansas, (b) hold an elementary principal's endorsement, and (c) be a practicing elementary school principal involved with leading a PLC for a minimum of 3 years. According to several researchers (DuFour et al., 2005; G. Hall & Hord, 2001; Senge, 2006), change is a process, not an event. Most high-level educational change takes 3 to 5 years to be implemented (George, Hall, & Uchiyama, 2000; G. Hall & Hord, 2001). With this research in mind, it was necessary to apply the three criteria to the participants in this study. Because the focus of this research study is on leadership characteristics that sustain a PLC, a minimum of 3 years experience in leading a PLC was necessary for the participants to have extended knowledge of the PLC's sustainability.

Quantitative Sample Characteristics

The sample is the statistical bedrock on which quantitative research is based. Finding the method to make contact with this population was also important to a quality research study. This research study had guidelines in place to oversee the characteristics of the participants.

Qualitative Setting and Sample

Qualitative Population

Participants in the qualitative portion of this study were 6 principals: the 3 principals who scored highest and the 3 principals who scored lowest on the LCSS (Lambert, 2003). Principals were chosen because the study was specifically targeting leadership capacity in sustaining PLCs. The focus of the study was narrowed by moving from the 30 participants surveyed in the quantitative phase of the study to 6 participants for the qualitative phase of the study. By selecting focus-group members from the top three scores and the bottom three scores on the LCSS (Lambert, 2003), the diversity needed for quality data was obtained. Additionally, this data represented opinions from across the spectrum of participants to provide the information needed to develop a targeted and supported professional-development model for educational leaders of PLCs. The subjects participated in one focus-group discussion in a semistructured environment. Semistructured means that guiding questions were initially created, but additional questions were added based on participants' reactions and responses (Hatch, 2002, p. 23). The discussion questions were open ended (see Appendix F) to enable the participants to describe their perceptions and understandings of the critical constructs of leadership that sustain school-improvement initiatives. Data were analyzed to determine which critical constructs were present in successful PLCs and which were lacking in others.

Qualitative Sampling Method

Maximum variation, one of the most popular qualitative sample strategies used by researchers (Merriam & Associates, 2002), was employed in this research study. The maximum-variation approach requires the advanced selection of criteria that

differentiates the participants in a study. Participants who were different from each other are selected, thereby increasing the likelihood that the results attained reflect the maximum differences. This approach is ideal for qualitative research studies. The maximum variation was applied to this research study by selecting study participants with the three highest scores and the three lowest scores on the LCSS (Lambert, 2003). This helped clarify the needed information to identify leadership constructs that sustain PLCs.

Qualitative Sample Size

In qualitative research, the sample size is selected to provide the maximum information about the phenomenon being studied. Therefore several participants are needed to obtain the desired information (Hatch, 2002). Polkinghorne (1989) recommended that qualitative researchers implementing a phenomenology study should interview 5 to 25 individuals who have all experienced the phenomenon. For the current project study, 6 principals were included in the focus-group discussion in the qualitative portion of this research study. This number fell within Polkinghorne's guidelines.

Qualitative Eligibility and Characteristics of the Selected Sample

As noted previously, qualitative research seeks to understand a phenomenon from the perspective of the participants. "In qualitative research a sample is selected on purpose to yield the most information" for the study (Merriam & Associates, 2002, p. 20). Therefore, purposeful sampling was performed in this research study. For comprehensive study, it is important to select information-rich cases to gain as much information as possible (Patton, 1990). The three criteria established for selection of the participants in this study were supported by the model. The criteria were the following: (a) be located in southwest Kansas, (b) hold an elementary principal's endorsement, and

(c) be a practicing elementary-school principal leading a PLC for a minimum of 3 years. By selecting participants with a significant amount of knowledge of PLCs, the data collected during the qualitative phase were information rich.

Quantitative Context and Sequential Strategies

A mixed-methods research design is valuable in capturing the best of both quantitative and qualitative approaches. In this study, collecting quantitative data allowed information to be gained from a large number of participants. The information was used to select the participants for the qualitative phase of this study.

Quantitative Sequence

Exploring human behavior and gathering data directly give real-time meaning to one's experience in research (Hatch, 2002). Completing a mixed-method research model for this study provided an opportunity to hear the voices of the participants, which extended this study beyond the boundaries of quantitative research.

Instrument

Lambert's (2003) LCSS was used to collect data for this study (see Appendix B). Lambert supported building leadership capacity from within the school and community as a method of sustaining school-improvement initiatives. The survey consists of 30 multiple-choice questions and asks participants their perceptions using a 5-point Likert scale. The range includes the following:

1. We do not do this at our school (p. 110).
2. We are starting to move in this direction (p. 110).
3. We are making good progress (p. 110).
4. We have this condition well established (p. 110).

5. We are refining our practice in this area (p. 110).

The survey queries respondents as to their perceptions of current practice in their schools. The LCSS (Lambert, 2003) took approximately 10–15 minutes for participants to complete. The intent of the survey was to discover spheres of leadership capacity (L. Lambert, personal communication, April 10, 2009). The survey was administered electronically using the Survey Monkey Tool (SurveyMonkey.com, 2009). Once all principals responded, the data were tabulated to obtain scores for each principal as follows:

Research Question 1

What were the mean, median, variance, and standard deviation scores on the Lambert survey (2003)? Using the Statistical Package for Social Sciences (SPSS) software version 16.0, data were analyzed to determine mean, median, variance, and standard deviation of the six critical leadership constructs. Standard deviation is the measure of the standard distance from the mean. Standard deviation is calculated by first computing the *SS* (the sum of the squared deviations) and variance (the mean squared deviation; Gravetter & Wallnau, 2008. p. 91).

Research Question 2

Which principals were identified as the 3 participants scoring the highest and the 3 participants scoring the lowest on the LCSS (Lambert, 2003)? The results of this process provided a ranking of the schools by leadership capacity according to the principals' perceptions. Through this calculation, the participants with the highest three scores and three lowest scores were identified for participation in the focus-group discussion in the qualitative portion of this research study.

Research Question 3

Which of the LCSS (Lambert, 2003) six critical constructs were most commonly practiced among the schools in the study? Data were also quantitatively analyzed considering the six constructs of the Lambert survey. The 30 questions on the survey are divided into six categories: (a) shared leadership, (b) vision, (c) inquiry, (d) collaboration, (e) student achievement, and (f) reflection (Lambert, 2003, pp. 110–113). Each of the characteristics measured in Lambert's survey has been found to be an important leadership construct in sustaining PLCs (DuFour et al., 2008; Hord, 2004; Schmoker, 2006).

Research Question 4

Which of the LCSS (Lambert, 2003) six critical constructs was the least commonly practiced among the schools in the study? The least commonly practiced leadership constructs were determined.

Once all principals completed the survey using the online Survey Monkey tool, the mean, median, variance, and standard deviation were calculated for each of the six critical constructs. This analysis provided an understanding of the principals' perceptions of the level of integration of the six leadership constructs in the sample schools. The outcome of this project study was to create a professional-development model that provided knowledge and understanding of the key leadership elements needed to develop an environment for sustaining PLCs. The data collected through the comparison of the six constructs in the survey process provided information on the content emphasis of this project.

The LCSS (Lambert, 2003) has been used throughout the world as a self-assessment tool to measure the perceived presence of leadership capacity in schools (L. Lambert, personal communication, April 10, 2009). Through the development of leadership capacity, schools are equipped to perform the system-changing transformations necessary for improvement (Enderlin-Lampe, 2002; Lambert, 1998; Schlechty, 2001).

Validity

"Measurements, [such as tests and surveys] can be reliable without being valid, but they cannot be valid unless they are reliable" (Campbell & Stanley, 1996, p. 48). Although reliability alone is not a necessary condition for validity, reliability is not sufficient to determine validity. Three types of validity are face validity, content validity, and construct validity (Pierce, 2007, p. 51).

Face validity. Face validity refers to validity at face value and requires intuitive judgment and subjective opinion (Cronbach, 1971; Walsh & Betz, 2001). The face validity of the LCSS (Lambert, 2003) was established, as the survey has been used numerous times since 1998 with input from thousands of educators (L. Lambert, personal communication, April 10, 2009). According to Pierce (2007), the face validity of the six critical constructs in the LCSS was established. Cronbach (1971) warned, however, that internal structure of such a measure may not coincide with its appearance, and the validity in research should go beyond face validity and appearance.

Content validity. Content validity is the relationship between test items and the content knowledge being assessed or measured (Cronbach, 1971). The knowledge and skills covered in the instrument should be representative of a larger body of knowledge

and skills. Pierce (2007) outlined the three main requisites for content validity: (a) main topic headings should be appropriate to the overall subject and aim of the measurement, (b) items chosen for inclusion should relate to the definition of their domain, and (c) items chosen should be representative of all those that may have been chosen for inclusion (p. 52). Based on the meta-analysis of research regarding leadership capacity and its theoretical and conceptual underpinnings, the LCSS (Lambert, 2003) possesses content validity (p. 69). In addition, the LCSS was developed by Lambert, an expert in the field of leadership capacity. Lambert noted that the LCSS was revised numerous times while in use in the field (L. Lambert, personal communication, April 10, 2009). For example, the 1998 version of the LCSS (Lambert, 2003) contained only five critical constructs of leadership capacity; the revision in 2003 contained six major constructs. This present study, therefore, accepted the content validity of the LCSS (Lambert, 2003).

Construct validity. Streiner and Norman (1989) emphasized that although construct validity refers to the degree to which scores measure the construct one is trying to measure, it is important to recognize what the tests for construct validity are trying to achieve (p. 123). A researcher may attempt to validate an instrument in its totality or validate the instrument's underlying constructs. Pierce (2007) established the construct validity of the LCSS by employing SPSS, a principal component analysis, and the first stage of confirmatory factor analysis (p. 53). The Eigen values of all six critical constructs were determined in this study to assess their relative magnitudes or the total amount of variance (Green & Salkind, 2003). Of all 30 possible components, SPSS defaulted to retain four factors with Eigen values greater than 1 (≤ 1). Construct validity was confirmed by this study (Pierce, 2007, p. 53).

Reliability

Reliability means that the tool can be trusted to collect the same information each time it is used. In a study conducted by Pierce (2007), item-total analysis and Cronbach's alpha were used to determine the reliability of the LCSS (Lambert, 2003). Cronbach's alpha findings from this study determined an overall reliability factor of .97, which represents a very high level of internal consistency (Cronk, 2004). The reliability factors for all six of the critical constructs of the LCSS (Lambert, 2003) were also found to be very high, ranging from .867 to .919 (Pierce, 2007, p. 117). The item analysis conducted on the LCSS (Lambert, 2003) revealed an overall correlation of .887 with ranges on the critical constructs from .824 to .911 (Pierce, 2007, p. 117).

Descriptive Statistics

For the purposes of this research study, descriptive statistics, defined as procedures used to summarize and describe data (Creswell, 2007), were used. The descriptive interval data were received from the LCSS (Lambert, 2003) survey as scaled scores. Of the three primary measures of central tendency in descriptive statistics (mean, median, and mode), the mean is the most powerful measure of central tendency (Gravetter & Wallnau, 2008, p. 71). Standard deviation, a mathematical transformation of the variance, is the most powerful measure of dispersion (Gravetter & Wallnau, 2008, p. 90). When reporting measures of central tendency, it is also important to report the corresponding measure of dispersion; therefore, this study reported mean scores (*M*), median, variance, and standard deviation (*sd*). In this descriptive study, each of these was determined for the overall summary and for the six critical constructs of the LCSS (Lambert, 2003).

Processes

A letter of introduction (see Appendix E) was e-mailed to the 30 elementary principals selected for this study. This letter contained the purpose of this research. This e-mail also included the consent form for participants to sign and return prior to the beginning of the research study (see Appendix E). This established voluntary participation included the rights of the participants and a request for their confidentiality. One week later, an e-mail was sent to each principal who signed the statement of consent (see Appendix E), which included a link to the LCSS (Lambert, 2003) located on the Survey Monkey website. A reminder e-mail was sent 2 weeks later (see Appendix H).

The following is a chronological list of the steps regarding the distribution and follow-up procedures for the survey:

1. E-mail addresses of 30 elementary principals were obtained and a group was formed in Outlook e-mail.
2. An initial e-mail was sent to each potential participant to convey the purpose and procedures of the study and the consent to participate. This had to be signed and returned before principals could participate in the study.
3. A cover letter with a link to the survey was sent to those participants who signed the statement of consent.
4. Responses were tracked as they were received.
5. One week later a second cover letter including a link to the survey was sent to any principal who had not completed the survey.
6. The surveys were scored and the data analyzed.

7. The participants with the top three scores and three lowest scores were identified for the focus discussion group in the qualitative portion of this research study.

Raw Data

Organizing and managing the survey data were essential parts of the data analysis. Raw data collected electronically from the surveys were copied to a password-protected flash drive for secure storage. Privacy of the schools and the participants was protected by masking names in the data. Quantitative and qualitative raw data may be requested.

Explanation of the Data

The data gathered from the administration of the survey were analyzed to determine the mean, median, variance, and standard deviation of the scores. Scores were analyzed according to the six leadership constructs that were randomly arranged during survey delivery and regrouped for analysis (Lambert, 2003). Individual scores were analyzed. All data were entered into the SPSS version 16.0 spreadsheet using the frequency function of SPSS.

Qualitative Context and Sequential Strategies

Qualitative Sequence

Exploring human behavior and gathering data directly give real-time meaning to one's experience in research and provide a deeper meaning that comes from personal contact with participants (Hatch, 2002). Wiener (2007) established the success of mixed methods in his case study of PLCs, which employed a survey and an interview to gather data. The mixed-method approach is relevant to the present study because nearly all of the influential empirical work over the last 3 decades in the area of PLCs and leadership

of learning communities employed some form or combination of quantitative and qualitative-data collection and analysis (Blasé, 2000; Little, 1990; Wiener, 2007). Therefore, the design of the present study is based on much influential, mixed-methods empirical work in the area of PLCs and leadership.

Procedures for Gaining Access to the Participants

Six principals participated in one focus-group discussion. Open-ended discussion questions designed for the research (see Appendix F) enabled the principals to describe their perceptions and understandings of leadership constructs that shaped organizational culture and provided constructs in sustaining PLCs in their schools. Focus-group discussion questions were provided to the participants in advance of the session. The focus-group discussion was recorded on audiocassette.

Creswell (2007) discussed a data-collection circle (see Figure 3) that must be considered during a qualitative research study. Qualitative data collection consists of a sequence of interrelated steps with the goal of collecting excellent information to answer the established research questions. In a qualitative study, individuals are needed who will voluntarily participate in the research study and who can provide insightful information regarding the study topic. The 30 building principals in southwest Kansas who participated in this study were identified as overseeing PLCs for a minimum of 3 years. The principals who participated in the focus-group discussion were the 3 principals who scored the highest and the 3 who scored lowest on the LCSS (Lambert, 2003). This allowed diverse information to be shared at both ends of the spectrum. Participants were contacted by phone following the data collection and analysis of the quantitative research

data to schedule a time for the focus-group discussion to complete the qualitative data collection.

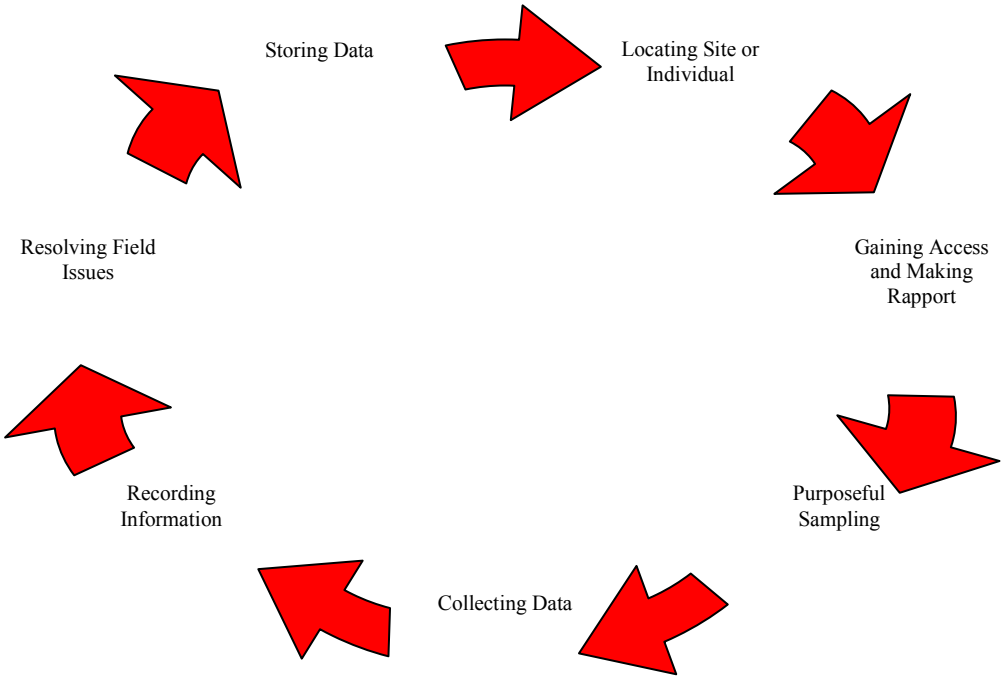

Figure 3. Data collection circle.
Note. Adapted from Qualitative inquiry and research design, by J. W. Creswell, 2007, Thousand Oaks, CA: Sage, p. 118.

Focus Group Discussion Plan

As a data-gathering strategy, Berg (2004) stated that focus groups are advantageous because they are flexible and permit observation of group interactions and exploration of views, opinions, experiences, and attitudes through informal discussion. Focus groups also provide immediate results and place the participants and researchers on a more level playing field (Berg, 2004). This method was selected for the present study because the focused dialogue and the participant interaction created a more comprehensive understanding of the topic. However, focus groups also have disadvantages. Some participants may be more comfortable than others expressing their

views in front of a group, and some may fear ridicule or embarrassment (Palys, 2003). Therefore, the moderator must establish that the participants understand and respect the privacy of all and collectively agree to maintain confidentiality concerning what was discussed in the focus group. This will ensure participants feel comfortable and secure with confiding their personal thoughts and experiences regarding PLCs. Additionally, the facilitator of the focus group should moderate the flow of the discussion so that certain participants do not dominate the conversations and all opinions are heard (Janesick, 2004). For this research project, principals were not provided with their scores on the LCSS (Lambert, 2003); thus, their focus group responses were not influenced.

Methods of Establishing a Researcher–Participant Relationship

Janesick (2004) suggested that practitioners need to create the conditions that will generate participants' energy, enthusiasm, and activity to productively address issues and problems of concern (p. 71). In this human-centered approach, moderators must acquaint themselves with participants by getting to know them and their concerns (Palys, 2003). Accordingly, a face-to-face focus-group discussion with the research participant was conducted. This method allowed me to listen to the contributions and to support responses in a personable, nonthreatening, respectful forum. This facilitative and inclusive approach helped foster positive working relationships and active contribution to the group (Stringer, 1999).

Focus groups combine the elements of the individual interview and participant observation (Janesick, 2004). The rationale for choosing a focus group is to maintain an informal setting where participants would each have an opportunity to speak freely about the research topic and feel comfortable doing so. The focus group is one of the most

common approaches in qualitative research (Hatch, 2002). My role in the focus group was to act as a moderator, carefully facilitating the discussion, taking a neutral stance throughout the discussion, and neither affirming nor disputing the information provided (Stringer, 1999). My goal in selecting the focus group was to produce data that would not be easily accessible without the interaction of the group. To prepare for the focus group, I implemented Hatch's (2002) suggestions: (a) the room was comfortable; (b) background noise was minimal; (c) extra tapes, batteries, extension cords, and supplies were available; and (d) ground rules and the process of the focus group time was reviewed at the beginning of the session (p. 97).

Data Triangulation

It was important to examine effective professional development to determine the delivery model for this project. The outcome of this project study was the creation of a professional-development model that provides knowledge and understanding of the critical constructs of leadership and that provides an environment for sustaining PLCs. Hatch (2002) suggested that triangulating unobtrusive data with data from other sources improves the credibility of a study's findings (p. 119). In addition to the quantitative data collection through the LCSS (Lambert, 2003) and the qualitative focus-group discussion data, unobtrusive data sources in the form of schools' records of professional-development participation pertaining to PLCs was recorded. This was collected on the day of the focus-group discussion from the 6 participating principals. Data were examined for reference and comparison to the perceptions and understandings of leadership characteristics that sustain PLCs in their schools.

Role of the Researcher

Berg (2004) recommended that moderators of the focus group take specific steps in advance, such as introduction activities, statement of the basic rules, and short question-and-answer discussion. Introductory activities include welcoming the participants, providing snacks, making individual introductions, asking permission to record the information, briefly describing the project, and allowing plenty of time for the participants to ask questions they might have about the content or the process of the focus group.

Basic ground rules were established that encouraged a respectful, organized, participatory process for the focus group. I stated each question to the group and expressed the importance of hearing from everyone in the process so all opinions were shared. A time for questions prior to starting the focus group was offered to ensure the group understood the process. At the conclusion of the session, the group was thanked for their time. A written thank you was sent to the participants following the focus-group discussion (see Appendix I).

I am currently the Executive Director of SWPRSC in Sublette, Kansas. This service center provides professional development and other services to 80 school districts in the state of Kansas. All 30 of the principals' buildings have received such service either directly from me or indirectly through the agency. The relationship between the participants and me is professional, and there are no personal relationships between the parties involved. Participation in the study was voluntary, and information regarding the study, time commitment, and results was covered fully prior to the participants agreeing to be a part of the study.

Data Analysis and Validation Procedures

Data analysis is the process of the researcher communicating what can be learned from the data to others. When researchers analyze data, they look for patterns, identify themes, and discover relationships (Hatch, 2002). In the sections that follow, the quantitative and qualitative analysis of the study, validity of the data, procedures for integrating quantitative and qualitative data and integration of the findings are discussed.

Quantitative Analysis

Descriptive statistics were used to analyze the data generated in the quantitative portion of this research study. The data gathered from the administration of the LCSS (Lambert, 2003) were analyzed according to individual question items that were randomly arranged and later regrouped under the six critical constructs (Lambert, 2003). Data were entered into the SPSS software, and a spreadsheet was created. Using the frequency function of SPSS, an analysis of each question and the six elements was calculated. A comparison of all the scores of principals was calculated to determine mean, median, variance, and standard deviation score for all principals individually and as a group. The same analysis occurred for the six critical constructs (Lambert, 2003).

Qualitative Analysis

Inductive data analysis was used to analyze the qualitative data in this research study. Qualitative research lends itself to inductive rather than deductive information processing. Qualitative typological data analysis (Hatch, 2002) was employed. The five major themes of PLCs (DuFour et al., 2008; Hord, 2004), which provide the conceptual framework for this study, provided the typologies for this qualitative analysis. By using this process, specific data regarding PLCs were extrapolated to provide information for

this study. Inductive thinking advances from specific to general information. Inductive analysis occurs by starting with specific elements and finding connections between them (Creswell, 2007, p. 38). In inductive data analysis, theory is derived inductively from the meticulous study of the contextualized phenomenon. By following these steps, inductive analysis allows a systematic approach to processing large amounts of data in ways that assure that what is reported is a true reflection of what participants shared (Creswell, 2007, p. 39). Participants were provided a copy of the focus group transcript to check for accuracy before the data were analyzed.

Data analysis in this mixed-methods research project occurred within both the qualitative approach and the quantitative approach, as suggested by Glesne (1999). In addition, an approach developed by Tashakkori and Teddlie (1998) called exploring outliers was applied. In this sequential-transformative study, an analysis of the quantitative data occurred in the first phase of the study. During the quantitative analysis, identifying extreme or outlier problems was a concern. However this did not occur during the analysis and did not become an issue to consider in this research study.

Validity of the Data

Data collection and analysis are intertwined, interactive processes that are important characteristics of a mixed-methods research study. The process of data collection, either by survey (quantitative) or by focus group (qualitative), coexists with the processes of data collection and analysis. Creswell (2003) believed that the researcher cannot interpret data until the data are broken down and classified in some way. Creswell viewed data analysis as a four-step cyclical process: (a) becoming familiar with the data and identifying main themes in it; (b) examining the data in depth to provide detailed

descriptions of the setting, participants, and activities; (c) categorizing the data; and (d) interpreting and synthesizing the organized data into general conclusions or understanding (pp. 157–186). By using these steps, trustworthiness can be maximized.

Once the data are collected, it is not a four-step process that enhances understanding and interpretation; it is the researcher's ability to think and analyze that drives the data analysis. The data-analysis process is a process of digesting the contents of the quantitative and qualitative data and identifying common threads woven throughout. Analysis cannot be accomplished without making the necessary connections to data. This can only be accomplished by a thorough knowledge of the data (Hatch, 2002).

Integration of Quantitative and Qualitative Data

This mixed-methods research study employed the sequential-transformative strategy. This strategy implemented the research-study data collection and analysis in two phases. First, the quantitative data was collected and analyzed. In this case, the 30-question LCSS (Lambert, 2003) was administered electronically, and data were collected from 30 elementary principals on their perceptions of leadership capacity in their buildings. Once the data were analyzed, the focus-group protocol and guiding questions were revisited to assure that the questions still provided the accuracy and detail needed for Phase 2 of the study. No adjustments were needed to the focus-group discussion guide.

At that point, Phase 2 of this study occurred, and qualitative data were collected through a focus-group discussion with 6 participants. This data were audio recorded, transcribed, and inductively analyzed. Once Phase 2 was complete, the quantitative and

qualitative results were compared for similarities and differences. Quantitative data were presented in the form of tables. Selected data excerpts were shared from the qualitative data to either support or refute the quantitative data. Professional-development records from the 6 principals participating in the focus group were also be analyzed and results incorporated into the final report.

Integration of the Findings

This mixed-methods research study examined leadership constructs of elementary-school principals in selected southwest Kansas school districts and how these constructs shaped organizational culture and provided support for sustaining PLCs. The outcome of this research study was to create a staff-development model that will provide knowledge and understanding of the elements of leadership needed to sustain PLCs.

Protection of Participants' Rights

According to the American Psychological Association (2001), it is necessary to "take reasonable steps to implement appropriate protections for the rights and welfare of human participants [and] other persons affected by the research" (p. 390). During every aspect of this study, the rights of the participants and stakeholders were respected. In addition, care was taken to preserve the integrity of the research process. Identities were kept confidential, and data were treated with the highest ethical and moral standards for research.

The project participants were protected from harm by establishing a safe environment built on privacy and trust. The fact that I am an acquaintance might have caused participants to be uncomfortable, wondering if their comments and actions were being judged. Open and continual communication and assurance diminished this concern

(Glesne, 1999). Participants were requested to maintain confidentiality of all survey responses and focus-group dialogue.

Research participants were informed of all implications of their involvement in the research study through the statement of consent (see Appendix E). This included informing them that their participation was voluntary, dependent on their consent, and that at any time they could withdraw without penalty. All Walden Institutional Review Board guidelines for informed consent and confidentiality were followed (IRB 09-17-09-0358713). All completed surveys and identifying information will be destroyed 5 years following the conclusion of this study.

Limitations and Assumptions

This descriptive, mixed-method research study was limited to the southwest area of the state of Kansas. As a result, the findings and recommendations may not be applicable to all other schools. Validating the findings to other demographic areas in Kansas would require additional research. Furthermore, because the data only represent elementary-building principals, the findings may not compare to the experiences of middle and high school principals and other staff members. Participation in the study was voluntary and contingent on the willingness of the participants to complete and return the online survey.

Finally, a limitation of this study that should be identified concerns the use of an online survey. Thirty participants completed a 30-question, multiple-choice, online survey, which used a 5-point Likert-scale. The answer choices in this survey may not have reflected the perceptions of each principal and may not have reflected the reality of others.

It was assumed that leadership capacity is a socially constructed phenomenon in an organization, as defined by Lambert (2003, p. 2). Therefore, leadership capacity is a measurable construct. It was also assumed that leadership capacity exists in all schools to some degree. It was assumed that participants would respond honestly to survey questions and that those responses would be a true representation of the leadership capacity present in their schools.

A timeframe was provided to the participants for this study. Respondents were given 2 weeks to respond to the survey. The school year is always busy for principals, no matter what time of year it is. It was assumed that those who would normally respond to such a survey would do so, regardless of their busy schedules.

Mixed Methods Results

The purpose of this study was to examine leadership constructs of elementary-school principals in selected southwest Kansas school districts and to determine how these constructs shape organizational culture and provide support for sustaining PLCs. At the center of this initiative are the school principals and their leadership skills. The findings from this study are divided based on the following research questions:

Quantitative Research Questions

1. What were the mean, median, variance, and standard deviation scores of the participants on the Lambert (2003) LCSS?
2. Which principals scored the highest and lowest on the Lambert (2003) LCSS?
3. Which of Lambert's (2003) six critical constructs were the most commonly practiced among the schools in the study?

4. Which of Lambert's (2003) six critical constructs were the least commonly practiced among the schools in the study?

Qualitative Research Questions

1. Among the 3 principals who scored highest on the Lambert's (2003) LCSS, what perceptions of leadership were most important to sustaining a PLC?
2. Among the 3 principals who scored lowest on the Lambert's (2003) LCSS, what perceptions of leadership were the most important to sustaining a PLC?
3. Which of Lambert's (2003) six critical constructs did the principals consider the most practiced and why?
4. Which of the Lambert's (2003) six critical constructs did the principals consider the least practiced and why?

To address these questions, a mixed-methods approach with a sequential-transformative strategy was used. Quantitative data were collected by administering the LCSS (Lambert, 2003) to 30 elementary principals. The LCSS used a 5-point Likert scale (1 = *we do not do this at our school*, 2 = *we are starting to move in this direction*, 3 = *we are making good progress*, 4 = *we have this condition well established*, 5 = *we are refining our practice in this area*). Each of the 30 questions on the survey corresponded to Lambert's (2003) six critical constructs which include (a) broad-based, skillful participation in the work of leadership; (b) shared vision resulting in program coherence; (c) inquiry-based use of information to inform shared decisions and practice; (d) roles and responsibilities that reflect broad involvement, collaboration, and collective

responsibility; (e) reflective practice and innovation as the norm; and (f) high or steadily improving student achievement (pp. 6–7). The critical leadership structures surveyed on the LCSS relate to significant aspects of leadership that sustain school-improvement initiatives (Lambert, 2003, p. 5). One can expect that the higher the score on each of the individual leadership constructs, the higher the leadership capacity of the participant (Lambert, 2003).

Tables 1–6 represent the responses from 30 principals for each of the 30 questions on the LCSS (Lambert, 2003) organized by the six leadership constructs. The survey was administered electronically, and feedback from the participants was prompt. Once all principals responded, the data were tabulated to obtain scores to answer the research questions posed in this study. In Table 1, Question 7, Construct 1 (broad-based skillful participation), 5 individuals failed to record answers to this question on the survey. The reason for this is unknown. Table 1 shows that in Construct 1, Questions 1, 2, and 4 (*have established groups, perform collaborative work*, and *organize for maximum interaction*) were strongest among the participants, with 16.7% of the participants scoring 5 on the Likert scale. The weakest scores were on Questions 3 and 6 (*model leadership skills* and *entire school and community were considered*) with only 10% of participants answering 5.

Table 1

Summary of Responses for Construct 1: Broad-Based Skillful Participation

			5		4		3		2		1	
#	Question	*N*	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
1	Have established groups	30	5	16.7	12	40.0	9	30.0	2	6.7	2	6.7
2	Perform collaborative work	30	5	16.7	16	53.3	7	23.3	2	6.7	0	0.0
3	Model leadership skills	30	3	10.0	15	50.0	9	30.0	3	10.0	0	0.0
4	Organize for maximum interaction	30	5	16.7	12	40.0	11	36.7	2	6.7	0	0.0
5	Share authority and resources	30	4	13.3	15	50.0	9	30.0	2	6.7	0	0.0
6	Entire school and community considered	30	3	10.0	15	50.0	11	36.7	0	0.0	1	3.3
7	Engage each other to lead	25	3	12.0	11	44.0	9	36.0	1	4.0	1	4.0

Vision, (Construct 2), Table 2, consisted of four questions. Question 8 and 10 (*developing vision jointly* and *align standards with vision*) showed the strongest capacity with 26.7% of participants scoring 5. The weakest area of the vision construct was Question 11 (*review the vision regularly*) with 0 participants scoring 5.

Table 2

Summary of Responses for Construct 2: Shared Vision

			5		4		3		2		1	
#	Question	*N*	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
8	Develop vision jointly	30	8	26.7	16	53.3	6	20.0	0	0.0	0	0.0
9	Ask each other questions	30	2	6.7	13	43.3	13	43.3	1	3.3	1	3.3
10	Align standards with vision	30	8	26.7	14	46.7	8	26.7	0	0.0	0	0.0
11	Review vision regularly	30	0	0.0	3	10.0	17	56.7	8	26.7	2	6.7

For Table 3, Construct 3, Question 15 (*data-driven decision making*) showed the strongest use by the participants with 36.7% indicating a Level 5. Questions 12 and 16

(*use of the learning cycle* and *comprehensive information system*) scored 3.3%, which translates as only 1 of the 30 participants scoring 5.

Table 3

Summary of Responses for Construct 3: Inquiry-Based Use of Data

			5		4		3		2		1	
#	Question	*N*	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
12	Use a learning cycle	30	1	3.3	6	20.0	21	70.0	1	3.3	1	3.3
13	Make time available	30	3	10.0	17	56.7	10	33.3	0	0.0	0	0.0
14	Focus on student learning	30	10	33.3	17	56.7	3	10.0	0	0.0	0	0.0
15	Decisions are data driven	30	8	36.7	11	36.7	11	36.7	0	0.0	0	0.0
16	Comprehensive information system	30	1	3.3	10	33.3	17	56.7	2	6.7	0	0.0

In Table 4, Construct 4 (*collaboration*), there are 29 responses to all four questions in this construct. One participant failed to answer the entire set of questions on collaboration. I contacted this participant to determine if the they would like the opportunity to correct this, the participant indicated he had not answered the questions in this section by choice. He did not explain this decision further. The data for this construct showed that collaboration is not a strength for the participants with Questions 17, 18, and 19 (*having designed roles, perform outside traditional roles*, and *new ways to collaborate*) having only 6.9% (or 2 participants) scoring a 5.

Table 4

Summary of Responses for Construct 4: Collaboration

			5		4		3		2		1	
#	Question	*N*	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
17	Have designed roles	29	2	6.9	7	24.1	14	48.3	6	20.7	0	0.0
18	Perform outside traditional roles	29	2	6.9	11	37.9	12	41.4	4	13.8	0	0.0
19	New ways to collaborate	29	2	6.9	16	55.2	9	31.0	2	6.9	0	0.0
20	Plan for implementation	29	1	3.4	12	41.4	14	48.3	2	6.9	0	0.0

On Table 5, Construct 5, reflection, Question 21, (*making time for on-going reflection*) showed 16.7% of participants scoring 5 while 0 participants scored 5 on Question 25, (*having developed accountability criteria for reflection time*).

Table 5

Summary of Responses for Construct 5: Reflective Practice

			5		4		3		2		1	
#	Question	*N*	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
21	Make time for ongoing reflection	30	5	16.7	12	40.0	10	33.3	2	6.7	1	3.3
22	Encourage initiative	30	1	3.3	16	53.3	10	33.3	3	10.0	0	0.0
23	Have joined with networks	30	2	6.7	4	13.3	16	53.3	5	16.7	3	10.0
24	Practice and support new ways	29	3	10.3	15	51.7	9	31.0	2	6.9	0	0.0
25	Developed accountability criteria	30	0	0.0	6	30.0	15	50.0	6	20.0	3	10.0

Finally on Table 6, Construct 6, Question 27 (*teach and assess so all students learn*) and Question 28 (*provide feedback to children and parents*) were the strengths of high student achievement construct with 7 participants or 23.3% scoring a 5. Only 1 participant considered himself functioning at Level 5 for Question 26 (*implementing standards and expectations*).

Table 6

Summary of Responses for Construct 6: High Student Achievement

			5		4		3		2		1	
#	Question	*N*	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
26	Implement standards and expectations	30	1	3.3	12	40.0	16	53.3	1	3.3	0	0.0
27	Teach and assess so all children learn	30	7	23.3	17	56.7	6	20.0	0	0.0	0	0.0
28	Provide feedback to children and parents	30	7	23.3	16	53.3	7	23.3	0	0.0	0	0.0
29	Talk with families about school programs	30	5	16.7	14	46.7	11	36.7	0	0.0	0	0.0
30	Have structures to develop resiliency	30	2	6.7	11	36.7	10	33.3	7	23.3	0	0.0

The findings presented in the remainder of this section are organized by quantitative data and research questions and then qualitative data and research questions.

Quantitative Findings

Research Question 1

What were the mean, median, variance, and standard deviation scores of the participants on the Lambert (2003) LCSS?

A breakdown of the mean, median, standard deviation, and variance of each the critical leadership constructs is illustrated in Table 7. These findings indicate that the mean total score of the construct was 106.1. Mean is defined by Gravetter and Wallnau (2008) as the "sum of the scores divided by the number of scores" (p. 58). The other central tendency method that was calculated was median. This was determined to be 105. Table 7 also shows the area of standard deviation (square root of the variance) and variance, which were determined to be 10.8 and 117.4 respectively

Table 7

Summary of Mean, Median, Standard Deviation, and Variance From Principals

	Construct 1	Construct 2	Construct 3	Construct 4	Construct 5	Construct 6	Total
Mean	24.9	14.8	18.4	13.5	16.3	18.5	106.1
Median	25.0	15.0	18.0	14.0	17.0	18.5	105.0
Std. Dev	4.2	2.2	2.1	3.4	3.1	2.1	10.8
Variance	17.7	4.9	4.5	11.6	9.9	4.5	117.4

Research Question 2

What principals scored the highest and lowest on the Lambert (2003) LCSS?

Table 8 represents the participants' total scores on the LCSS (Lambert, 2003) in descending order. Participants 10, 26, and 6 represented the principals that scored the highest on the LCSS (Lambert, 2003) with scores of 126, 126, and 121 points respectively. A total of 150 points were possible on the survey. Participants 29, 24, and 2 scored lowest on the survey. Their scores were 94, 90, and 73 points respectively.

Table 8

Summary of Total Responses From Principals in Ascending Order

Ranking	Participant number	Total score	Ranking	Participant number	Total score
1	10	126	16	13	105
2	26	126	17	22	105
3	6	121	18	12	104
4	8	117	19	20	104
5	1	114	20	21	102
6	7	114	21	25	102
7	14	114	22	30	102
8	17	114	23	16	101
9	27	114	24	28	101
10	15	111	25	11	98
11	3	110	26	4	97
12	18	110	27	23	95
13	19	110	28	29	94
14	5	105	29	24	90
15	9	105	30	2	73

Research Question 3

Which of Lambert's (2003) six critical constructs were the most commonly practiced among the schools in the study?

Results of the participants' Likert scale responses by mean according to the six leadership constructs on the LCSS (Lambert, 2003) are shared in Table 9. There were three critical leadership constructs that were identified as the most commonly practiced by the participants in this study. These constructs include the following: Construct 1, (broad-based skillful participation); Construct 3, (inquiry-based use of information to inform shared decision and practice); and Construct 6, (high or steadily improving student achievement). These three constructs had a mean Likert score of 3.7.

Table 9

Summary of Six Critical Constructs Mean Likert Score

	Construct 1	Construct 2	Construct 3	Construct 4	Construct 5	Construct 6
Mean average Likert score	3.7	3.5	3.7	3.3	3.25	3.7

Research Question 4

Which of Lambert's (2003) six critical constructs were the least commonly practiced among the schools in the study?

Table 9 also identifies the least commonly practiced leadership constructs of the 30 participants in this study. Construct 5 (reflective practice and innovation in the work of leadership), had the lowest recorded mean Likert score of 3.25.

Quantitative: Evidence of Quality

Explicit procedures to ensure accuracy of data collection were followed during the collection of the quantitative data. Participants were not contacted prior to receiving approval of the research proposal and the Institutional Review Board research-study procedures. Research procedures approved by the Institutional Review Board were followed. A voluntary consent form was distributed and returned from each participant prior to the beginning of the study. The voluntary consent included the rights of the participants and a request for confidentiality. Raw data were collected electronically from the surveys and were copied to a password-protected flash drive for secure storage. Participants were assigned identifiers to protect their privacy and the privacy of their schools. All of these efforts show evidence of quality procedures to ensure accuracy of the data.

Outcomes of the Quantitative Data

Outcomes of Research Question 1

What were the mean, median, variance, and standard deviation scores of the participants on the Lambert (2003) LCSS?

Using SPSS software version 16.0, data were analyzed to determine mean, median, variance, and standard deviation of the six critical leadership constructs. Construct 1 (broad-based skillful participation), had the highest mean, median, standard deviation, and variance score (see Table 7). Of the six critical leadership constructs, Construct 4 (collaboration), had the lowest recorded mean and median score. Construct 3 (inquiry-based use of information to inform shared decisions and practice), had the lowest standard deviation score of 2.1, and Construct 6 (high or steadily improving student achievement), had the lowest variance score of 4.5.

This study would be strengthened through a comparative study. For example, the study might have compared the leadership capacity of principals from high-achieving schools to the leadership capacity of principals from low-achieving schools to determine if there was a difference in the leadership capacity of these two groups. With data from a comparative study and application of additional statistical analysis, the study would provide quality information to identify relevant results. The results of the current research study with reference to Research Question 1 are insignificant.

Outcomes of Research Question 2

Which principals scored the highest and lowest on the Lambert (2003) LCSS?

Identifying the 3 principals that scored the highest and the 3 principals that scored lowest on the LCSS (Lambert, 2003) allowed identification of the 6 principals that would

participate in the qualitative data collection of this study. Participants 10, 26, and 6 represented the principals that scored highest on the LCSS (Lambert, 2003) with scores of 126, 126, and 121 points respectively. A total of 150 points were possible on the survey. Participants 29, 24, and 2 were the participants scoring lowest on the survey with scores of 94, 90, and 73 points respectively. There was a difference of 53 points between the principal who scored the highest and the principal who scored the lowest on the 30-question survey. When calculated by percent, the highest scoring principal scored 84% and the lowest scoring principal scored 49%.

Outcomes of Research Question 3

Which of Lambert's (2003) six critical constructs were the most commonly practiced among the schools in the study?

Three critical leadership constructs had a mean score of 3.7 as shown in Table 9 and were indentified in this study as the most commonly practiced. Those constructs were Construct 1 (broad-based skillful participation), Construct 3 (inquiry-based use of information to inform shared decisions and practice), and Construct 6 (high or steadily improving student achievement). Construct 1 (broad-based skillful participation), consisted of seven questions. As shown in Table 1, the Likert scores were fairly evenly distributed throughout the 7 questions. Construct 3 (inquiry-based use of information to inform shared decisions and practice; see Table 3), consisted of five questions. Question 14 focused on student learning and Question 15 on data-driven decisions. These two questions stood out as practiced at a higher level by the 30 participants. In addition, 1 participant indicated that his school did not participate in the learning cycle or have a comprehensive information system to support collaboration. Of the five questions in

Construct 6 (high or steadily improving student achievement; see Table 6), none were scored by the participants lower than a 2. A score of 1 on the Likert scale corresponds to "we do not do this at our school." The responses to two questions in this construct were significantly stronger than the other three. Those questions were Question 27, we teach and assess so all children learn (23.3 % chose the answer 5); and Question 28, we provide feedback to children and parents (23.3 % chose the answer 5).

The results of this study showed that three critical leadership constructs were the most commonly practiced. Critical information was gained from the analysis. The specific item analysis of the questions in the critical leadership constructs allowed information to be captured regarding the strengths and weaknesses in each of these constructs. The identified areas were addressed in the development of the professional-development model that was a result of this research study. This included the following:

1. Information on the learning cycle.
2. Alternative ways to schedule time.
3. Designing a comprehensive communication system.
4. Developing core beliefs.
5. Understanding the change process.

Outcomes of Research Question 4

Which of Lambert's (2003) six critical constructs were the least commonly practiced among the schools in the study?

The least commonly practiced critical leadership construct was identified as Construct 5 (reflective practice and innovation in the work of leadership), with a mean Likert score of 3.25 (see Table 9). There were five questions in this construct for

participants to answer. These questions included the topics of creating time for reflection, encouraging colleagues to participate in reflection, collaborating in reflection with teachers in other school districts, taking risks by trying new instructional techniques, and developing a method of self-evaluation for reflection time. Question 24, developing a method of self-evaluation, was the lowest scored question in the construct of reflective practice. It received no responses of 5 (we are refining our practice in this area) from any of the 30 participants. Fifty-percent of the participants selected a 2 (we are starting to move in this direction) and 20% selected a 3 (we are making good progress). There were several areas identified to be included in the design of the professional-development model as a result of the analysis of Research Question 4. Those areas include the following:

1. Demonstrate a variety of techniques for individual and group reflection.
2. Describe team structures that can support reflection.
3. Share technology tools that will allow for reflection with educators beyond their school (Go-To Meeting, Interactive Television, Skype, Moodle).
4. Communicate multiple self-evaluation methods for individual and shared work.

Qualitative Findings

NCLB has increased the accountability level of educational leaders. The literature review conducted in this study showed that creating learning communities is one promising practice that can help lead to higher rates of student achievement. The qualitative data presented provides support for this theory.

Research Question 1

Among the 3 principals who scored the highest on the LCSS (Lambert, 2003), what perceptions of leadership were most important to sustaining a PLC?

Construct 5 (broad-based skillful participation), is defined as "a vast majority of teachers and large numbers of parents and students are all involved in the work of leadership" (Lambert, 2003, p. 4). The 3 principals who scored the highest on the LCSS (Lambert, 2003) survey collectively agreed that the critical-leadership construct of broad-based participation was the most practiced in their schools in an effort to sustain PLCs. Both structure and the process for broad-based participation are included in this construct. The literature review completed in this research study supported the idea of the importance of broad-based participation to successful PLCs. According to Kouzes and Posner (2006), "Leadership is everyone's business" (p. 183).

Research Question 2

Among the 3 principals who scored lowest on the LCSS (Lambert, 2003), what perceptions of leadership were the most important to sustaining a PLC?

A noteworthy theme surfaced as an important leadership perception during the focus group with the 3 principals that scored the lowest on the LCSS (Lambert, 2003). That theme was the importance of instructional coaches to the PLC process. These three principals indicated that from their experience, instructional coaches were a key component of successfully sustaining PLCs.

Research Question 3

Which of Lambert's (2003) six critical constructs did the principals consider the most practiced and why?

Data-based inquiry was identified in the qualitative data by the 6 focus group members as the most practiced critical leadership construct. When comparing the qualitative results to the results of the 30 participants in the quantitative survey, the importance holds true. The quantitative data in Table 7 indicate that Construct 3 (inquiry-based use of information to inform shared decisions and practice), was one of three constructs identified as the most practiced.

Research Question 4

Which of the Lambert's (2003) six critical constructs did the principals consider the least practiced and why?

The least practiced critical leadership constructs identified through the focus-group discussion were Construct 5 (reflective practice and innovation as the norm), and Construct 4 (roles and responsibilities that reflect broad involvement, collaboration, and collective responsibility).

Qualitative: Evidence of Quality

Procedures to ensure accuracy of data collection were followed during the collection of the qualitative data. Six principals participated in a semistructured focus-group discussion. The focus-group members were selected from the top three scores and the bottom three scores on the LCSS (Lambert, 2003). This process allowed for the diversity needed so that quality data would be obtained. Open-ended discussion questions (see Appendix F) were distributed to the focus-group participants in advance. The need to understand and respect the privacy of all and to collectively agree to maintain confidentiality concerning what was discussed in the focus group was established. Additionally, participants were encouraged to be honest with their feedback during the

focus group in order to contribute the necessary information to the study. The participants were assured that the information shared would be kept confidential. Principals were not provided with their scores on the LCSS (Lambert, 2003); thus, their focus-group responses were not influenced by this information. Following the conclusion of the focus-group discussion, a professional transcriptionist transferred the information from the audiocassette to a written document. The transcriptionist signed a confidentiality agreement to ensure the privacy of the participants (see Appendix E).

To ensure internal validity of the qualitative data, member checks and peer review were employed. Member checks is defined by Merriam and Associates (2002) as "taking your tentative findings back to some of the participants to comment on your interpretation of the data" (p. 26). All members of the focus group were involved in the member-checks opportunity. Peer review was also implemented to ensure internal validity. Peer review is defined by Merriam and Associates as a peer "who reads and comments on the findings" (2002, p. 27). An independent educator scanned the raw data and reviewed the findings to determine if the findings were reasonable.

A number of steps were put into action to ensure evidence of quality in the collection procedures of the qualitative data. Qualitative-data collection consists of a sequence of interrelated steps with the goal of collecting accurate information to answer the established research questions. Ensuring accuracy at each step during the research process was necessary for accurate data.

Outcomes of the Qualitative Data

The results of the qualitative data from the focus-group discussion allowed several important conclusions to be drawn. These conclusions were incorporated into the

creation of the professional-development model that was a result of the research study. The outcomes of the research are described in the next subsection.

Outcomes of Research Question 1

Among the 3 principals who scored highest on the Lambert's (2003) LCSS, what perceptions of leadership were most important to sustaining a PLC?

The 3 principals that scored the highest on the LCSS (Lambert, 2003) survey collectively agreed that the critical Construct 1 (broad-based skillful participation), was the most established in their schools (see Table 10). Details regarding successful broad-based participation emerged in the focus-group discussion from the 3 principals that scored the highest. The importance of building relationships and public accountability were identified by the focus group as vital to the successful practice of involving teachers in shared leadership. Regarding the importance of building relationships, Participant 6 shared, "To really spend some time with the staff, talking to them one-on-one and building solid relationships is important to getting teachers to step up and participate in leadership roles." Participant 10 compared effective relationships to a team of horses and a teamster. Participant 10 stated,

> There's two ways to make a team of horses pull. You can get behind them with a whip and yell and scream and beat the tar out of them, and they'll pull. But the first time they get a chance, they're going to kick you in the head and run off. And if you watch the old guys that really cared about their horses and got them to pull on a daily basis, they got around in front of them and they'd pat them on the neck and they'd whisper a little bit in their ear and they'd give them a little sugar and

> they'd say, "Come on boys." Those teams of horses would literally break their legs pulling for those guys.

This statement by Participant 10 affirms what the literature review in this study indicated what an effective leader needs to do in order to gain consensus and working toward a common goal of broad-based participation. Partners who work together assume commitment and a sense of responsibility for group decisions (Senge, 2006).

Fullan (2005) considered that developing a culture of shared leadership provided for cyclical energizing and therefore supported sustainability of school-improvement initiatives. Two insights emerged from the focus-group discussion in developing a supportive culture for successful broad-based participation. Teachers view their position in a new light as they become empowered through the assumption of additional leadership responsibility.

Rasberry and Mahajan (2008) shared that when group members perceive themselves as "insiders," they gain a sense of identity with the group and their loyalty grows. Participant 10 stated that it is imperative to the success of shared leadership to "get buy-in among staff through public accountability." Participant 10 has a long-standing practice at the end of each PLC meeting of having teachers publicly state "what they are going to do for the team." This informs the rest of the team what this person "can be counted on to do." Developing a culture of trust is a necessity for this practice to be successful. Broad-based participation must be guided by a shared sense of purpose and facilitated in a trusting and open environment (Glaser, 2005). Participant 26 affirmed that this practice had been exceedingly successful for his school by developing a culture of shared leadership through public accountability.

The second insight that emerged from the 3 focus group participants was the need to target individual strengths as PLC teams were developed. Participant 6 indicated that the secret he had found to developing a culture of shared leadership was "giving teachers opportunities to lead where their interests are." Lambert (1998) claimed that leadership capacity grows when teachers begin to perceive their roles differently and assume more responsibility. In the beginning of developing a culture of broad-based participation, a leader needs to match teacher's individual strengths with what needs to be accomplished so the teachers will see success. As the teachers gain confidence and develop trust, they will be more and more willing to take risks and try new things for the good of the team.

The qualitative data indicated that Construct 1 (broad-based skillful participation), was rated at the highest level of implementation by the 3 principals. The quantitative data from the 3 highest scoring principals supported these results. The quantitative data shown in Table 10 for these 3 principals shows that Construct 1 (broad-based skillful participation), had total score of 91 points or 86%. Construct 2 was also calculated at 86%.

Outcomes of Research Question 2

Among the 3 principals who scored lowest on the Lambert's (2003) LCSS, what perceptions of leadership were the most important to sustaining a PLC?

Table 10

Summary of High Scoring Principals by Construct Total

Participant	Construct 1	Construct 2	Construct 3	Construct 4	Construct 5	Construct 6
10	33	16	22	19	18	18
26	29	20	22	14	18	23
6	29	16	20	14	20	22
Total	91	52	64	47	56	63
Percent	87	87	85	78	75	84

The importance of an instructional coach was an unmistakable strategic point identified by the 3 principals scoring lowest on the LCSS as critical building block to sustaining PLCs. Participant 2 acknowledged that instructional coaches are "critical to the survival of our district, to our building. They are our lifeblood." Guskey (2003b) agreed in his research and indicated that as individuals, teachers need support to sustain the difficult work of teaching. Sweeney (2007) used the term "instructional coach" to describe the support person who modeled new strategies in the classroom. In addition, the focus-group participants shared that the instructional coach provided explicit criticism, modeled lessons, reviewed and analyzed student data, and assisted the teacher in creating excellent learning situations for individual students in their classrooms. Sweeney stated, "Instructional coaches customize professional development to match each teacher's need and interests while they help the school establish a common understanding across all teachers" (2003, p. 50).

Participant 29 indicated the necessity for consistency with instructional coaches in the classroom in order to provide the necessary support for PLC implementation. This participant stated, “In the models that I have observed over my years in education, it is absolutely necessary that the coaches be in the classroom on a regular basis.” Participant 24 went on to comment that an instructional coach is “someone to help teachers with the decision-making points in their classroom. Teachers need someone who’s there as they are making decisions . . . to be the second set of eyes.” While instructional coaching means a variety of things to different people, in all instances it is a way for teachers to become analytical about their work. Coaching supports classroom teachers in their work as they develop their skills and apply new knowledge. Instructional coaches can guide teachers to this end and help ensure that they are successful. Among the 3 principals that scored the lowest, the identified need for an instructional coach in the PLC process was unquestionable.

Why did the 3 principals that scored the lowest have the perception that instructional coaches were an invaluable resource to the sustainability of PLCs? The message was clear: it is an issue of time. Teachers are overwhelmed with student-assessment data, state content standards, and new research on effective instructional techniques. The instructional coach serves as a filter to assist the classroom teacher with determining needs, priorities, and new skills. In the last decade, educational research has built a convincing argument about the role of professional development in promoting teacher quality and increasing student achievement. “Simply put, the argument is this: What teachers know and do impacts what their students know and do” (Killion, 2002, p. 11).

The principals that scored the lowest agreed that instructional coaches can assist in the delivery of professional development that is job embedded and occurs over time. Participant 24 stated, "PLCs are a collaborative-community, centered around student achievement with the instructional coach serving as the guide to increase teacher's understanding of the complexities of teaching and learning." In the field of education, these focus-group participants maintained the use of instructional coaches to support teachers' progress in implementing and sustaining PLCs to overcome the challenges of time. This topic of instructional coaches was not addressed in the current survey nor was it included in the focus-group discussion questions. This topic will require additional research.

Outcomes of Research Question 3

Which of Lambert's (2003) six critical constructs did the principals consider the most practiced and why?

Data-based inquiry was identified through the qualitative data analysis as the most practiced critical leadership construct. Research supports that one of the most powerful tools a classroom teacher can use is the analysis of student data to improve instruction (Marzano, 2006). NCLB has encouraged teachers to actively engage in this behavior to continue to move student achievement forward.

With the pressure of NCLB on every educator's mind, it was not surprising that inquiry-based use of data was considered the most practiced leadership construct identified by the six focus group participants. NCLB has increased test requirements, mandated annual assessments in reading and mathematics, and called for disaggregation

of the data by race, socioeconomic status, and language. In addition, NCLB requires schools to meet adequate yearly progress on state assessments each year through 2014.

This law is an ambitious educational initiative that has had a profound effect on teachers, principals, parents, students, and communities. It has impacted virtually every aspect of the teaching profession (DuFour et al., 2008). For years, teachers have had an abundance of student-assessment data. However, historically this data have not been used by the classroom teacher. With the passage of NCLB, student-assessment data became a critical element in designing a plan for continued student progress to meet the adequate-yearly-progress goal. Marzano (2006) stated that our education culture was "data rich and information poor." The focus-group participants indicated this trend is changing. Participant 6 shared, "Teachers literally have all the data they could ever hope for at the tip of their fingers." Participant 10 continued by sharing,

> One of the biggest changes that I've seen through the years is we've been data poor for years. We had drawers full of data, cabinets full of data. But we had data, number one, that we didn't know how to use. The difference that I see now is I have teachers that are asking for more data because they know how to use it to improve instruction.

Becoming a data-based inquiry school is a process that takes time, professional development, and a supportive leader (DuFour, et al., 2008). When discussing data-based inquiry, Participate 26 said, "We are in an extremely data-driven school, we have no choice. . . . We have to look at our data to determine the direction we will go next in order to continue to increase our student achievement." This participant went on to

explain that the process of becoming a school that was data driven was difficult. Participant 26 shared,

> This was painful at the beginning because teachers take their data personally. It hurts. There were a lot of tears. There was a lot of crying. But we always had to bring it back to student focus and work our way through the analysis process.

Participant 29 shared that their success in dealing with confronting the brutal facts of the data is "as a leader I continually remind them it is about the kids."

Outcomes of Research Question 4

Which of the Lambert's (2003) six critical constructs did the principals consider the least practiced and why?

The least practiced critical leadership constructs were Construct 5 (reflective practice and innovation as the norm), and Construct 4 (roles and responsibilities that reflect broad involvement, collaboration, and collective responsibility).

Finding time for reflection was identified by the focus-group participants as the primary barrier to the successful practice of reflection. Participant 26 shared of reflection,

> When it comes to the end of the day and a teacher has a choice of preparing for the next day or time to reflect on how today's lesson went, preparing for tomorrow almost always wins out. Lack of reflection is caused by so many other demands on the teacher's time.

In the focus-group discussion, Participant 2 indicated that he was implementing a reflection technique as way for this teachers to routinely reflect. Participant 2 said, "If I really want to slow folks down to think (reflect), I ask them to write." This participant continued by saying, "I'm trying to get them to think about what they're doing." The area

of reflection was incorporated into the professional-development model created as a result of this study.

The qualitative results of the focus-group discussion revealed that one of the least practiced critical leadership constructs was determined to be Construct 4 (collaboration). The literature review conducted in this study revealed the fundamental need to have collaboration by staff in order to sustain successful PLCs. Collaboration is critical for achieving and sustaining high performance and vital to the development of a climate of respect and trust (Horsheed, 2007; Kouzes & Posner, 2006). The primary reason cited by focus-group participants as to why collaboration was the least practiced was the issue of time and scheduling conflicts. Participant 2 indicated that it is "difficult to find time for grade-level meetings, let alone cross grade-level time during the school day." Focus-group members also readily admitted that once they carved out time for teachers to collaborate, teachers don't know how to use this time effectively to improve instruction.

The literature review repeatedly indicated the need for educators in a PLC to continually seek the best instructional strategies for helping students learn to their highest potential. This occurs only when teachers work together in a collaborative environment (Bridges, 2003; Buffum et al., 2009; Hargreaves & Fink, 2006; McThige, 2008). Principals in PLCs must be diligent in providing the time and support for this environment and must identify outcomes and accountability for collaboration time (Hord, 2004, p. 34). Focus-group Participant 10 admitted, "All of us find time to do the things that we just really like to do, and we kind of don't do the things we don't." This identified need of additional support for PLC leaders in the area of collaboration was reflected in

the creation of the professional-development model that was a result of this research study.

Comparison of qualitative data and the quantitative data regarding the least practiced critical leadership construct held true. When looking at Table 10, which reflects quantitative data of the focus-group members only, collaboration was identified as the least practiced on the LCSS (Lambert, 2003). When comparing this to the results of all 30 participants shown in Table 9, collaboration was next to the lowest practiced of the six leadership constructs. DuFour et al. (2008) shared that "collaboration is a systematic process in which teachers work together, interdependently, to analyze and impact professional practice in order to improve results for their students, their team, and their school" (p. 16).

Findings Summary

A problem that exists in many schools in southwest Kansas is the lack of a clear understanding of the leadership constructs that sustain PLCs. Currently, schools are successful in implementing PLCs but struggle to sustain them over time. This problem affects principals, teachers, and students because PLCs are a research-based school-improvement initiative that will positively influence student achievement if districts are able to move beyond initial implementation of PLCs (DuFour et al., 2008). The quantitative and qualitative questions posed in this study, along with the synthesized information learned through the literature review, were intended to provide me with information regarding leadership constructs and how they shape organizational culture and sustain PLCs. These results were then used to impact the content and design of the professional-development model that was the outcome of this research study.

Based on the findings of this study shared previously in this section and the review of the related literature, the following conclusions were made:

1. Leaders involved in developing broad-based skillful participation in the work of leadership build leadership capacity in the organization.
2. Finding time for collaboration is a challenge to current leaders.
3. The daily practice of reflection is minimal.
4. Data-based inquiry drives instructional decisions.
5. Leaders must develop a collaborative culture in their buildings.

Findings of this study gained through the quantitative and qualitative data collection processes support the information in the literature indicating that leadership capacity is an important factor to the success of sustaining school improvement initiatives. Leaders are crucial in a sustained cultural change (Depree, 2004; Dooner et al., 2008; DuFour et al., 2008; Lafee, 2003).

Project Outcome

The outcome of this project study was to create a professional-development model that provides knowledge and understanding of the key leadership constructs needed to develop an environment for sustaining PLCs. The project study conducted and synthesized research pertaining to specific leadership behaviors. This research contributed to a new professional-development model designed to facilitate and sustain PLCs. A definitive guide with training and supporting materials for leaders of PLCs was the tangible product. The unique perspective of this project study was to identify the critical leadership constructs necessary to sustain PLCs. The research on adult learning was applied in the development of the project portion of this research study. Professional

development was created in a hands-on, multisensory, and multiday format. This includes differentiated-learning opportunities for the participants involved. Implementation of the professional-development model created through this research study is intended to advance the goal of cultural change in classrooms in southwest Kansas.

Section 3: The Project

Description and Goals

This project study determined how the selected elementary principals shaped organizational culture and provided the structures that sustain PLCs. The procedures were three-fold: (a) to administer and analyze the results of the LCSS (Lambert, 2003) survey; (b) to conduct a focus-group discussion for the purpose of identifying leadership constructs that sustain school-improvement efforts, and; (c) to create a research-based professional-development model that would provide knowledge and understanding of the key constructs of leadership needed for sustaining PLCs.

The first procedure of this study was to determine key leadership constructs that contribute to the sustainability of PLCs. Through the delivery of the LCSS (Lambert, 2003) survey and the facilitation of a focus-group discussion, both quantitative and qualitative data were collected. The LCSS (Lambert, 2003) was designed to assess the leadership-capacity conditions that currently exist in schools. Leadership capacity is imperative for school-improvement initiatives to be sustained successfully (DuFour et al., 2008; Eaker & Keating, 2008; Lambert, 2002).

The second procedure of this study was to increase knowledge and understanding of identified leadership constructs effective in sustaining PLCs. The results of this project study have contributed to the creation of a professional-development model. This model supports new organizational structures that contribute to the sustainability of school improvement initiatives in elementary schools. The conclusions drawn from this study provide school leaders with additional information to consider when developing a successful framework for leadership that can be replicated successfully. Outcomes of this

research project will contribute to social change in elementary schools through the creation of a professional-development model that will provide shared knowledge and understanding of the key elements of leadership needed to sustain PLCs. Furthermore, this information will be delivered in a targeted and rigorous training session with support materials to guide principals' behavior and provide them with constructive direction as they work to develop and sustain their PLCs. Thus, this project study represents a synthesis of research pertaining to specific leadership behaviors designed to sustain PLCs.

Rationale for the Project Genre

The project genre selected for this study was a professional-development training model. This model was created based on the findings and results from the current study and synthesized research found through the literature review. The rationale for selecting professional development as the genre of this study is supported by research including that of the NSDC (2001). They stated "staff development is the means by which educators acquire or enhance the knowledge, skills, attitudes, and beliefs necessary to create high levels of learning for all students" (p. 2). The professional-development model was designed to organize adults into learning communities. Information for the current study was collected from 30 elementary principals across southwest Kansas, and the professional-development model was designed based on the results of the LCSS (Lambert, 2003). For example, the critical-leadership construct that the quantitative survey indicated was least practiced by the 30 principals was Construct 5, reflective practice and innovation in the work of leadership. Through the qualitative focus-group discussion, the significant barrier to reflective practice was identified. That barrier was

creating time for PLC teams to meet during the school day on a regular basis. By choosing professional development as the genre for this study, the specific needs of the 30 principals was met by assimilating the information learned through the data-collection process, and designing the model to support the identified strengths and weaknesses. As a result, PLC time was emphasized in the professional-development training. By choosing the genre of professional development, flexibility of the project was increased. The professional-development model can be customized to the specific needs of each audience. The professional-development model can be adjusted to meet the needs of any prospective audience in the future through the assessment of their leadership-capacity practices prior to the delivery of the professional development.

Rationale for Content of the Project

The research problem addressed in this study was that school leaders in southwest Kansas were unable to sustain PLCs to a satisfactory level. Data collected from the evaluations of SWPRSC PLC workshops (2008) indicated the need for more leadership training to support the sustainability of PLCs. In addition, informal focus-group discussions held at regional principals' council meetings (Southwest Plains Principals' Council, 2008) indicated the lack of knowledge of the critical leadership constructs that would sustain school improvement efforts such as PLCs. Although educational leaders are working to develop, to implement, and to sustain PLCs, the process is difficult to accomplish because of the complexity of involving all individuals in the school building (DuFour, 2004a; W. Hall, 2006; Leithwood, Jantizi, et al., 2004). Lambert's (2003) LCSS was used to collect data for this study (see Appendix B). Lambert supported building leadership capacity from within the school and community as a method of sustaining

school-improvement initiatives. The survey queried 30 elementary principals to discover their perceptions of current leadership practice in their schools. The intent of the survey was to discover spheres of leadership capacity (L. Lambert, personal communication, April 10, 2009).

The outcome of this project study was to create a professional-development model that provided knowledge and understanding of the key leadership elements needed to develop an environment for sustaining PLCs. The data collected through the quantitative comparison of the six critical leadership constructs and qualitative data collected through the focus-group discussion process provided the rationale concerning the content emphasis of the project. The quantitative data was collected first, and then the mean Likert score of each construct was determined. Table 9 illustrates a summary of the data. Results indicated there were three critical constructs identified as the most commonly practiced by the participants in the study. These constructs included the following: Construct 2, shared vision resulting in program coherence; Construct 3, inquiry-based use of information to inform shared decision and practice; and Construct 6, high or steadily improving student achievement. The least commonly practiced critical leadership constructs were the following: Construct 5, reflective practice and innovation in the work of leadership; and Construct 4, collaboration.

Following the collection and analysis of the quantitative data, the qualitative data were collected through a focus-group discussion. The principals who participated in the focus-group discussion were the 3 principals who scored the highest and the 3 who scored the lowest on the LCSS (Lambert, 2003). The goal in deciding to conduct a focus group was to produce data that would not be easily accessible without the interaction of

the group. The results of the analysis of the focus-group discussion contributed additional information and in-depth detail necessary for comprehensive information desired in this study.

The qualitative results in some cases supported the quantitative data, and in other cases brought new information to light. For example, the 3 participants who scored the highest on the LCSS (Lambert, 2003) all indicated broad-based participation as the most practiced construct in the quantitative portion of this study. In fact, the total points scored on broad-based participation was 27 points higher than the next construct (see Table 10). The total points for the 3 highest scoring principals on the construct of broad-based participation was 91 points. Broad-based participation was also the highest ranking leadership construct for the lowest scoring principals; however, the total number of points representing their perception of the level the construct is practiced in their school was 55. This is a 36-point difference between the highest scoring principals and the lowest scoring principals on the construct of broad-based participation. The content of the professional-development model was determined by the factors that arose during the data analysis in Section 2. The primary factors that influenced the content were the following:

1. Reflective practice was determined to be one of the least commonly practiced leadership constructs. Additional information regarding reflective practices and research as to why reflection is vital to sustaining school-improvement initiatives was included in the professional-development design. Application and practical reflective activities were included.

2. Collaboration was also determined to be one of the least commonly practiced leadership constructs. This result held true for all participants. During the qualitative data collection, collaboration seemed to be the most difficult construct to accomplish in practice. As a result, the professional-development model allotted additional time during the training on the leadership construct of collaboration, to ensure barriers that surfaced in the focus-group discussion were thoroughly covered.
3. In the focus-group discussion, the theme of culture emerged on a regular basis. Consequently, additional time and practical application activities were included in the professional-development model on the subject of culture. Topics included assessing the current culture, successful ways to influence the culture, and the importance of a collaborative culture to the sustainability of PLCs.

DuFour et al. (2006) stated that "the impulse of most leaders is much the same today as it was a thousand years ago: accept the system as it is and lead it" (p. 24). Principals overseeing learning communities must overcome this frame of mind. The rationale for the content of this study was to provide PLC leaders a professional-development model driven by the data collected through this mixed-methods research project.

Questions that were considered during the development of this project included the following:

Quantitative Research Questions

1. What were the mean, median, variance, and standard deviation scores of the participants on the Lambert (2003) survey?

2. Which principals scored the highest and lowest on the Lambert (2003) survey?
3. Which of Lambert's (2003) six critical constructs were most commonly practiced among the schools in the study?
4. Which of Lambert's (2003) six critical constructs were the least commonly practiced among the schools in the study?

Qualitative Guiding Questions

1. Among the 3 principals who scored highest on the LCSS (Lambert, 2003), what perceptions of leadership were most important to sustaining a PLC?
2. Among the 3 principals who scored lowest on the LCSS (Lambert, 2003), what perceptions of leadership were the most important to sustaining a PLC?
3. Which of Lambert's (2003) six critical constructs did the principals consider the most practiced and why?
4. Which of the Lambert's (2003) six critical constructs did the principals consider the least practiced and why?

Review of Education Research and Theory

Research relative to the background of the PLC and the critical cultural conditions that principals need to sustain the learning community was examined during this study. Section 1 provides a literature review and theoretical framework of the PLC, as well as the critical role of the principal in the learning community. In this section, the literature review focuses on three aspects: effective professional-development research, significant aspects of adult learning, and Lambert's (2003) six critical constructs of leadership

capacity. Multiple sources were consulted to collect the information including the libraries of SWPRSC, Fort Hays State University, Kansas State University electronic library, and Walden University electronic library. Databases such as Articles First, ProQuest, EBSCOhost, Educational Resources Information Center, Southwest Educational Development Laboratory, NSDC, and North Central Association were incorporated to retrieve online journals and research studies. The first subsection of this review discusses the context standard of professional development designed by NSDC (2001). Adult-learning theory is reviewed in the second subsection. The six components of high capacity leadership, identified by Lambert (2003), are reviewed in the third subsection. These six components include shared vision, inquiry-based use of data, collaboration, reflective practice, increased student achievement, and broad-based participation (pp. 6–7). The final portion of this section discusses the implementation and evaluation plan and implications of the study on social change.

Professional Development Research

Investigation of the research concerning effective professional development was important to this study. The delivery model for this project replicates best practices and is research based. “Every proposal for education reform and every plan for school improvement emphasizes the need for high-quality professional development” (Guskey, 2000, p. 3). Newmann, King, and Young (2000) studied characteristics of comprehensive professional development. Their 2-year study found that student-achievement factors were directly influenced by the professional development their teachers received. Nine elementary schools with low-achieving scores (50% or more students scored below the minimum state testing standards for reading and/or mathematics) had shown significant

gains in student achievement over the previous 3 to 5 years (p. 269). During this period, the teachers had received a significant increase in the time dedicated to professional development. Schools attributed their students' academic progress to continual school-wide professional development. This was determined through the analysis of implementation of professional-development standards, hours of professional development in the school day each month, and percent of students receiving free and reduced lunch (p. 63).

Through linear regression analysis, Newmann et al. (2000) concluded that professional development designed to meet the needs of the individual building affected student achievement in the most significant manner. This study and others (Muhammad, 2006; Wenglinsky, 2002) substantiated the need for ongoing, school-wide professional development in our schools. Schools must demonstrate adequate yearly progress as part of NCLB. These demands for increased student academic performance are putting additional pressure on the classroom teacher. To help with the apprehension felt by teachers today, the research by Newmann et al. (2000) indicated that professional development can be a tool used to assist teachers in improving their skills in content, process, and procedure. The information synthesized from the study by Newmann et al. (2000) was applied to the design of the professional-development model created as an outcome of this research. The vision for the professional-development model was that powerful professional development is made up of highly successful learning experiences that are designed to accomplish the specific purpose of significantly improving the capacity of the educators in attendance. By affecting the educators in a positive way, student achievement is also impacted in a positive way (DuFour et al., 2008).

"Improving professional learning for educators is a crucial step in transforming schools and improving academic achievement" (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009, p. 12). The NSDC developed 12 standards for effective professional development. They have organized these 12 standards into three overarching areas: (a) context standards, (b) process standards, and (c) content standards. The context standards, discussed in the literature review, include learning communities, leadership, and resources. Only the context standard was included in the review as it is most applicable to the professional-development standards to this research study.

Context Standards

The NSDC (2001) defined context standards as those that "address the organization, system, and culture in which new learning will be implemented" (p. 2). The school culture that exists to support professional development needs to include a shared vocabulary, ongoing and collaborative activities, data-driven processes, and commitment to the school's vision and mission (Sparks, 2004). NSDC context standards include the following: (a) learning communities, which "organizes adults into learning communities whose goals are aligned with those of the school and district" (p. 8); (b) leadership, which "requires skillful school and district leaders who guide continuous instructional improvement" (p. 10); and, (c) resources, which "requires resources to support adult learning and collaboration" (p. 12). The NSDC context standards describe the structures that must be in place for successful learning to occur.

Learning communities. Context Standard 1 involves organizing teachers into learning communities that have common goals. These learning communities meet on a regular basis to discuss students' progress and participate in collective inquiry. The most

powerful form of professional development occurs when ongoing teams meet on a consistent basis, with the goal of learning together, lesson planning, data analysis, and problem solving (Andrews & Lewis, 2006; Resnick, 2005, Weiss & Pasley, 2006).

There may be no stronger endorsement for the creation of learning communities or PLCs than the one that was made by Schmoker (2006). Schmoker's educational career spans the range from classroom teacher to central-office administrator. Schmoker was actively engaged in closing the achievement gap at the schools with which he was involved. Schmoker shared that "our most effective tool for improving instruction is the use of learning teams and communities" (p. 43). Learning-community teams should range from four to eight members (DuFour et al., 2008; NSDC, 2001). In addition to the students' learning needs, the teachers should also consider their own learning needs for professional growth. Teams may conduct book studies, read articles, visit other classrooms, or attend workshops or conferences based on what the group determines to be the best method to address their most significant learning need (Lowden, 2005, p. 61).

The importance of PLCs in professional development is illustrated by Lowden's study. Two models of professional development were examined: one model conducted in isolation and the other model conducted in a PLC. Lowden surveyed 205 teachers in 11 public school districts. The survey was based on Guskey's five levels of evaluating professional development (Guskey, 2003a). The results of the study revealed an increase in student learning in the class whose teachers participated in research-based professional development in a PLC model. Of the teachers surveyed, 68% indicated that professional development had the greatest impact on classroom instruction when it was delivered to a team of teachers with common goals, visions, and concerns. Results indicated that

professional development delivered in isolation was ineffective (Kelleher, 2003; Pardini, 2003). As a result of this information, the current research study designed the professional-development model to be delivered in a PLC configuration. This included participants attending the professional-development trainings as teams and provided support between professional-development days onsite with those teams in their individual buildings.

According to the NSDC (2001), administrators as well as teachers should be involved in learning communities for professional development. Peretti (2009) conducted a quantitative quasiexperimental study regarding teachers' perceptions of administrative involvement in PLCs. Peretti administered a pretest–posttest format of the Learning Organization Survey to gather the perceptions of 60 participants after the PLC groups had met for a period of 8 weeks. The results of the study showed that "learning communities should include both teacher and school administrator participants for the purpose of increasing collaboration, teacher learning, shared leadership, and most importantly, student achievement" (p. 112). The purpose of the learning community time is to "deepen participants' understanding of instructional leadership, this means teachers and administrators alike" (NSDC, 2001, p. 8). Through their participation in PLCs, NSDC contended that leaders can identify strategies to support teachers in their efforts to improve. Darling-Hammond et al. (2009) agreed with this and stated, "In an effective professional learning system, school leaders learn from experts, mentors, and their peers about how to become true instructional leaders" (p. 68). Learning is continuous and comes from a variety of sources.

Leadership. In the framework of professional development, leadership occurs at many levels in the school building. Administrators, parents, teachers, classified staff, community, and students can provide needed leadership in the area of professional development (Mullen & Hutinger, 2008). The NSDC (2001) placed emphasis on the need for leaders to understand the connection between the professional learning of teachers and improved student achievement (p. 16). If the proposed initiatives required a change in the culture, the leadership must have a significant sphere of influence to successfully guide the staff through the change process (Owens, 2004, p. 59). Through their leadership, principals convey the critical link between improved student achievement and the professional development of educators (DuFour, 2003).

A study conducted by Racek (2008) examined teacher perception of the NSDC standards of professional development and determined that the NSDC standard of leadership was the most effectively implemented. Thirty teachers completed the Standards Assessment Inventory. Racek analyzed the data with a *t* test and one way analysis of variance. This analysis revealed that the variables of experience and time in a district did not significantly affect perception of the 12 professional-development standards. Leadership was found to be the most effectively implemented standard. Understanding that the study by Racek found leadership to be the most effectively implemented of the standards was incorporated into the final project of this study because the project was created to develop and increase leadership in the six critical leadership constructs. Weiss and Pasley (2006) shared that "**l**eadership had the most influence on student achievement when a continuous instructional process drove improvement"

(p. 93). Other studies that supported the strength of the leadership standard include Pritchard and Marshall (2002) and Weiss and Pasley (2006).

Resources. The final area of the context standard is resources. Without the necessary resources, professional learning cannot be effective (NSDC, 2001, p. 13). The resources standard supports long-term investments for quality teaching to impact student learning (Fenstermacher & Richardson, 2005; N. Protheroe, 2005). While resources can refer to any number of material objects or individuals, the word most commonly associated with resources is money (NSDC, 2001). Human assets, software, curriculum, workshops, conferences, consultants, coaches, technology, and professional-development materials all require an investment of time and money (DuFour, 2004b). The NSDC (2001) advocated that 25% of a teacher's work time should be committed to learning and collegial collaboration (Guskey, 2003b; Honawar, 2008).

A study conducted by Drews (2007) examined the relationship between allocation of resources and individual student achievement. Research Question 4 from this study specifically looked at the relationship between expenditures on professional development and the impact on student achievement. State assessment data from 8,120 students were collected from 43 school districts for the 2002 through 2006 school years. Financial data for the same time period were also collected from the 43 school districts. Descriptive statistics and an analysis of variance were used to examine the relationship between expenditures on professional development and increased student achievement. The results of the study found that there was a statistically significant relationship between the percent spent on professional development and student achievement in all 4 years of the study (p. 94). The study determined that the districts spending between .42% and .83% of

their total budget on professional development had higher mean scores for student achievement for each year of the study (p. 94) when compared with similar districts.

The research continues to support that professional development is an excellent way to have an impact on the classroom. The genre selected for the project of the current study was to create for principals a professional-development model that synthesized the research findings regarding critical-leadership constructs found to be effective in sustaining school improvement initiatives such as PLCs. Professional development as indicated in the study by Drews (2007) has a positive impact on student achievement (Easton, 2004; Guskey, 2000).

The role of the principal is important when looking at the resources standard (Mizell, 2001; Richardson & Hirsh, 2001). Without a forward-thinking principal who sees the value of time and money set aside for professional development, it is unlikely the educators in the building will have the resources necessary for increasing student achievement. Professional development that is supported by the building leader is much more likely to impact student achievement (DuFour, 2004b).

A qualitative study conducted by Kolsky (2009) examined the influence of principals on professional development. In addition, it considered how the principal's leadership could support instructional change in the classroom. The data sources for the study were interviews with 16 teachers across eight regions (p. 54). Principals nominated the teachers based on their perception of teachers who had greatly benefited from the principals' leadership practices. Private interviews were conducted with each of the participants and these were audiorecorded and transcribed. This information was then analyzed by Kolsky to discern the results of the study. Role-ordered matrix and coding

were used to categorize the data for analysis. The conclusions regarding the principal's effort to monitor and document changes in practice following professional development were clear. The teachers indicated that "it was very important to receive feedback from the principals after receiving professional development" (Kolsky, 2009, p. 89). Effective instructional leadership by the building principal is associated with creating conditions that are supportive of professional growth and development.

The conceptual framework of Kolsky's study was based on literature that identified the elements of effective leadership and how those elements lead to effective instructional change. The research is clear that through the allocations of resources and support provided to the classroom teacher, the principal is a key factor in successful professional development. Results from Kolsky's (2009) research study were applied to the current research study through the knowledge that principals need to understand the complexities of their role in the success of classroom teachers. The principals must provide teachers with explicit support of professional-development information and classroom application.

Learning communities, leadership, and resources form the context standard for professional development. These three structures create the overarching foundation for a number of support systems that must work together to have successful delivery of professional development (NSDC, 2001). The literature review uncovered the fact that classroom teachers have little awareness regarding NSDC standards. Hummel (2007) conducted a study of 127 elementary-school principals to determine the perception regarding the implementation of the NSDC standards (2001). A survey instrument from the NSDC was used (p. 123). The survey had 36 questions regarding level of

implementation of the NSDC standards of context, process, and content. Descriptive analysis was used and mean scores and standard deviation were calculated for each of the responses to the survey. The conclusions of the study found that there was only moderate to low implementation of the NSDC standards in the schools participating in the study.

These findings from Hummel's (2007) study were applied to the current research project. The lack of knowledge by current practicing principals of the NSDC standards is astonishing. Research conducted by NSDC (2001), Sparks (2004), and other researchers reveals the value of the professional-development standards to effective practice.

Adult Learning

This doctoral project focused on how the selected elementary principals shape organizational culture and provide the structures that sustain PLCs. The project portion of the study is a professional-development model that synthesized the research findings regarding leadership constructs. The leadership constructs that were found to be effective in sustaining school-improvement initiatives such as PLCs were used in the model. The study applied established research regarding effective professional development and adult learning in the development and delivery process. DuFour and Eaker (1998) defined learning as "ongoing action and perpetual curiosity" (p. xii). Establishing a foundation for adult learning in an educational setting is an essential step in establishing a successful PLC (Barth, 2003).

In the early 1900s Thorndike, Bregman, Tilton, and Woodyard (1928) found that adults have the capability to continue learning throughout their adult lives. Lindeman's (1926) early research on adult learning was applied. In this groundbreaking document, Lindeman theorized that adult learners' experiences play a critical role in making

learning situational and vital. For example, when working in small groups, adults tend to reflect on their own experiences and build on them by working collaboratively (Lindeman, 1926). Lindeman's work, for the first time, indicated that school-age students and adult students learn differently, and therefore, need different types of learning environments. This theory of adult learning has grown into current and well-respected theory. Knowles, Holton, and Swanson (1998) argued that there are five key components of adult learning:

1. Adults are motivated to learn as they experience needs and interests that learning will satisfy.
2. Adults' orientation to learning is life-centered.
3. Experience is the richest source for adult learning.
4. Adults have a deep need to be self-directed.
5. Individual differences among people increase with age. (p. 40)

Understanding adult learning in the field of professional development requires some background concerning andragogy. Andragogy is the intentional, guided activity that aims to create a change in adults (Knowles et al., 1998, p. 60). Pedagogy, the more familiar term that describes the art and science of teaching children, was questioned in its application to adult learning during training efforts in World War I (Knowles et al., 1998). Andragogy is based on the supposition that adult learners learn differently from children. The model shares six items: (a) the need to know, (b) the learner's self-concept, (c) the role of the learner's experiences, (d) readiness to learn, (e) orientation to learning, and (f) motivation (Knowles et al., 1998, pp. 64–69). In the pedagogical model, teachers are assigned responsibility for all decisions concerning content, process, and context,

while the learners are submissive (Knowles et al., 1998). Andragogy accepts the characteristics of pedagogy and includes assumptions that exist in the distinctive learning situation. Listening and learning about content is not enough to transfer a new skill from a training session to application (Joyce & Showers, 2002).

Smith (2008) conducted a study to determine whether a difference existed between adults who were taught with traditional teacher-centered instruction and those who received student-centered instruction with application of adult-learning theory. The study consisted of 50 participants in each of the comparison groups. Using a pretest/posttest model, data were collected using the Principles of Adult Learning Scale to determine participants' preferred model of instruction. Smith (2008) found that applying adult-learning theory "was more likely to improve both the learning outcomes and student satisfaction of the adults in their classrooms" (p. 138). When applied to adult-learning situations, Smith (2008) determined that andragogical principles increased the knowledge acquisition of participants (p. 138). As a result of this research study, a professional-development model has been created to be delivered to school leaders working toward sustaining PLCs in their buildings. Andragogical principles were applied in the design of the study.

Deep understanding should be the goal of adult learning. Garet, Porter, Desimone, Beirman, and Yoon (2003) indicated that multiple opportunities over extended sessions are required for adult learners. Adults need to practice and integrate the new skills into their classrooms and this takes time. This study was conducted on a national scale and sampled 1,027 teachers from 358 districts. The Teacher Activity Survey was used to gather that data. The study centered around three features of professional development:

(a) the form of the professional development, (workshop, study group, virtual, etc.); (b) the teachers participating collectively in the professional development; and (c) the length of time of the professional development (p. 919). A least-squares regression analysis was conducted on the data, and results confirmed that the three central features have significant impact on teacher learning. Results determined that both time span and contact hours have positive effects on the quality of the professional-development experience (p. 933). Professional development that is sustained over time and involves follow up support is highly effective to ensure teachers apply what they have learned to their classroom. Adults need to be actively involved with the content in a variety of methods. Professional development must include opportunities to hear, see, and interact with the content (Garet et al., 2003). This research on adult learning was applied in the development of the project portion of this research study (Garet et al., 2003; Smith, 2008; Tannehill, 2009). The professional development that was created is practical, multisensory, and multiday. The training includes differentiated learning opportunities for the learners involved.

The Six Components of "High Leadership Capacity"

Providing a professional-development model that supports elementary leaders to sustain PLCs was a goal of this research study. In order to determine the leadership constructs that are most vital in sustaining school-improvement initiatives such as PLCs, the LCSS (Lambert, 2003) was administered to 30 elementary principals. Lambert (2003) shared that there are four possible leadership-capacity situations: low skill/low participation, low skill/high participation, high skill/low participation, and high skill/high participation (p. 5). Figure 4 illustrates the six critical constructs of a "high" leadership-

capacity school found by Lambert to have lasting impact on the sustainability of school improvement (Lambert, 2003). These leadership capacities include the following: (a) broad-based, skillful participation in the work of leadership; (b) shared vision resulting in program coherence; (c) inquiry-based use of information to inform shared decisions and practice; (d) roles and responsibilities that reflect broad involvement, collaboration, and collective responsibility; (e) reflective practice and innovation as the norm; and (f) high or steadily improving student achievement (pp. 6–7). These six critical leadership constructs make up the components measured by the LCSS (Lambert, 2003).

Broad-Based, Skillful Participation

The first critical-leadership construct of a school with high leadership capacity (Lambert, 2003) is broad-based, skillful participation (p. 7). Broad-based skillful participation allows principals to develop leaders at all levels in their buildings. Through distributive leadership, schools have the ability to develop a culture of trust and personal accountability that contributes to the success of the building attaining their desired goals. Collins (2001) identified Level 5 leaders as those who develop the leadership capacity of others (p. 34). Broad-based leadership lends itself to creating a united vision that brings a shared sense of direction to the team. According to Kouzes and Posner (2006), "Leadership is everyone's business" (p. 183). Lambert (2003) shared that broad-based skillful participation is a foundational building block to successful leaders (p. 6).

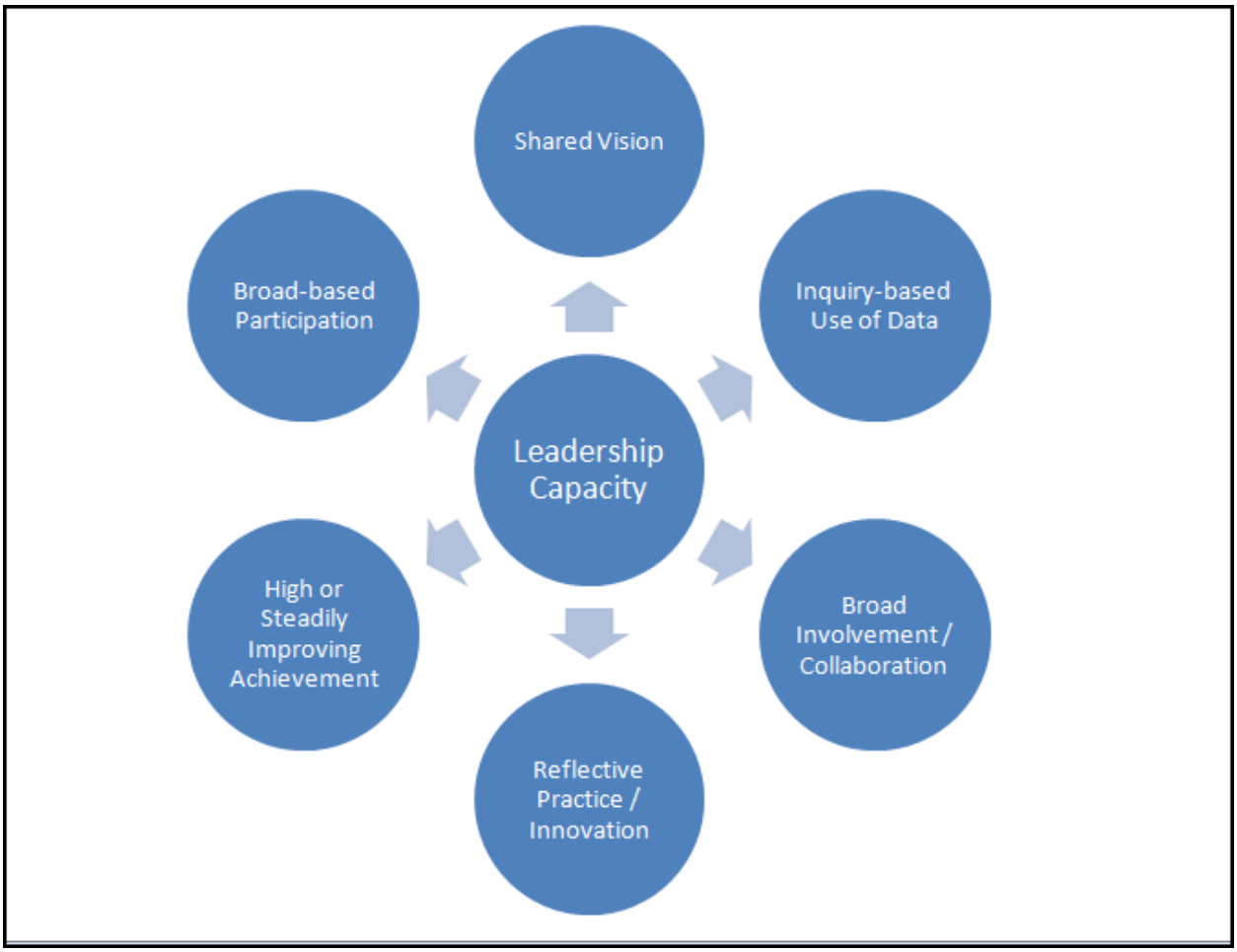

Figure 4. Six critical constructs of leadership capacity.
Note. Adapted from *Leadership Capacity for Lasting School Improvement,* by L. Lambert, 2003, Alexandria, VA, Association for Supervision and Curriculum Development.

Shared Vision Resulting in Program Coherence

The second critical leadership structure is shared vision resulting in program coherence. "The most important question in any organization has to be 'what is the business of our business?'" (DuFour & Eaker, 1998, p. 21). The ability of a leader to create the sense of direction in a team is a necessary leadership skill (DuFour et al., 2008; Lambert, 2003). Research on leadership is very clear about the importance of developing and articulating a shared vision among all school members (Blankstein, 2004; Day, 2000; Kouzes & Posner, 2006; Lambert, 2003; Senge, 2006). Based on effective schools

research, visions should be created. DuFour and Eaker (1998) advised that vision statements should be written with a focus on the future, lasting 5 to 7 years (p. 82). Once the vision is established by the team, the leader needs to institutionalize the vision into the culture of the building (DuFour et al., 2008). Valuable vision statements create a proactive team that is focused on the future, and they give guidance to the individuals on the team.

Inquiry Based Use of Data

The third critical leadership construct is inquiry-based use of data to inform shared decisions and practices (Lambert, 2003, p. 6). Attention to data-driven decision making is a foundational element to the school-improvement process and PLCs (DuFour et al., 2008; Schmoker, 2006). Inquiry necessitates that team members engage in dialogue, questioning, and discussion to critically analyze data. Four data types should be considered: achievement data, contextual data, perception data, and demographic data (Bernhardt, 2004). Inquiry-based use of data allows those involved to experience personal and professional growth (DuFour, 2003; Haycock, 2005). DuFour et al. (2008) shared that teachers and administrators must participate in data-drive dialogue on a regular basis in collaborative teams. The inquiry process leads to gaining information about individual student progress, effectiveness of instructional techniques, and advancement toward content standards. DuFour et al. (2008) believed that our schools are "data rich and information poor" (p. 26). They advised that data analysis was essential for educators in order to understand and plan for the needed changes. Data need to be examined in a systematic process in order to make valuable decisions about future instruction needs (Bernhardt, 2004; DuFour & Stiggins, 2009). Peters (1992) shared the

importance of inquiry-based data processes when he stated, “What gets measured gets done” (p. 2). When inquiry-based use of data becomes the routine practice in schools, school leadership capacity is strengthened.

Broad Involvement, Collaboration, and Collective Responsibility

A fourth critical structure of high leadership capacity, according to Lambert (2003), is broad involvement, collaboration, and collective responsibility (p. 7). “Educators have known for quite some time that building a collaborative culture in which people work together interdependently to fulfill their shared purpose and achieve their common goals is an essential strategy for sustaining school improvement” (DuFour et al., 2008, p. 173). Research studies conducted between 1999 and 2004 cited that the collaboration of teachers was a decisive factor in improving student achievement in four out of five schools (Duke, 2006). Southwest Educational Development Laboratory studied low-achieving schools and determined few opportunities for staff to collaborate (Morrissey, 2000). These studies, as well as the information synthesized in the literature review, confirm the belief that that collaboration may have a positive impact on student achievement. DuFour and Marzano (2009) believed that positive collaborative cultures provide for continuous energy and thus support sustainability of PLCs.

Reflective Practice and Innovation

The fifth critical leadership construct is reflective practice and innovation (Lambert, 2003 p. 7). The need to determine what factors are being effective in improving student achievement and what factors are having little or no impact on student achievement is especially critical today, as schools face increasing demands to improve student learning (Senge, 2006). Reflection has been identified in the research as a

powerful method to cause change in the classroom (Buffum et al., 2009). Time in collaborative reflection should center on student learning, instructional strategies, and academic content. The job-embedded professional development created through this research study allocates time during the school day for teachers to collectively solve problems stemming from challenges they face in the classroom.

High or Steadily Improving Student Achievement

The sixth critical leadership construct is high or steadily improving student achievement (Lambert, 2003, p. 7). DuFour et al. (2008) shared that the key to student achievement is for teachers to "focus on learning instead of teaching" (p. 332). Teachers must be clear about what they are going to teach, have a variety of instruction techniques to use in the delivery of the content, and administer assessments to determine when students have mastered content and when content needs to be retaught using a different method. Senge (2006) stated, "The rationale for any strategy for building a learning organization revolves around the premise that such organizations will produce dramatically improved results" (p. 44). One of the fundamental purposes of PLCs is to allow educators to work collaboratively to promote student success.

Lambert's Critical Leadership Constructs

Keith (2009) examined leadership-capacity perceptions and their relationship to student achievement. The LCSS (Lambert, 2003) was used to collect the perception data in this quantitative study. Participants included 7 principals, 20 assistant principals, and 391 teachers from 7 school districts. Pearson *r* correlation was used to determine a relationship in the data. The dependent variable in the study was academic achievement. Student achievement results from the state assessments were used. The results of the

study indicated that there was a positive correlation between the principal's leadership capacity and student achievement in all seven participating school districts. This correlation was found in both state mathematics and reading scores. Educational systems that sustain leadership capacity at a high level are important to the student achievement in the school.

The results of Keith's (2009) research study support those found in the literature review. Learning communities that stress leadership involvement by all parties and employ collaborative cultures will experience teacher and student success. Understanding that a principal's leadership capacity has a direct correlation on student achievement has a significant impact on the current research study. Assuring that the six leadership constructs assessed in the LCSS (Lambert, 2003) are the focus of the professional-development model is a priority. Efforts must be made to develop the capacity of principals in the six areas identified.

Crean (2007) also conducted a study to determine the impact of leadership capacity of the principals on student achievement. The principals identified for the study were leading distinguished Title I schools with Academic Awards. Crean (2007) employed a descriptive design for the study. The 41 elementary principal participants could complete the LCSS (Lambert, 2003, p. 88) survey electronically or on paper. Crean (2007), during the data-analysis process, determined quadrant scores by tallying total scores for each of the six sections on the survey and dividing by the number of questions posed in the survey. The six quadrants represented the six leadership capacities identified by Lambert (20030 as essential in sustaining school improvement initiatives. Central tendency and measures of variability were determined (p. 99) in the study.

The quantitative data gathered indicated that the principals in the study (Crean, 2007) exhibited the highest degree of skill in the following areas of the six leadership capacities: (a) focusing on student achievement; (b) using data/evidence to inform decisions and teaching practices; (c) talking with families about student achievement: (d) making time available for staff learning to occur; (e) teaching and assessing so that all children learn; and (f) performing collaborative work in large and small teams (p. 109). Crean's study was able to verify that participating principals from distinguished Title I schools with Academic Awards exhibited a high degree of skill in leadership capacity; in turn each of these schools earned academic-achievement awards for student achievement success. The principals in the study practiced each of the six Lambert's leadership capacities at a high level.

The studies by Keith (2009) and Crean (2007) provided insight to educators who are charged with the task of closing the achievement gap and designing instructional curriculum to meet the needs of *all* students. Through the data collection and analysis, these studies connect the leadership capacity of the principal with student achievement. The information obtained through this literature review regarding leadership capacity had immediate implications for the study. The data further solidified the influence that the six leadership capacities (Lambert, 2003) have on the principal's leadership ability. The research data provided by Keith (2009) and Crean (2007) were incorporated into the professional-development model in order to provide further evidence of the significance of the leadership capacities with increasing student achievement.

Implementation Plan

The resources needed for implementation of the professional-development model that is a result of this research study are identified in the following subsection.

Potential Resources

Training materials and the training site are the primary resource considerations for successful implementation of the professional-development model (Guskey, 2003b).Two weeks in advance of the first training session each participant will receive a copy of *Revisiting Professional Learning Communities at Work: New Insight for Improving Schools* (DuFour et al., 2008). Participants will be asked to read the contents of this book to help establish background knowledge and common vocabulary on the topic of PLCs. Research by Weiss and Pasley (2006) confirmed the need for professional-development trainers to establish common vocabulary and background knowledge of the participants involved. Through this process, the likelihood that the professional development will cause a change in current practice is increased (p. 26).

Another necessary resource will be establishing and setting up a training site. The professional-development site will be a comfortable environment that supports collaboration among the participants (Easton, 2004). A nonthreatening, welcoming environment will be created. Tables will be arranged so participants sit in groups for dialogue. In addition, the training site will allow adequate space to facilitate large-group activities that involve movement of all the participants. “Powerful professional learning designs provide the activities that make PLCs more than a structure” (Bernhardt, 2004, p. 111). Each participant will be provided with a laptop to use during the on-site training. Uses will include taking training notes, collecting information, and accessing websites.

Pertinent websites will be posted in advance on http://www.sharetabs.com/ for easy access during the training. A web-calendar will be designed to schedule the on-site visits provided to the participants between each of the training sessions. Participants will have access to this web-calendar to select visit dates and post notes regarding areas they would like addressed during the trainer's time in their buildings.

Existing Supports

SWPRSC in Sublette, Kansas will be the existing support for the successful implementation of the professional-development model that is a result of this research study. SWPRSC will provide the training facilities, technology, materials, and supplies. In addition, SWPRSC will market the professional development through their website, e-mail distribution lists, and membership councils. SWPRSC will be critical to the successful implementation of the PLC training developed from this study.

Potential Barriers

Budget cuts in education both at the state and federal levels may threaten teachers' access to professional-development opportunities. If communities are truly committed to educating students to high levels, teachers need to experience professional growth themselves through trainings (Guskey, 2000). As schools are dealing with shrinking budgets, eliminating professional development appears to be a quick answer to the problem. This barrier will be addressed by sharing the synthesized research collected through this study that confirms the importance of the development of the six leadership constructs in sustaining school-improvement initiatives. The research-based design of the professional-development model will help ensure a high-level application of the information. The three inherent outcomes of this study can have a direct impact on

student achievement in the buildings of the participants. Convincing information will be communicated to provide justification for the expenditure. Appropriate funding is a significant barrier to the professional-development model created as a result of this research study. Decreased support for professional development will have lasting impact on student achievement (Hirsh, 2003a).

Another barrier to the successful implementation of the professional-development model is the willingness of principals to invest their time. The training is designed in a research-based, multiday model. The training will occur over 3 days, about 4-6 weeks apart. According to a study conducted by Garet et al. (2003) "professional development is higher quality if it is sustained over time and involves a substantial number of hours" (p. 933). Principals' time is a premium commodity (Kolsky, 2009). Their positions in the school demand multiple hours each day and carry tremendous responsibility (National Association of Secondary School Principals, 2004). Getting principals to commit to the time needed to participate in this professional-development model may be a barrier, despite the support of the research that an extended time is a best-practice design, and the tenet that PLCs are a research-based field of study. The results of the synthesized research will be needed to convince principals'' that there will be a positive return on their time investment.

Timetable

The implementation of this project will take place in early fall 2010. In order to effectively deliver the professional-development model created by this research study, a list of actions and their timeline have been developed and are listed below.

1. Present a break-out session at the Kansas United School Administrators' Summer Conference and the Kansas State Department of Education Summer Conference to communicate information regarding the PLC Leadership training opportunity to administrators statewide. Synthesized data from the literature review and the study will be shared to provide support for the model. (June 2010)
2. Design a marketing brochure and distribute throughout the state using the Kansas State Department of Education administrative directory. E-mail LISTSERV groups will also be created for electronic distribution of the brochure. (June 2010)
3. Seek support of the professional-development model from DuFour and DuFour. Incorporate a quote from DuFour and DuFour in the marketing materials. (June 2010)
4. Set up the registration process using the SWPRSC web-based registration process. (June 2010)
5. Reserve the training room. (July 2010)
6. Purchase *Revisiting Professional Learning Communities at Work: New Insight for Improving Schools* (DuFour et al., 2008) and distribute copies to participants as they register with a letter outlining the training and expectations of prior reading. (August–September 2010)
7. Professionally print training guides developed as a result of this research study for distribution to participants of the professional-development training. (August 2010)

8. Electronically collect preassessment data from the participants through the LCSS (Lambert, 2003). Analyze data for strengths and weaknesses of the participants using Lambert's six critical leadership constructs and customize the training to the needs identified. (September 2010)
9. Provide the training over a period of 4 months with on-site visits to each participant between professional-development sessions. (September–December 2010)
10. Electronically administer the LCSS (Lambert, 2003) at the conclusion of the training to determine growth by each participant in the six critical leadership constructs.

Roles and Responsibilities

I will have the primary role in the implementation and delivery of the professional-development model created through this research study. I will also carry out the activities listed in the time table above. SWPRSC will provide administrative-assistant support for mailings, LISTSERV creation, the registration process, billing, printing, and training-room needs.

Project Evaluation Plan

An outcome-based formative evaluation plan will be used. The evaluation process that will be implemented is focused on the professional-development model and its success in impacting the leadership capacity of the participants in the training.

Description of Evaluation

The focus of professional development evaluations has conventionally been a one-time survey completed at the end of the training. This one-time survey focuses on the

comfort of the participant (Sparks, 2004). This type of information is not substantial enough to determine the impact on the practice of teaching as a result of the training (Guskey, 2000). The type of program evaluation selected to be used is dependent on the information desired to facilitate programming decisions (McThige, 2008). Determining the effectiveness of the professional-development model will be of value to me in establishing a continuous-improvement model for the process. An outcomes-based formative evaluation process will be applied to the professional-development program. This evaluation process will measure the impact of the professional-development model designed as a result of the research project. The outcomes will include increased knowledge and skills of the professional-development participants in the area of the six critical leadership capacities determined by Lambert (2003) and the impact the six capacities have on the sustainability of school-improvement initiatives (p. 6). Principals who participate in the professional-development model will complete the LCSS (Lambert, 2003; see Appendix B) in a pretest/posttest format. The survey consists of 30 multiple-choice questions and asks participants to record their perceptions using a 5-point Likert scale. The range includes the following:

1. We do not do this at our school (p. 110).
2. We are starting to move in this direction (p. 110).
3. We are making good progress (p. 110).
4. We have this condition well established (p. 110).
5. We are refining our practice in this area (p. 110).

The survey queries respondents as to their perceptions of current practices in their schools. The LCSS (Lambert, 2003) takes approximately 10–15 minutes for participants

to complete. The intent of the survey is to discover spheres of leadership capacity (L. Lambert, personal communication, April 10, 2009).

According to Lambert (2003) there are six critical leadership constructs of a school that hold the highest level of leadership capacity: schools that possessed high principal skill and high principal participation. They are as follows: (a) broad-based, skillful participation in the work of leadership; (b) shared vision resulting in program coherence; (c) inquiry-based use of information to inform shared decisions and practice; (d) roles and responsibilities that reflect broad involvement, collaboration, and collective responsibility; (e) reflective practice and innovation as the norm; and (f) high or steadily improving student achievement (pp. 6–7). These six critical constructs formed the elements measured by the LCSS (Lambert, 2003).

In the professional-development model designed from this research study, the LCSS (Lambert, 2003) will be administered 2 weeks prior to the first training session to those participating principals. This formative-assessment data will provide the necessary information regarding the skill level of the individual participants in each of Lambert's six critical leadership constructs. To measure the growth in leadership, the LCSS (Lambert, 2003) will also be administered to all the participants at the conclusion of the professional-development model. Each participant's pretest and posttest data on six critical leadership constructs will be compared to determine if growth occurred. The mean Likert scale score for the pretest and posttest will be used for comparison.

In addition to using the LCSS (Lambert, 2003) for data collection, a checklist developed by Sweeny (1998) will be employed to assist in the planning and

implementation phase of the evaluation. Table 11 outlines the checklist that will be implemented for tracking the outcomes-based formative evaluation process.

Table 11

A Model for Program Evaluation

Steps in the process	Check when done	Planning details
Set the goals—purpose for the evaluation		To increase knowledge and skills in each of the professional development participants regarding the six critical leadership constructs (Lambert, 2003)
Identify the audience for the data		Principals
Define the indicators of success for each audience		Posttest LCSS (Lambert, 2003) results to show an increase in the participants' leadership capacity over the pretest results
Check the relevance of each indicator to program goals		This research study has shown that the 6 leadership constructs are vital to the success of sustaining PLCs
Determine the scope of the evaluation process		Participating principals
Organize the indicators by data type: learning (self-assessment); needs assessment; results (gains)		Learning and Needs Assessment Data: Pretest data of the LCSS (Lambert, 2003) Results: Posttest data of the LCSS (Lambert, 2003)
Select how to collect the data		The LCSS (Lambert, 2003) will be administered electronically both in the pretest and posttest process to the principals
Analyze and interpret the data		LCSS pretest data will be analyzed and interpreted prior to the first training session and posttest data will be collected following the last training session
Report conclusions and reflect on needed adjustments		Results of the pretest/posttest data will be shared with principals on an individual basis

Note: Adapted from *A Model of Program Evaluation,* by B. Sweeny, 1998, retrieved from http://mentoring-association.org/membersOnly/Process/ProgrEvalModel/html

Justification

The outcomes-based formative-assessment evaluation design allows measurement of the growth of the six leadership constructs in each individual principal who participates in the PLC professional-development model. In addition, the growth in the

overall group will be measured. Stufflebeam (1999) classified this type of program evaluation as "improvement-oriented" (p. 41). The pretest of the LCSS (Lambert, 2003) provides data needed to customize the professional-development content to the specific needs of the participants. The posttest data will assist in determining adjustments that need to be made in the professional-development-model content in the delivery of the material for the future trainings. This data-driven process will be implemented to evaluate the growth in the participants and to determine changes that will be made to the professional-development model. Black and Williams (2008) conducted a study on assessment, and their results "show conclusively that formative assessment does improve learning" (p. 61). The formative-assessment model is used by using the pretest/posttest assessment.

An outcomes-based formative evaluation process was selected based on numerous studies and resources that indicate the effectiveness of this evaluation process over traditional models of professional-development evaluation. One such study was conducted by K. Johnson (2008). K. Johnson conducted a quantitative research project to evaluate the impact of the formative-assessment process on professional development. Participants were 220 principals representing "advancing schools" and "static schools" (p. 6). Students from the advancing schools had increased student achievement over the last 4 years. Students in the static schools demonstrated a decline in student achievement in the last 4 years. Principals from these schools completed a two-part survey based on Guskey's work on evaluative procedures for effective professional development. Guskey (2000) stated, "The crucial point is that it is not the professional development per se, but

the experience of successful implementation that changes [teacher] attitudes and beliefs" (p. 139).

Results of the Guskey (2000) study established that there are many methods that schools implement to evaluate professional development. However, formative assessment evaluation was found to show a positive correlation between the professional-development training and the application of knowledge into the classroom. Furthermore, schools from the advancing schools practiced outcomes-based formative-evaluation practices in their professional-development model, while schools in the static-schools category practiced traditional methods of professional-development evaluation (p. 37). This information led K. Johnson (2008) to conclude that outcomes-based formative-evaluation practices applied to professional development have a positive impact on student achievement. An outcomes-based formative-evaluation process will be used to evaluate the professional-development model created as a result of this study.

A study conducted by McMahon (2008) determined that there was a positive correlation between formative assessments and increased levels of content knowledge. McMahon (2008) incorporated six formative assessments into an 8-week unit of study. During the study, the formative assessments were returned to the students for reflection once they were graded. The study established that that the formative-assessment process had a positive impact on retention of knowledge. In addition, it was found that the formative-assessment process impacted the depth of knowledge retained. Studies confirmed that outcomes-based formative-assessment processes maximize knowledge acquisition during the learning process (K. Johnson, 2008; McMahon, 2008). Significant

research supported a strong knowledge base for teacher quality and professional development in improving student achievement (Marzano, 2003; Schmoker, 2006).

Overall Goals

Although educators are working to develop, implement, and sustain PLCs, the process is difficult because of the complexity of involving all individuals in the school building. The result of the research study was to create a professional-development model to be delivered to elementary principals based on the synthesized research. The overall outcome of this research project was to increase the knowledge and skills of the critical leadership constructs that would sustain school-improvement efforts such as PLCs for the elementary principals of southwest Kansas. If the principal leadership has the skills, training, and passion for the process, PLCs can be sustained (DuFour et al., 2008; Marshall, 2007; Schmoker, 2006). Through the outcomes-based, formative-evaluation design, I will be able to show growth of participants' knowledge of the six leadership constructs through pretest/posttest results of the LCSS (Lambert, 2003). Results of the participants' responses according to the six critical leadership constructs by mean according to their Likert scale results will be compared.

Key Stakeholders

The key stakeholders in this research project will be principals who participate in the professional-development model. The outcomes-based, formative-evaluation plan pretest results of the LCSS (Lambert, 2003) will be shared with each of the individual participants prior to the start of the professional-development model. With this information, participants will know what background knowledge they need to review or new knowledge they needed to gain through reading and research prior to each

professional-development session. In addition, posttest results of the LCSS (Lambert, 2003) will be reviewed with each individual participant and growth identified and discussed. Future areas of focus will also shared based on posttest results.

Ultimately, the professional-development model will help students in the buildings of the participants. Educators involved with effective PLCs work together to clarify what students need to learn, frequently monitor students' progress, provide systematic interventions as necessary for individual student's needs, and enrich learning when a student has mastered the intended content (DuFour et al., 2008). These actions encourage continuous improvement (Buffum et al., 2009) and will positively impact student achievement. An increase in the leadership capacity of the principals is desired through their participation in the professional-development model created as a result of this study.

Project Implications

Social Change

The professional-development model created as a result of this study will contribute to improving the critical leadership skills of the participating principals. Research indicates that these critical leadership constructs are important to sustaining school-improvement initiatives such as PLCs (Lambert, 2003) for increased student achievement. The ability of a school to implement and sustain PLCs will help bring about educational reform in individual schools, which will in turn promote social reform on a much larger scale, as teachers collaborate in learning communities to ensure that all students learn.

The professional-development model in its support of PLCs will encourage a community of learners in the buildings. The bond of people and their connections to shared values and ideas is the defining characteristic of PLC schools. When teachers collaborate to improve education, they model collective inquiry to their students. There is widespread recognition among social theorists and policy advisors that a high-quality public education is essential (Hargreaves & Fink, 2006). The concept of people working and learning together to improve their lives, as demonstrated in a learning community, has value to society. This type of educational system will benefit not only the teachers and students in the system itself, but also communities and societies in which these collaborative teams exist (DuFour et al., 2008).

Local Change

PLCs have emerged as one of the ways for schools to support continuous improvement in student achievement (DuFour et al., 2008; Haberman, 2004; Schmoker, 2006). A missing component for successfully implementation of PLCs in southwest Kansas has been leadership that allows these schools to move through the implementation phase to development, and finally to create the ability to sustain themselves over time. Lambert (2003) stated, "As long as we have schools that need to be improved or improvements that need to be sustained, the role of the principal will be important" (p. 43). Further evidence to support the importance of principal leadership is found in a review of literature written by Crawford (2004), who concluded that "leadership of principals has significant effects on student learning" (p. 24). The professional-development component of this project study will provide principals with the synthesized

research regarding leadership constructs that will encourage them to apply those characteristics to sustain a PLC.

Section 4: Reflections

Educational leaders have been challenged by NCLB (2001) to raise the achievement level of all students in their schools. At the center of this mission has been the principal. Principals have been faced with the challenge of leading their staffs to create new instructional strategies that will increase the achievement level of all students. "The use of professional learning communities is the best, least expensive, most professionally rewarding way to improve schools. . . . Such communities hold out immense, unprecedented hope for schools and the improvement of teaching" (Schmoker, 2006, p. 105). The theoretical underpinnings of this project study were the research of DuFour et al. (2008), Lambert, (2003), and Lezotte (2005), who showed that learning communities in schools can empower teachers to create an environment to share their future work and increase student achievement.

Project Strengths

Much has changed in public education over the past decade. State standards have attempted to clarify what students must learn; state assessments are being used to monitor schools, and sanctions and penalties are now being imposed on schools and students based on assessment results (DuFour et al., 2008; Schmoker, 2006). While the term PLC has become commonplace, the actual practices of a PLC have yet to become a norm in education (Fullan, 2005; Haberman, 2004; Schmoker, 2006). The strength of this study stems from the synthesized research of leadership structures that support sustaining PLCs. This research provided information and knowledge that supports positive change in classrooms, buildings, districts, and communities through identification of critical leadership constructs that promote the sustainability of PLCs. Based on the results of this

study, educational leaders will benefit from both greater clarity about PLCs and specific strategies for sustaining the learning-community concept.

During the focus-group discussion, all six participants agreed that Construct 3 (roles and responsibilities that reflect broad involvement, collaboration, and collective responsibility) was the least practiced of the six leadership constructs. Quantitative data confirmed this finding as well. Construct 3 was determined to be the second least practiced by the survey. Participant 2 stated, "We just can't figure out how to adjust our time during the school day to allow teachers the collaboration time they need for PLCs without impacting the instructional time of our students." The frustration of each of the focus-group participants was evident when there was a discussion of time for PLCs.

DuFour et al. (2009) stated that the responsibility of the principal is "to create the conditions that help the adults in this building continually improve upon their collective capacity to ensure student success" (p. 309). Strength of the project lies in its genre of professional development. The training model can be adjusted to meet the needs of the participants, identified through the data-collection process. As a result of the quantitative and qualitative data analysis conducted in this study, the professional-development model design focused attention on the issue of time when training, Construct 5.

Participants in the professional-development model will be provided information on how to think differently about time, class schedules, and minutes of instruction to create time for teacher collaboration. Additionally, the participants will be taught successful brainstorming methods that involve multiple individuals in the process of finding solutions to identified problems, such as alternative ways to structure time during the school day. A foundational element of training based on Construct 5 will be to create

a shift in the schools' culture to focus on learning rather than constraints of the class schedule. This shift in culture will assist school leaders to develop a clear understanding of the leadership constructs that sustain PLCs.

Project Limitations

One of the project's limitations is that participants must have the dedicated resources to participate in the training. These resources include time, money, and flexibility. The professional development that was created as a result of this study is practical, multisensory, and multiday. On-site support is also included in the professional-development design. In order to gain the knowledge extrapolated from the study, the participants must take part in the professional-development model. Some principals may not have the flexibility or the authority to be away from their buildings for this time period. The professional-development training will also involve multiple costs. Costs will included the following: registration for the training, purchase of supplemental material to enhance the participants' background knowledge, and expenses such as mileage, meals, and lodging. Current budget constraints could be a barrier to participation in professional development. Principals who do not attend professional-development trainings due to budget issues or time constraints will not be exposed to the information synthesized from this research study.

Another limitation of the study is the fact that surveys are reactive (Isaac & Michael, 1997): Questions in a survey draw a reaction from participants. This reaction may or may not be a true reflection of the current practice. In addition, this study only measured the responses of those principals who agreed to participate in the study, and were willing to commit the time to do so. Therefore, the results represent the only sample

used in this study. During the focus-group discussion this limitation was acknowledged by Participant 2 who said, "I'm not sure other principals think the same way I do about developing the vision."

The outcome of this project study was to create a professional-development model that provides knowledge and understanding of the key leadership constructs needed to develop an environment for sustaining PLCs. The data were collected from 30 elementary principals through the LCSS (Lambert, 2003) survey and a qualitative focus-group discussion. The results of the quantitative and qualitative data determined the content of the professional-development design. Because surveys are reactive, the data gathered from the 30 participants may be positively or negatively influenced by other factors occurring in their lives during the administration of the survey. This project study contributed to the body of knowledge needed to sustain school-improvement initiatives such as PLCs. It examined leadership constructs of elementary-school principals in selected southwest Kansas school districts and how these constructs shape organizational culture and provide support for sustaining PLCs. The limitations of the study need to be recognized in order to have an understanding of the potential roadblocks that could surface with the implementation of the project.

Recommendations

This section includes recommendations for action to be taken by elementary principals to implement and sustain PLCs. These recommendations are based on the conclusions drawn from the literature review and on the findings from this study. With NCLB (2001) in place to close the achievement gap and to assure that all students achieve academic proficiency, educators are compelled to be an integral part of a

successful school. NCLB has allowed for "renewed and broader attention to student and teacher accountability" (Mitchell & Reutzel, 2007, p. 715). PLCs can be a resource for schools that will allow them to reach this educational goal.

The first recommendation is that elementary principals should arrange daily schedules to facilitate PLC time and advance a collaborative and supportive culture that works toward the development of sustaining PLCs in their schools. This can be accomplished through faculty meetings, department meetings, cross-grade-level meetings, and common teacher planning periods. Participant 26 shared in the focus-group discussion that teachers want to meet on a regular basis to solve problems arising from student concerns. This comment concerning time allocations for PLCs was enlightening. Participant 26 shared,

> We have so many teachers that coach a sport after school, so that time is out. We have a number of teachers that have small children that can't be taken to daycare before a certain time in the morning, so before school is out.

The results of this study support the information revealed in the reviewed literature that "principals in PLCs must be diligent in providing the time and support for this collaborative environment and must identify outcomes and accountability for the collaboration time" (Hord, 2004, p. 34). Solutions for schedule adjustments to allow time for teacher collaboration might include the following: common preparation time, parallel scheduling, adjusted start and end time of the contractual day, shared classes, and class activities. These suggestions will be covered in detail in the professional-development model developed as a result of this study (see Tool 4.1 in the PLC training guide).

The second recommendation, based on the findings from this study, is that elementary principals should design their professional-development opportunities to be action oriented, grounded in the critical leadership constructs of vision, collaboration, reflection, data analysis, student achievement, and broad-based participation. Justification for this emphasis is corroborated by the research. Lambert supported building leadership capacity from within the school and community as a method of sustaining school improvement initiatives (Lambert, 2003). DuFour et al. (2008) shared that "people in organizations accomplish most by *taking action* and believing in their capacity to learn through shared experiences" (p. 414). This "take action" philosophy is what elementary principals need regarding professional development in their buildings. Pfeffer and Sutton (2000) shared that they discovered the most effective organizations "learn by doing" (p. 249).

In the focus-group discussion, Participant 6 supported this research, stating that "We have to continually provide our teachers collaborative opportunities to learn, learning what works and what doesn't work through trial and error. We often learn more from our mistakes than our successes." The most relevant and valuable professional development is when educators are engaged in the work of PLCs with a specific and common goal at hand. Providing educators with action-oriented professional development that they need to be more effective educators will lead to greater levels of student achievement. In this time of accountability, professional development that is action oriented needs to be structured, planned, and delivered with the goal of increasing student achievement. Having teachers work in learning communities during professional-

development time will enhance the opportunities for learning and impact the classroom (Cohen, 2000).

The final recommendation, based on the findings of this study, is consideration of different ways to address the identified problem of the current research study. Through the focus-group discussion, the subject of instructional coaches and their role in successful PLCs emerged. Originally, impact of the instructional coach had not been considered as an integral piece of the success of sustainability of PLCs when designing this study. The focus-group discussion indicated that instructional coaches should be a part of a successful PLC process for sustainability. Participant 10 shared of instructional coaches, "Their knowledge base is tremendous. Their people skills are tremendous." When asked how instructional coaches specifically supported the PLC process, Participant 2 indicated that "They have grade level meetings, they also have coaches' meetings, and they hold individual meetings with all of the teachers."

Building principals are viewed as being in the position of an evaluator in their buildings. It was group consensus that this view is a barrier to teachers' willingness to openly describe problems and concerns in their classrooms. Instructional coaches, on the other hand, are viewed as content and instructional support. As a result of the information shared in the focus-group discussion, a recommendation of how to address the problem differently would be to conduct a study in the future that would include the instructional coaches and their impact on the sustainability of PLCs.

Analysis Discussion

Effective school improvement involves not only selecting and implementing the right reform initiative but also building the leadership capacity to accept change and carry

out the work of improvement. In this section, an analysis of scholarship, project development and evaluation, and leadership and change will be discussed.

Scholarship

This study showed that when educators have multiple opportunities to construct knowledge, experience reflection, and collaboratively solve problems, there is significant impact on the culture of the building. Improved culture of the building can lead to improved student achievement (DuFour et al., 2008; Hord, 2004; Schmoker, 2006). As discussed in Section 1 of this study, successful education is difficult to accomplish in isolation (DuFour et al., 2008). Educational leaders must understand the role that collaboration plays in student success. Teachers learn most effectively when they are coconstructors of their learning (Rasberry & Mahajan, 2008).

Schmoker (2006) shared that in making the transition from isolation to collaboration, the methodologies are much less important than the commitment of the educators to a new way of thinking on how to educate for student success. The focus-group discussion emphasized the power of a learning community and the opportunities available to educators for personal and professional growth. During the focus-group discussion, a powerful learning environment was formed by the 6 principals. As some participants were sharing successes and failures related to the PLC focus-group discussion questions, other participants were diligently taking notes and asking detailed questions of each other to gather more information to apply to their own buildings.

The demographic data on the principals was worth noting. Three of the 6 focus-group-discussion participants had been elementary principals in their buildings for more than 30 years. The districts that these 3 principals serve are only 30 miles apart, and yet,

these three principals had never met in those 30 years. These principals represent districts that are similar in size and demographics. Each of these three districts has experienced a radical change in their student populations. In the last 5 years there has been a considerable increase in students who are classified as migrant, English Language Learners, and/or of low socioeconomic status. These student populations are triggering many instructional challenges. Despite the commonalities in these districts and the looming pressure of increasing student achievement in all of these subgroups, these principals had never taken the opportunity to talk collaboratively.

These 3 principals, along with the other principals in each of their districts, would benefit from PLC time to discuss students, successful instructional practices, experienced failures, and curriculum. At the conclusion of the focus-group discussion, one of the focus-group participants said, "Why don't we do this on a regular basis around different subjects that each of us are facing? I learned so much today from all of you." Fullan (2007) shared, "If educators are to help more students learn at higher levels, they must break free from the restraints of their traditional structures" (p. 297). PLCs can impact much more than a grade level, a building, or a district. Educators will benefit from all levels of PLC teams in order to "become a better learning profession" (DuFour et al., 2008). PLCs need to cross district boundaries.

A reflection of my personal growth in the area of scholarship is noteworthy. My involvement with PLCs began over 20 years ago as a classroom teacher. As a beginning teacher, I felt remarkable empowerment from being part of a learning community that worked together for students. The outcome of this learning-community environment was increased student achievement. After about 6 years, I moved to another school, and my

PLC experience was significantly different. The school indicated that they were "doing" PLCs, but teachers and students were not experiencing success. The culture was not that of a team but of isolation and competition. These contrasting experiences furthered my desire to uncover why some PLCs are successful and sustain themselves over time while others are poor attempts at teaming that die out quickly.

As I moved through the ranks from teacher to administrator, I read journal articles, attended trainings, and visited other successful PLC schools in order to uncover those hidden reasons for success. I soon realized that the school leader was the key element to the success of sustaining school-improvement initiatives including PLCs. The theme of leadership was driven home over and over in the readings. In visits to schools, classroom observations, and interviews with principals and teachers, I observed both effective and ineffective examples of PLC implementation that supported the role the leader plays in the sustainability of school-improvement initiatives. But the question remained in my mind, why?

What makes some leaders more successful than others in initiating, developing, and sustaining successful school-reform initiatives? I have learned through the completion of this study that there is significant research in the area of effective leadership (Brookover & Lezotte, 1979; Phillips, 2003; Schmoker, 2006). From the literature review conducted in this research study, I now understand there are specific qualities that have been identified in effective leaders. Lambert's research concerning leadership capacity identified six critical constructs that a leader should develop (Lambert, 2003). The six critical leadership constructs are (a) shared leadership, (b) vision, (c) inquiry, (d) collaboration, (e) student achievement, and (f) reflection (Lambert,

2003, pp. 110–113). The results of this study have confirmed my belief that the leader is essential for implementing and sustaining school-wide support of PLCs (Barth, 1990; DuFour et al., 2005; Hargreaves & Fink, 2006). In addition, the results have strengthened my desire to continue to investigate effective leadership that will lead to improvements in the schools.

Project Development and Evaluation

I have been involved with professional development for over 25 years and have become a passionate reader of websites, research studies, and journal articles on this subject over the past 10 years. Essentially, professional development is critical for professional growth and is directly linked to improved student achievement (Guskey, 2000). Unfortunately, most schools are unable to reap the benefits because change is a large component of what needs to occur. Resistance to change is one of the most difficult things to overcome when working to sustain school-improvement initiatives such as PLCs.

An analysis of the research data led me to reflect in one specific leadership construct area: broad-based participation. The project developed as a result of this research was designed as a 3-day professional development for building leaders. A training guide that was the outcome of this research study will be provided to each principal. The professional-development delivery will be multisensory and integrated with a number of research-based instructional practices. The research synthesized in this study indicated that isolation is the enemy of sustainability (DuFour et al., 2008; Haberman, 2004; Loertscher, 2005; Schmoker, 2006). The focus-group-discussion data also supported the negative impact isolation can have on effective learning communities.

Participant 26 stated that "When teachers and administrators work in a learning community, it means that you never have to face the challenges of teaching alone." Therefore, the project developed through this research study will be available to teams of participants from school buildings rather than the building leaders alone. With this collaborative structure in place, team members can provide support and encouragement when they return to their respective buildings. This model of project delivery will support the research and contribute to the success of buildings moving from PLC implementation to sustainability. "Confidence blooms when people feel connected rather than isolated, when they are willing to engage and commit to one another, when they can act together to solve problems and produce results" (Kanter, 2004, p. 83).

An adjustment in the professional-development design for the project will be to include broad-based participation in the training component and involve multiple stakeholders from each building rather than the principal attending alone, as originally planned. "Changing people's behavior is the core challenge of effective professional development" (Kotter & Cohen, 2002, p. 2). Easton (2004) advocated that leaders must realize that "only a change in practice produces a genuine change. . . . Grab people by their practice and their hearts and minds will follow" (p. 41). The professional-development model created from this research will emphasize putting the theory into practice.

Leadership and Change

The data analysis from this study assisted in identifying the least and most commonly practiced of Lambert's (2003) leadership constructs. In order to have effective, sustained school reform such as the implementation of a PLC, effective

leadership is critical (Colburn, 2003; Hargreaves & Fink, 2006). The thought that change is not easily accomplished is supported in the findings of the literature review and the study. The central focus on sustaining change is the impact on school culture through effective leadership (DuFour et al., 2008; Moffet, 2000; Roy, 2006). Change is difficult and should be seen as a process not an event, as supported by the research of Colburn, (2003) and G. Hall and Hord, (2001).

Finally, many principals lack the required information and tools to implement change successfully (Pfeffer & Sutton, 2000). The present research study considered how elementary-school principals in selected school districts shape organizational culture and provide the critical leadership constructs that sustain PLCs. The outcome of this project study was to create a professional-development model that provides knowledge and understanding of the key elements of leadership needed to sustain PLCs. These leadership capacities include the following: (a) broad-based, skillful participation in the work of leadership; (b) a shared vision resulting in program coherence; (c) inquiry-based use of information to inform shared decisions and practice; (d) roles and responsibilities that reflect broad involvement, collaboration, and collective responsibility; (e) reflective practice and innovation as the norm; and (f) high or steadily improving student achievement (Lambert, 2003, pp. 6–7).

Three critical leadership constructs were indentified by using the LCSS (Lambert, 2003) as the most commonly practiced. Those constructs were Construct 1 (broad-based skillful participation), Construct 3 (inquiry-based use of information to inform shared decisions and practice), and Construct 6 (high or steadily improving student achievement). The least commonly practiced leadership construct was Construct 5

(reflective practice and innovation in the work of leadership). The content of the professional-development model was directly impacted by the results on each of the 30 questions in the LCSS (Lambert, 2003). In developing the content of the professional-development model, each individual question in the six leadership constructs was considered response by response, not in aggregate form.

During the study, much was learned about leadership and change. Leadership is an enormous field of study. Through reviewing the literature and analyzing multiple research studies (Hord, 2004), I have a clearer understanding of the six critical leadership constructs and how each affects the outcome of PLC sustainability. Each of the six critical leadership constructs (Lambert, 2003) works in combination to provide the necessary culture for sustaining PLCs. Through the identification and understanding of the six critical leadership constructs, leaders can focus their professional growth according to their specific leadership needs.

Qualitative Research Questions 3 and 4 asked the focus group participants to identify which of the six critical leadership constructs were the most and least practiced in their buildings. In this research study, the 6 principals that participated in the focus-group discussion collectively identified the least commonly practiced construct to be reflective practice and innovation as the norm (Construct 5) and the most commonly practiced leadership construct was inquiry-based use of information to inform shared decisions and practice (Construct 3). This specific information will allow the breakdown of the larger concept of leadership into six smaller constructs for detailed, focused, in-depth targeted improvement of leadership skills. With this focused improvement, change

will be more visible and happen more quickly, as the learning is directed toward small specific tasks.

Qualitative Research Questions 1 and 2 asked the 6 focus-group participants their perceptions of what leadership expertise was most important to sustaining a PLC. The 3 highest scoring principals and 3 lowest scoring principals collectively had different responses. The 3 highest scoring principals' perceptions indicated that Construct 1 (broad-based skillful participation) was the most important to sustaining a PLC. They shared that their experience had shown them that broad-based skillful participation allowed principals to develop leaders at all levels in their buildings. Through this distributive-leadership model, leaders have the ability to develop a culture of trust and personal accountability that contributes to sustainability. The 3 principals that scored the lowest indicated that their perception of what was important to the success of sustaining PLC was the involvement of an instructional coach to support instructional change. These 3 principals indicated that, from their experience, the instructional coaches were a key component of successfully sustaining PLCs. Although the responses of the two groups of principals that participated in the focus group varied concerning their perceptions of the leadership constructs that are most important to sustaining a PLC, I believe that neither group is incorrect and that both groups' perceptions should be valued.

Analysis of Self

Scholar

This study provided significant personal and professional growth as I continue to strive for excellence as a professional leader in the field of education. Through ongoing reflections of the research and survey results, I continue to build strengths and improve

weaknesses as an educational leader. In reflection, one of the most significant areas of growth in the area of scholarship for me was in the ability to use online search tools to gather information. Online databases such as Articles First, ProQuest, EBSCOhost, Educational Resources Information Center, Southwest Educational Development Laboratory, and NSCD were accessed frequently to gather data regarding the research topic. I have expanded these new skills as I improve my ability to access current research and information on a variety of topics.

Practitioner

When reflecting on the value of a PLC, I realized the remarkable power of leadership in the educational setting. Instructional techniques will come and go with the latest wave of information, but leadership can influence teacher knowledge and instruction throughout the changes. This is congruent with the literature, which states "without a competent caring individual in the principal's position, the task of school reform is very difficult" (DuFour et al., 2008, p. 131). As a practitioner, I learned through this research study the value of all six critical leadership constructs and that these constructs are not held exclusively for those persons with the title of administrator. Construct 1 (broad-based, skillful participation in the work of leadership) was the highest ranking construct in the quantitative-data analysis. It was also identified during the focus-group discussion as the most important construct by the 3 highest scoring principals. Concerning broad-based participation, Participant 29 shared in the focus group, "I don't think you can do it in a dictatorship where you just go in and just demand. You have to get teachers involved from the start and get buy-in early." In the fast-paced world of

education, it is easy for leaders, including me, to forget to slow down and get the team on board with decisions and directions.

As a result of analyzing this study another of my realizations is the importance of culture in sustaining PLCs. Barth (2003) wrote, "The school's culture dictates, in no uncertain terms, the way we do things around here" (p. 7). The review of the literature was clear that "meaningful, substantive, sustainable improvement can occur in an organization only if those improvements are anchored in the culture" (DuFour et al., 2008, p. 90). Focus-group comments confirmed the research. Participant 10 shared, "One of the things that I think is critical when it comes to PLCs is to develop the PLC culture." Participant 26 agreed when he stated, "Culture is the key to the whole thing." As a practitioner, I realize that all schools have a culture. The culture may support collaboration or isolation, it may be student centered or teacher centered, but each school has a culture. As a practitioner and leader of an organization, I learned that I need to spend time developing the culture in the organization.

The final realization I had as a result of this study is the recognition that principals in the 21st century should become actively engaged in building their own leadership capacity. Principals must identify their individual leadership needs and capacity-building practices that are their strengths and weaknesses (National Association of Secondary School Principals, 2004). Principals must seek assistance and find ways to improve the leadership capacity through study, trainings, and mentors (Sergiovanni, 2005). As a practitioner in the field of education, I should always be searching for ways to improve practices in the classroom. Principals should take responsibility for directing their own professional development and ensure that they are aware of the current trends and best

practices in the areas of (a) research-based leadership practices, (b) instructional leadership, and (c) leadership through the change process.

Project Developer

Rubin and Rubin (2005) stated, "Rather than pretend to have no biases, it makes sense to examine your preconceptions and work out how your feelings might slant the research and then with this understanding in mind, work to formulate questions to offset your biases" (p. 82). This information was taken into consideration when questions were designed for the qualitative portion of this study. The qualitative questions were the following:

1. Among the 3 principals who scored highest on the Lambert's (2003) LCSS, what perceptions of leadership were most important to sustaining a PLC?
2. Among the 3 principals who scored lowest on the Lambert's (2003) LCSS, what perceptions of leadership were the most important to sustaining a PLC?
3. Which of Lambert's (2003) six critical constructs did the principals consider the most practiced and why?
4. Which of the Lambert's (2003) six critical constructs did the principals consider the least practiced and why?

Additional questions were specifically designed to collect data to answer the four main qualitative research questions. Six participants took part in the focus group. Their discussion was recorded and professionally transcribed. The accuracy of the transcript was assured through the member-checks process. Through this process, participants were

given the opportunity to read the transcript for accuracy and to assure that what was written in the transcript represented what they meant to say. Participants were allowed, through this member-checks process, to make changes to the information prior to the analysis. An inductive analysis was used for the coding process on the collected data. Rubin and Rubin (2005) stated,

> Analysis in the responsive-interview model proceeds in two phases. In the first, you prepare the transcripts, find, refine, and elaborate concepts, themes, and events; and then code the interviews to be able to retrieve what the interviewees have said about the identified concepts, themes, and events. (p. 201)

I prepared the transcripts, read and re-read looking for themes in the raw data, and created six categories. Although significant planning was used when setting up this process to ensure substantial data were collected in the qualitative area, it was difficult to draw any significant conclusions as a result of this analysis. As a project developer, I need to continue to study the area of qualitative data collection to improve the collection design and analysis.

In this research study, focus-group results demonstrated that all of the participants believed that PLCs were beneficial to the educational process. The synthesized-study results implied that school leaders seeking to implement change can consider PLCs a vehicle for such change. Previous research also validated these findings: PLCs are a school-reculturing effort being proposed as a way to rethink the ways in which schools are organized for teachers' work (Eaker et al., 2002; Hord, 2004).

Reflections

Perhaps the most stimulating aspect of this research was its potential to create positive social change. Walden University's website (2009) asserts that

> Knowledge is most valuable when put to the use for the greater good. Our students, alumni, and faculty are committed to improving the human and social condition by creating and applying ideas to promote the development of individuals, communities, and organizations, as well as society as a whole. (Walden University, para 2)

Developing and sustaining PLCs, promoted in this study, allows for a shift in understanding and altering the lens through which educators look as they consider teaching and learning. "In a professional learning community, educators create an environment that fosters mutual cooperation, emotional support, and personal growth as they work together to achieve what they cannot accomplish alone" (DuFour & Eaker, 1998, p. xii). The PLC is a resource that can propel social change in education.

Another reflection, is the realization of the importance of building-wide development of broad-based skillful participation in the work of leadership (Lambert, 2003, p. 9). Marzano et al. (2005) shared that distributed leadership is an effective model to sustain school-improvement initiatives. In this model the principal is not the leader alone, but there is a team of individuals responsible for the task of leadership. According to Kouzes and Posner (2006), "Liberate the leader in everyone, and extraordinary things happen" (p. xx). Leaders need to cultivate leadership capacity in their buildings.

In addition to the research found in the literature review, the results from this study also support the reflection concerning the importance of broad-based skillful

participation. The quantitative and qualitative data were conclusive, demonstrating that the work of leadership is not only the responsibility of the principal but the responsibility of a leadership team in the school. In the focus-group discussion, Participant 6 shared, "We can't do this alone; we need a number of individuals involved who are willing to step up and be leaders in the PLC process." In the quantitative data, the 3 highest scoring principals in the study responded on the survey that broad-based skillful participation in their schools was the most established of the six critical leadership constructs. PLCs encourage leaders to involve teachers in small and large teams. Implementing PLCs by design provides the framework necessary for leaders to execute broad-based skillful participation through the collaborative team through time with grade-level teams, cross-grade-level teams, content-area teams, and so on. Through my lens as the researcher and practitioner, the impact on the educational system of initiating and ultimately sustaining PLCs is evident. This research study provided new insight and encouragement regarding the advancement of the six leadership constructs to support the sustainability of PLCs.

Implications, Applications, and Directions

Schools can benefit from having their teachers function in PLCs. During the PLC process, teachers develop levels of trust in sharing their practice, and increase and enhance their teaching skills to benefit the students of the school (DuFour et al., 2008). Principals with the leadership skills identified by Lambert (2003) and supported by the present research study can have an impact on the sustainability of learning communities (Eaker et al., 2002; Hord, 2004; Lambert et al., 2002). Principals who are aware of the challenges that teachers face may have the power to make changes and reduce problems associated with sustaining PLCs.

Implications

This study provides insight for the schools in southwest Kansas charged with the responsibility of closing the achievement gap and meeting adequate yearly progress on state assessments. The research review conducted in this study provides support for positive social change in schools who wish to sustain PLCs in their buildings. The study provided a framework for leadership capacity that will assist elementary principals in sustaining PLCs through the application of Lambert's six critical leadership constructs (Lambert, 2003). The research had implications for project development, as it assisted in identifying the level of impact of the individual leadership-capacity constructs identified by Lambert (2003). The research findings drove the design of the professional-development model that was created as the project for this study.

Through the research, it was identified that the participants needed support in the area of Construct 4 (roles and responsibilities that reflect broad involvement, collaboration, and collective responsibility) and Construct 5 (reflective practice and innovation as the norm). According to the quantitative data collected through the Lambert LCSS (Lambert, 2003), all 6 principals concurred that Constructs 4 and 5 were the two least commonly practiced of the six critical leadership constructs (see Table 9). The mean Likert score for Construct 4 was 3.3, and for Construct 5, the mean Likert score was 3.25.

The qualitative data collected through the focus-group discussion confirmed the quantitative results. The primary theme that surfaced during the focus-group discussion as a barrier to the implementation and practice of Construct 4 and 5 was the issue of time. Participants indicated that for Construct 4 (collaboration) to be practiced at the refining level, teachers needed to have time to meet in various teams. Designing schedules during

the school day for teachers to have time set aside for teaming was recognized through the data to be a substantial road block in the practice of collaboration. Consequently, information regarding alternative schedules and creative ways to think about time were included in the professional-development model developed as a result of this study (see Tool 4.1 in the PLC training guide).

Time was also a concern for Construct 5 (reflective practice and innovation as the norm). In this case, however, the barrier was trying to find a time and a method for educators to reflect on a regular basis. The research from Dana and Yendol-Hoppey (2009) shared "reflection is a powerful vehicle for learning and reform" (p. 6). In the focus-group discussion, Participant 2 indicated that he was implementing a reflection technique as way for this teacher's to routinely reflect. Participant 2 said, "If I really want to slow folks down to think (reflect), I ask them to write." This participant continued by saying, "I'm trying to get them to think about what they're doing." Implications of this study indicated that participants in this research study needed additional guidance and training concerning Construct 4 (roles and responsibilities that reflect broad involvement, collaboration, and collective responsibility) and Construct 5 (reflective practice and innovation as the norm). This need was addressed specifically during the development of the professional-development model that was a result of this research study.

The research can be applied by school leaders just beginning to initiate PLCs or school leaders who are already implementing PLCs. The ability of a school to implement and sustain a PLC helps to bring about educational reform in individual schools, which will, in turn, promote social reform on a much larger scale as teachers collaborate to ensure that all students learn. Results from the present study helped direct the

development of a PLC leaders' training guide that will assist principals and other leaders of PLCs in understanding the critical leadership constructs that guide them in implementing and sustaining PLCs.

Applications

1. It is recommended that the LCSS (Lambert, 2003) be administered to corroborate faculty perceptions regarding the existence of leadership constructs in their school. The findings can be helpful in recognizing those leadership constructs in need of attention as a staff.
2. It is recommended that the LCSS (Lambert, 2003) be included in the training of aspiring principals so they can have an understanding of the six leadership constructs and their importance in sustaining school-improvement initiatives.
3. In this time of increased accountability, it is recommended that principals use the LCSS (Lambert, 2003) when reporting to local boards of education regarding school-improvement practices.
4. Professional development for school leaders must be an ongoing process in a rapidly changing education environment. Mentoring for new principals should be considered. Knowledge is power. Providing principals with the resources to develop not only their own learning but also the learning and leadership of others is important for the future of public education.

Directions

NCLB (2001) has challenged educational leaders to develop effective strategies that will increase student achievement for all learners. This project study examined leadership constructs of elementary-school principals in selected southwest Kansas school districts and how these constructs shape organizational culture and provide support for sustaining PLCs. The following recommendations for future study are made based on the findings and conclusions of this study:

1. Replicate the study with middle-school or high school principals to compare the results with this study on elementary principals.
2. Administer the LCSS (Lambert, 2003) to measure the leadership constructs of teachers to determine their capacity to sustain PLCs.
3. Carry out future research on specific interventions that promote growth in the six critical leadership constructs identified by Lambert (2003).
4. Carry out a more focused study to determine if one leadership construct increases student learning more than the others.

The outcomes of this study support the work of previous researchers. The overall recommendation is that further study be completed in schools that have sustained PLCs in order to continue to gather information on what factors contributed to their success. The information provided by further study would give school leaders practical suggestions to apply in their schools. Because PLCs are so closely related to increased student achievement, evidenced in the literature, the implications of this study are crucial to school leaders who desire to improve student achievement in their own buildings. By understanding the interpretations of this study, leaders can impact social change by

developing and sustaining learning communities that encourage and support increased learning for both students and teachers.

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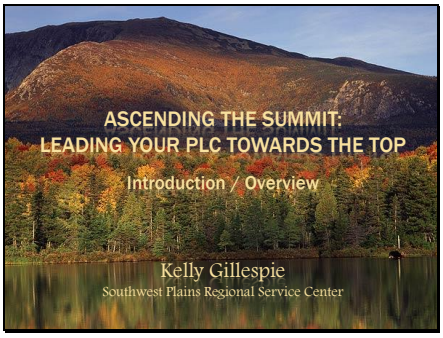
Appendix A: Project

Slide 1



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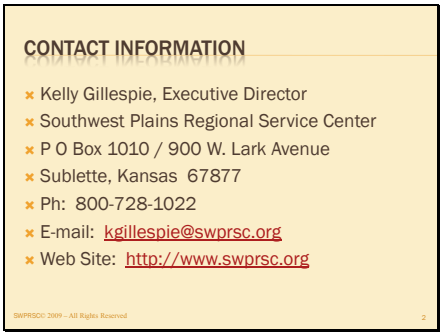

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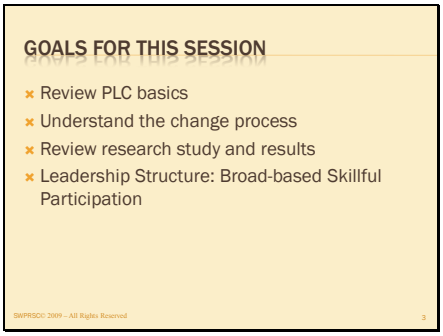

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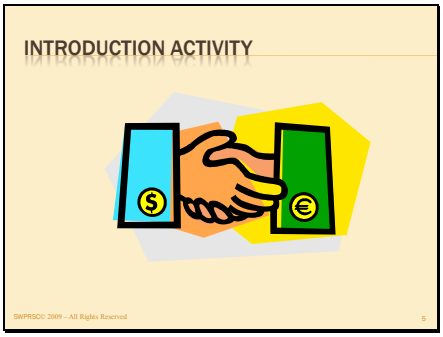
Slide 5



Get to Know Each Other: Provide the following directions to participants

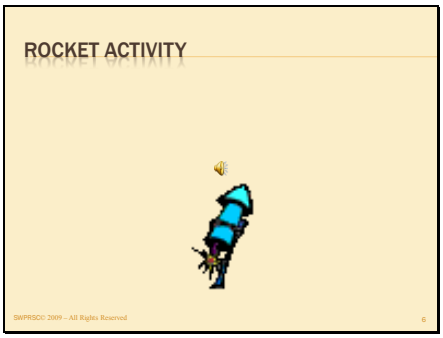
- Have each participant write their name on a sheet of paper.
- Find a partner, correctly introduce themselves and in 60 seconds each person share about themselves. Provide the topic, such as "What did you do this summer, favorite book read, what did you learn today?"

Stop the directions and let them complete activity. **STOP** Then continue with the directions below.

- Switch papers with the person you met and find a new partner. Introduce yourself to the new partner as if you are the person whose name is on the sheet of paper you are holding. **STOP**
- Switch partners one more time.
- Then each person find the person that is holding the paper with their name on it and see how closely the information they share matches with what was originally said.
- Have participants sit down when they are done.

Ask: "How many had a good match with the info that was shared? How many heard things that they never said?"

Slide 6



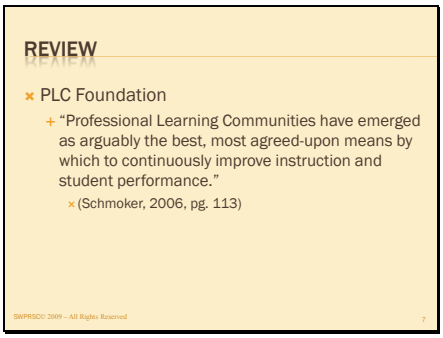
Tell participants they have now gotten to know a little about each other. Now, I'd like to learn a little more about your knowledge and background. I will state several questions and as I do, please stand up and sit down if the statement applies to you.
Read the statements below one at a time and allow participants to stand and sit.

- I am a practicing principal.
- I am a superintendent.
- This is my first year as an administrator.
- I have been involved in education for five years.
- I have been involved in education for ten years.
- I have been involved in education

for 20 years.

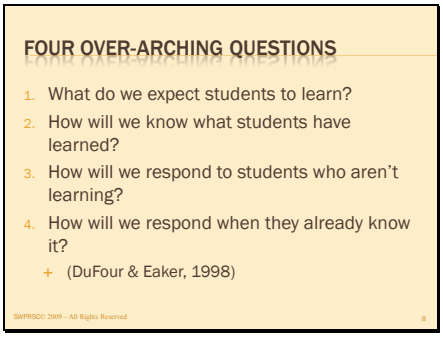
- I have been involved in education for 25 or more years.
- I have been lucky enough to hear Dr. Rick & Becky DuFour at a conference.
- My school has been involved in the PLC process for three or more years.

Slide 7



Participants number off in groups of 4. Each group member is assigned a number 1, 2, 3, or 4. In groups of 4, numbers 1 & 2 discuss and 3 & 4 discuss the statement posted.

Slide 8



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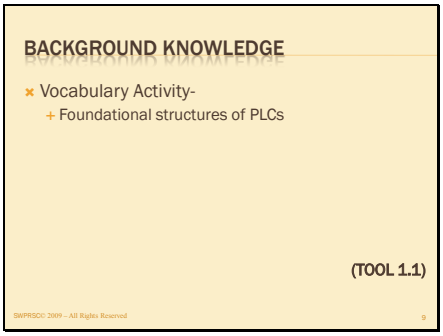
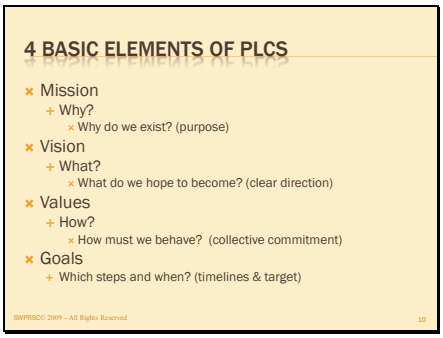


Tool 1.1

Each participant gets a group of index cards with the following words: mission, vision, values, & goals. They also receive sticky notes with the words listed below: Why? Why do we exist?, purpose, What? What do we hope to become?, How? How must we behave?, collective commitment, Which steps and when?, timelines and targets.

As individuals or as groups, have them match words on the sticky notes to the terms on the index cards.

Slide 10



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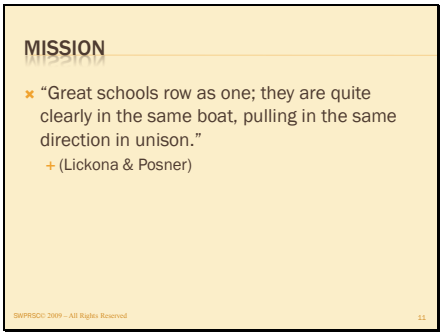
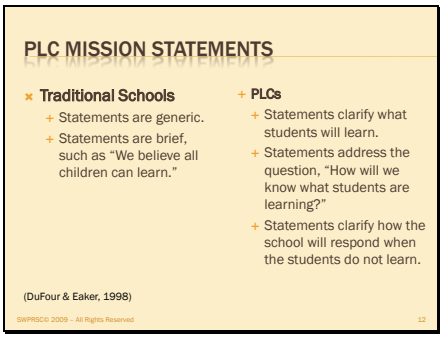


Quote from "Revisiting PLCs" book.

Slide 12



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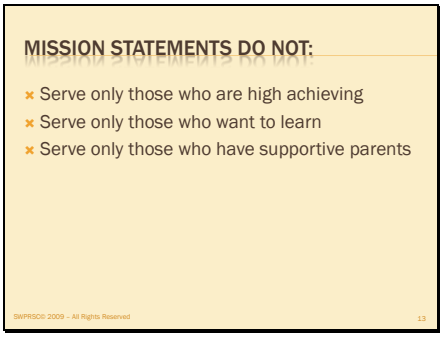

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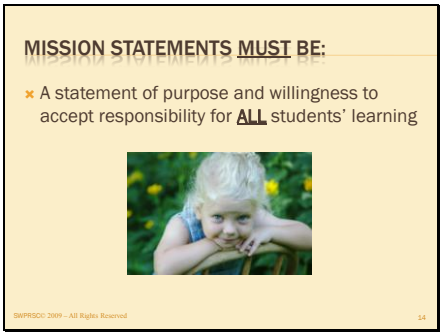

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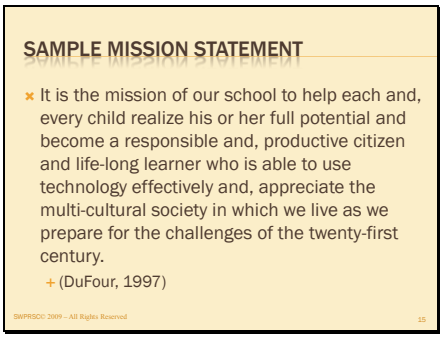


Ask participants:
In groups, discuss ways a visitor could tell if the teachers were committed to this mission. Come up with as many as your can in five minutes and write your answers down on a sheet of paper.

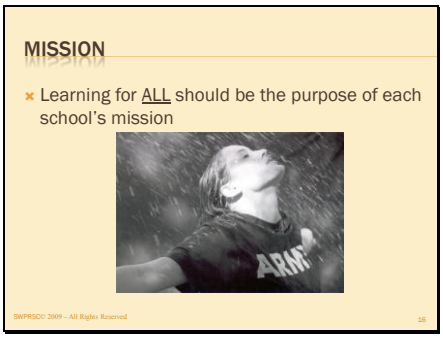
Tag board/markers:
Relay discussion: Presenter hands marker to one person in the room, he/she writes down one response on the tag board at the front of the room and discuss. The first person then passes the marker to another participant who repeats the procedure. Process continues until all participants have had a chance to share.

Self-reflection: Have participants consider list that was created. Do the things listed represent their school? Why or why not? What is one or two things they could do as a leader to improve the teachers' commitment to the school's mission? (Allow ten minutes for self-reflection and then share with table partner.)

Following this exercise, offer the

opportunity for participants to share responses with entire group.

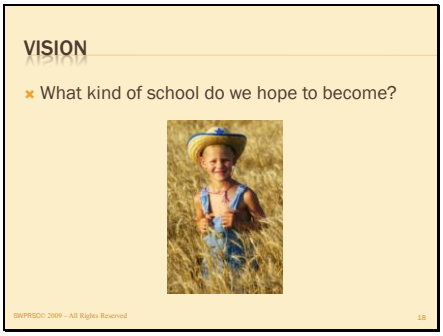
Slide 16



Slide 17

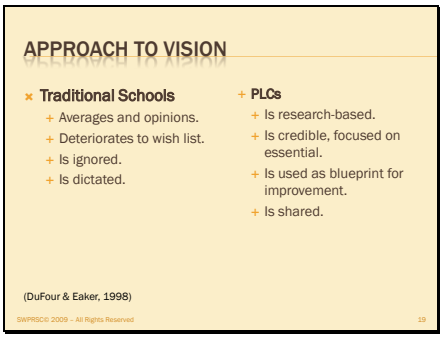
Tool 1.2

Slide 18



Vision is one of the five critical leadership structures to sustain PLCs. A brief review will be covered now and more in-depth information provide later.

Slide 19



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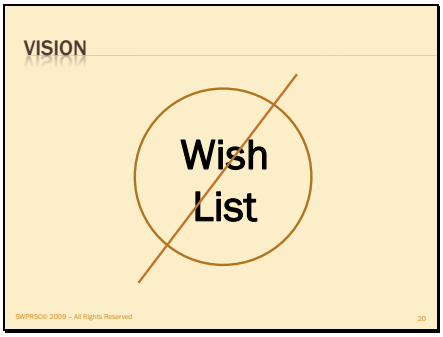
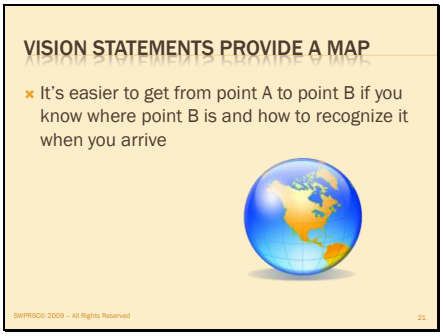


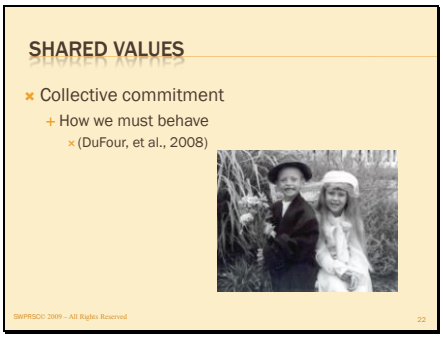
Vision statements are built by teams of teachers collaboratively researching best practices.

Slide 21



We will learn more about vision later.

Slide 22



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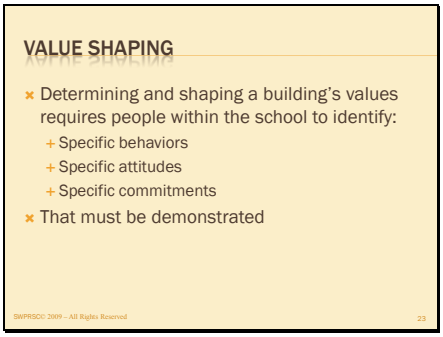
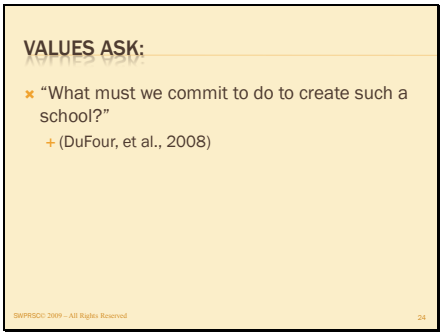


Discuss examples of behaviors, attitudes, and commitments.

Slide 24



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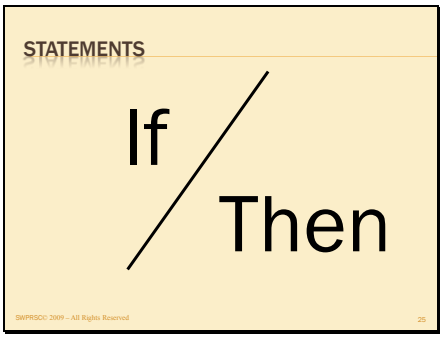


•**<u>If</u>** we are to be a school where teachers and students are clear on the knowledge, skills, and dispositions students must acquire in each course, grade level, and unit of instruction, **<u>then</u>** we must agree to develop a guaranteed curriculum and commit tot implement that curriculum in our classrooms.

•**<u>If</u>** we are to be a school that ensures high levels of learning for all students, **<u>then</u>** we must monitor each student's learning on a very timely basis using a variety of assessment strategies and create systems to ensure they receive additional time and support as soon as they experience difficulty in their learning.

•**<u>If</u>** we are to create a collaborative culture, **<u>then</u>** we must be positive, contributing members to our collaborative teams and accept collective responsibility for the success of our colleagues and our students.

•**<u>If</u>** we are to be a school that provides a guaranteed curriculum and frequently monitors student learning through a wide variety of assessments, **<u>then</u>** we must provide each collaborative team

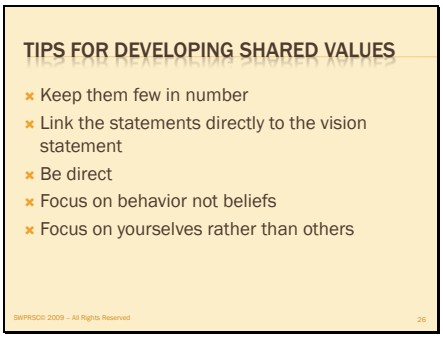
with the resources, time, and training to create the curriculum and assessments.

•**<u>If</u>** we are to become a school that supports the ongoing, job-embedded learning of staff to promote continuous improvement, **<u>then</u>** we must provide staff with time to learn with and from one another, and develop the parameters and processes to ensure their shared learning is in areas that impact student achievement.

•**<u>If</u>** we are to be a school with widely dispersed leadership, **<u>then</u>** we must create structures to promote multiple leadership opportunities and define our job, in part, as developing the leadership potential in others.

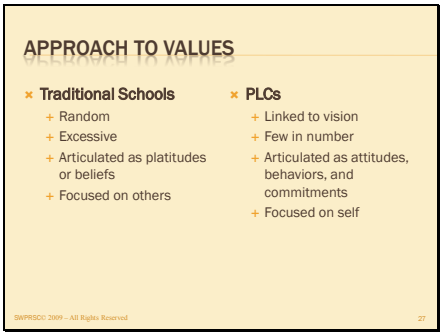
(DuFour, et al., 2008, pages 148-149.)

Slide 26



Discuss in Cooperative Learning Groups.

Slide 27



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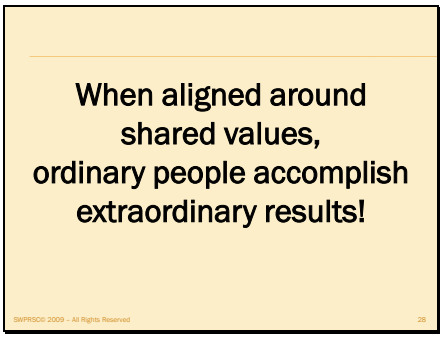

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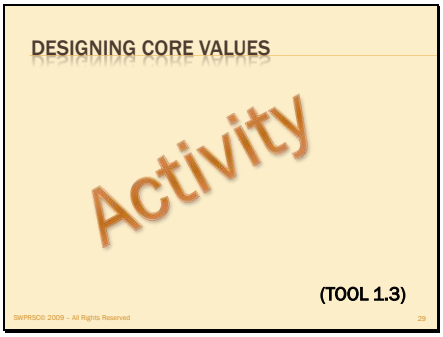
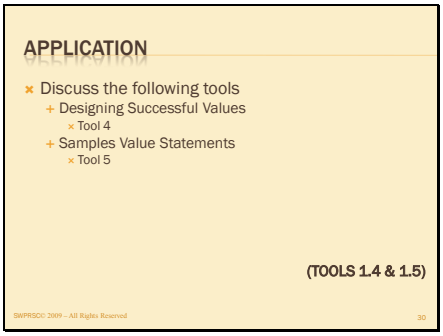


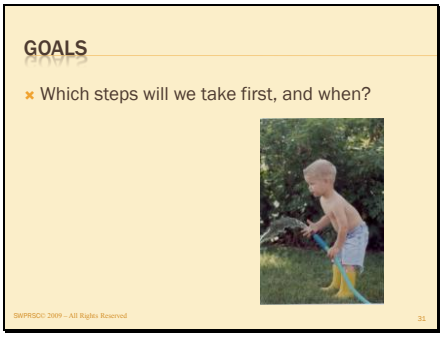
Tool 1.3
Do this activity with participants. Also encourage them to use the activity back in their buildings with their teachers.

Slide 30



Tools 1.4 & 1.5
Discuss the handouts provided, Designing Successful Values & Sample Value Statements, as a group. At conclusion, have participants share in these groups at tables, number 1 with number 3 and number 2 with number 4, about their value statements at home. Suggested topics to discuss might include: Do your value statements represent best practice?; Why or why not?; What steps do you need to take as the leader to get your values "in shape"?

Slide 31



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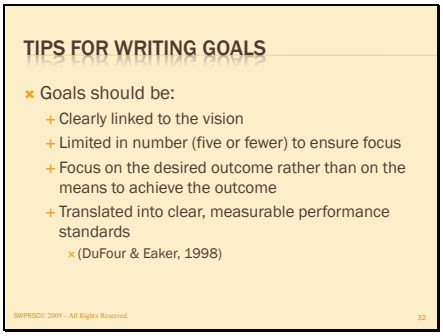

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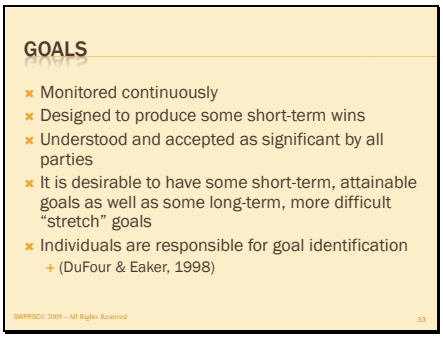

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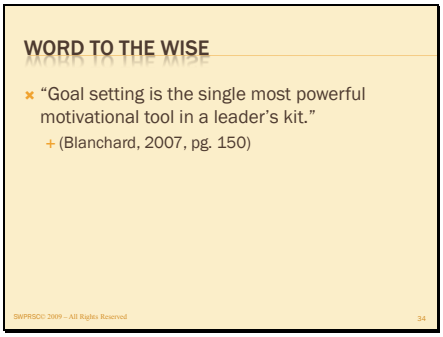
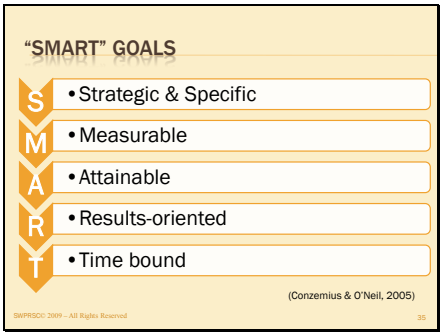


Have participants get up and move into groups of 1s, 2s, 3s and 4s to discuss the quote. Suggested discussion starter: Have you ever been motivated by a leader through the goal process? When and how? Or, How have you specifically used the goal process to motivate an unmotivated staff member?

Slide 35



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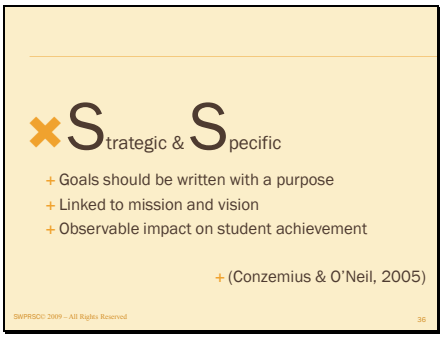

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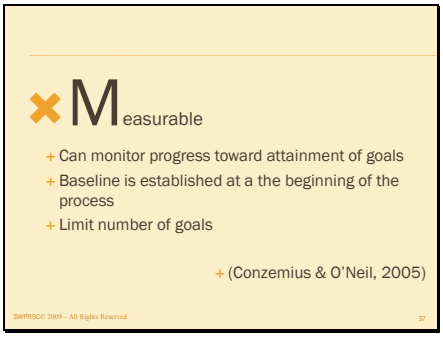

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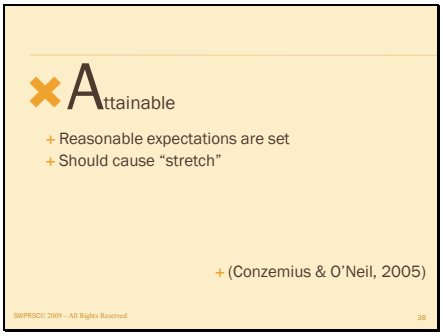

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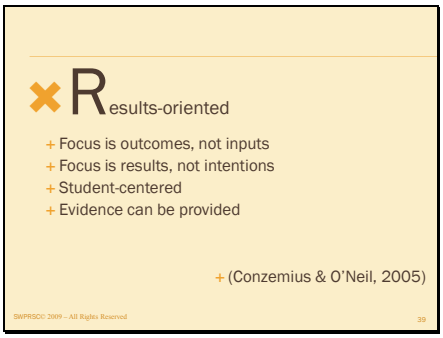

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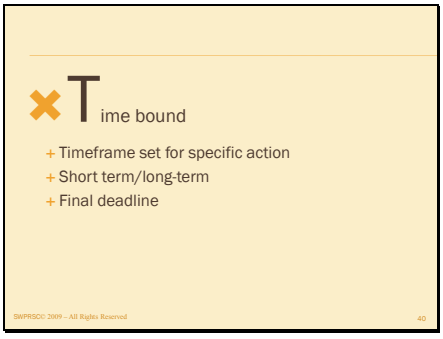

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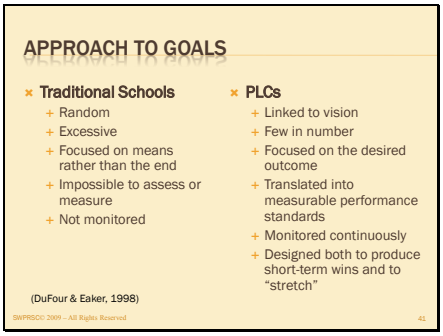

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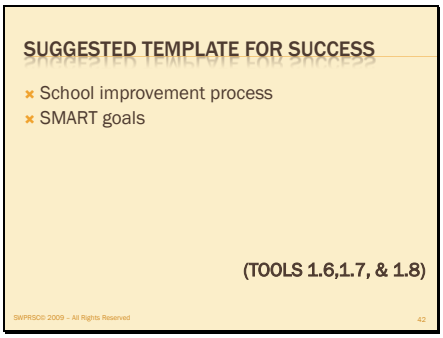
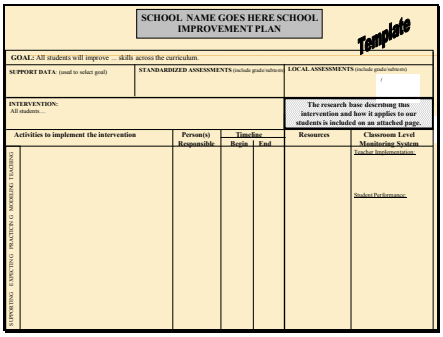


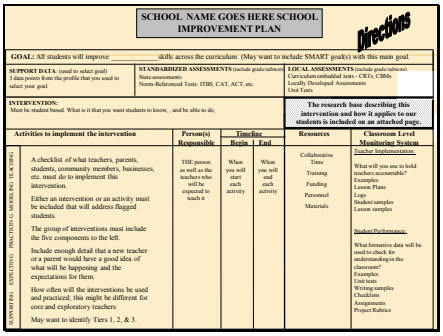
Tools 1.6, 1.7 & 1.8.

Slide 43



Tool 1.6

Slide 44


SCHOOL NAME GOES HERE SCHOOL IMPROVEMENT PLAN

Directions

GOAL: All students will improve _____skills across the curriculum. (May want to include SMART goal(s) with this main goal.

SUPPORT DATA: (used to select goal)
3 data points from the profile that you used to select your goal

STANDARDIZED ASSESSMENTS (include grade/subtests)
State assessments
Norm-Referenced Tests: ITBS, CAT, ACT, etc.

LOCAL ASSESSMENTS (include grade/subtests)
Curriculum embedded tests - CRTs, CBMs
Locally Developed Assessments
Unit Tests

INTERVENTION:
Must be student based. What is it that you want students to know, , and be able to do,

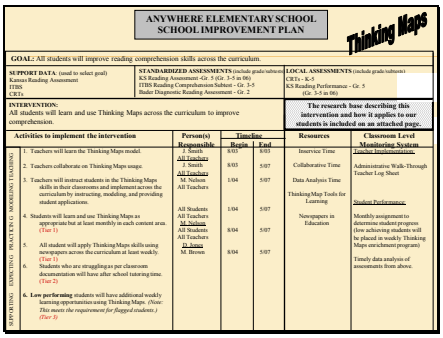
The research base describing this intervention and how it applies to our students is included on an attached page.

Activities to implement the intervention	Person(s) Responsible	Timeline Begin	Timeline End	Resources	Classroom Level Monitoring System
A checklist of what teachers, parents, students, community members, businesses, etc. must do to implement this intervention. Either an intervention or an activity must be included that will address flagged students. The group of interventions must include the five components to the left. Include enough detail that a new teacher or a parent would have a good idea of what will be happening and the expectations for them. How often will the interventions be used and practiced; this might be different for core and exploratory teachers. May want to identify Tiers 1, 2, & 3.	THE person as well as the teachers who will be expected to teach it	When you will start each activity	When you will end each activity	Collaborative Time Training Funding Personnel Materials	Teacher Implementation: What will you use to hold teachers accountable? Examples: Lesson Plans Logs Student samples Lesson samples Student Performance: What formative data will be used to check for understanding in the classroom? Examples: Unit tests Writing samples Checklists Assignments Project Rubrics

SUPPORTING EXPECTING PRACTICES & MODELING TEACHING

Tool 1.7

Slide 45


ANYWHERE ELEMENTARY SCHOOL SCHOOL IMPROVEMENT PLAN

Thinking Maps

GOAL: All students will improve reading comprehension skills across the curriculum.

SUPPORT DATA: (used to select goal)
Kansas Reading Assessment
ITBS
CRTs

STANDARDIZED ASSESSMENTS (include grade/subtests)
KS Reading Assessment -Gr. 5 (Gr. 3-5 in 06)
ITBS Reading Comprehension Subtest - Gr. 3-5
Bader Diagnostic Reading Assessment - Gr. 2

LOCAL ASSESSMENTS (include grade/subtests)
CRTs - K-5
KS Reading Performance - Gr. 5
(Gr. 3-5 in 06)

INTERVENTION:
All students will learn and use Thinking Maps across the curriculum to improve comprehension.

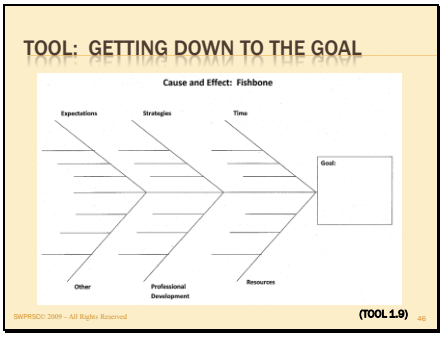
The research base describing this intervention and how it applies to our students is included on an attached page.

Activities to implement the intervention	Person(s) Responsible	Timeline Begin	Timeline End	Resources	Classroom Level Monitoring System
1. Teachers will learn the Thinking Maps model.	J. Smith All Teachers	8/03	8/03	Inservice Time	Teacher Implementation:
2. Teachers collaborate on Thinking Maps usage.	J. Smith All Teachers	8/03	5/07	Collaborative Time	Administrative Walk-Through Teacher Log Sheet
3. Teachers will instruct students in the Thinking Maps skills in their classrooms and implement across the curriculum by instructing, modeling, and providing student applications.	M. Nelson All Teachers	1/04	5/07	Data Analysis Time ThinkingMap Tools for Learning	
4. Students will learn and use Thinking Maps as appropriate but at least monthly in each content area. (Tier 1)	All Students All Teachers	1/04	5/07	Newspapers in Education	Student Performance:
5. All student will apply ThinkingMaps skills using newspapers across the curriculum at least weekly. (Tier 1)	M. Nelson All Students All Teachers	8/04	5/07		Monthly assignment to determine student progress (low achieving students will be placed in weekly Thinking Maps enrichment program)
6. Students who are struggling as per classroom documentation will have after school tutoring time. (Tier 2)	D. Jones M. Brown	8/04	5/07		Timely data analysis of assessments from above.
6. Low performing students will have additional weekly learning opportunities using Thinking Maps. *(Note: This meets the requirement for flagged students.)* (Tier 3)					

SUPPORTING EXPECTING PRACTICES & MODELING TEACHING

Tool 1.8

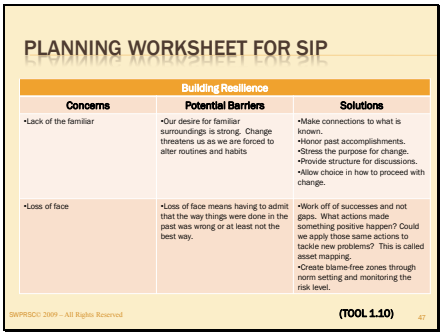
Slide 46



Refer to the Tool 1.9. Discuss process of how you could use the Cause & Effect method and Fishbone graphic organizer to keep team to priorities for goal areas. Remember, SMART/Specific – this tool will help teams get to specifics.

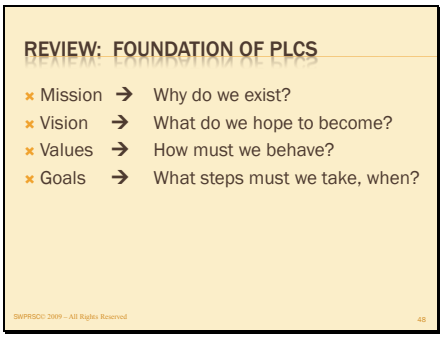
Point out each area on Fishbone and discuss why each of these must be considered as a leader.

Slide 47



Participants – look at Tool 1.10. Discuss.

Slide 48



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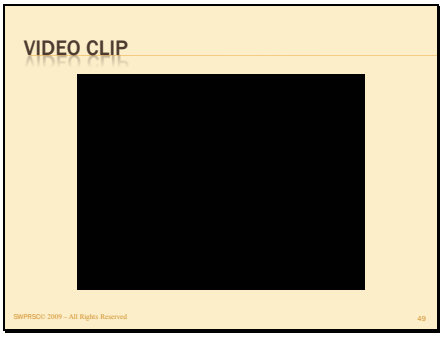
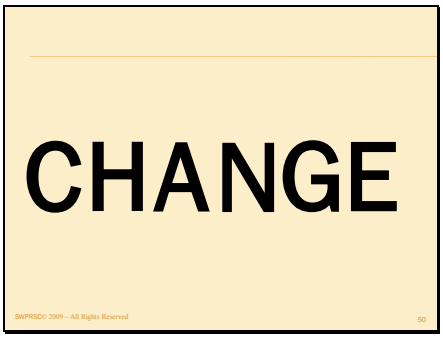


Watch the Ice Scraping clip. Following, participants should discuss the question: "How does this video clip represent what teachers, classrooms, and buildings do everyday in our schools?"

Possible answers:
Don't have the tools we need.
Working hard.
Working alone.
Working on the wrong thing.
Assessed too late.
Poor conditions.
Didn't look at data before started

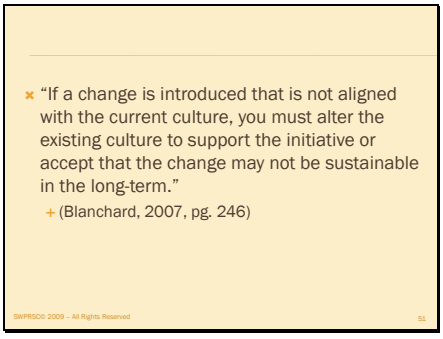
working, etc.

Slide 50



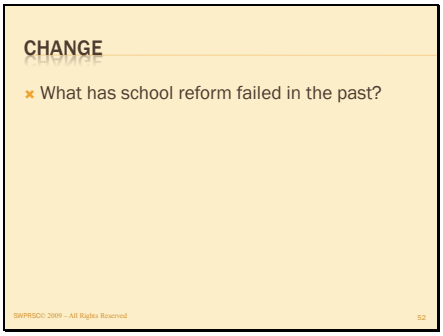
Insert music.

Slide 51



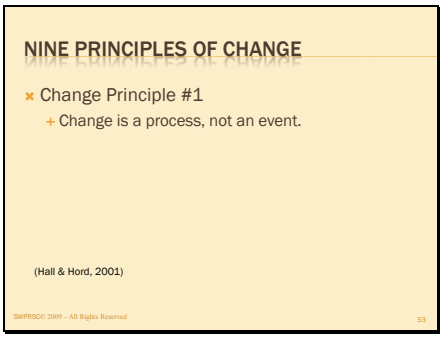
Have participants discuss the concept of culture. What is a building's culture? What is it not? How do you know what the culture is if you are new?

Slide 52



Discuss with participants this question. Possible answers include:
Difficult time
Commitment
Buy-in
Give up too quick
Time
Staff

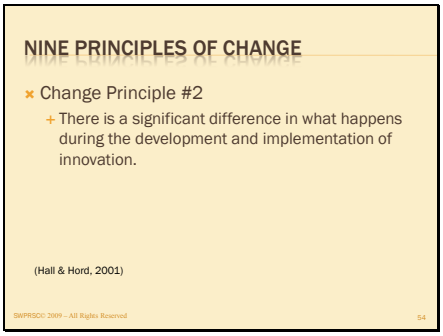
Slide 53



Book: Hall & Hord – Implement Change: Patterns, Principles, and Pot Holes.

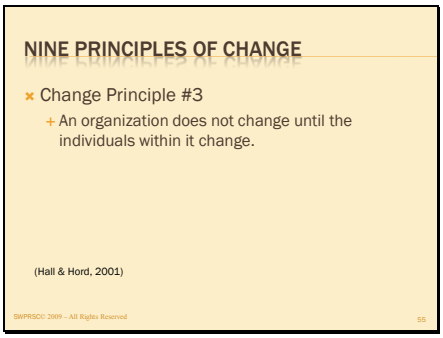
Change is not accomplished with a one-time announcement by a leader or a two-day workshop in August. Change is a process in which people within the organization move through gradually. Research indicates that most changes in education take three to five years. (George, Hall, & Uchiyama, 2000). There are very few shortcuts that can be set up in order to move the process along more quickly.

Slide 54



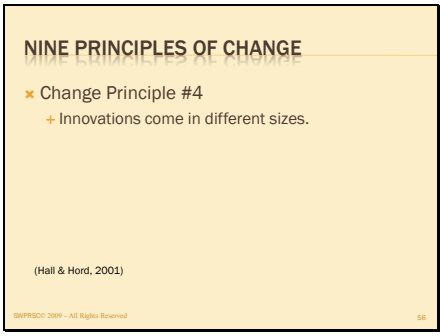
Development and implementation are two sides of the same coin. Development of the change initiative involves all of the activities related to creating the initiative (creating, developing, packaging, etc.). Implementation involves the activities surrounding use of the initiative within the learning community.

Slide 55



There is always an individual aspect to the organizational change. Each time a new initiative is introduced to a learning community, the individuals within that community will respond differently and at different speeds. Part of that response will depend on the background knowledge or prior knowledge, part of that will depend on personal attitudes, etc. Some will grasp the new initiative with enthusiasm and jump on right away. Some will come on with a small amount of encouragement. A third group, called the “laggards” (Rodgers, 2003) will avoid the change for as long as possible and even sabotage the initiative.

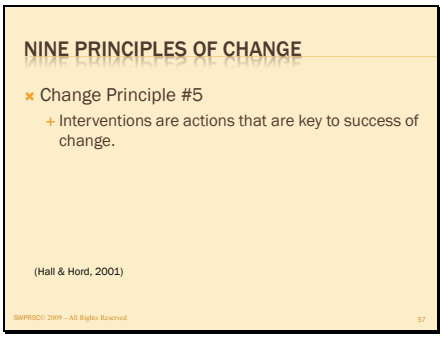
Slide 56



Notes:
Innovation – what will be changed. Innovations may be products (computers, i-pods) or processes (instructional techniques).
Usually innovations are bundled (block schedule).

Change initiatives come in different sizes…but ultimately all changes are "bundles of small changes" that must occur. Large scale changes are very complex, system-wide changes. Typically this size of change takes 7-8 years to implement and entrench within he system as habit. What are some examples of large scale change that you have been involved with?

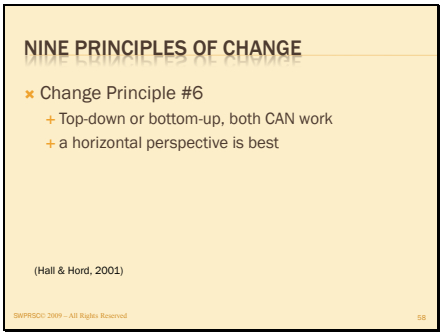
Slide 57



Interventions are the actions that need to take place in order for the change to be successful. They are the little things that are often overlooked by most people. Workshops are an example of an intervention.

Interventions are different sizes as well. When change is successful…it is because time and detail were given to the interventions within the change. A "one-legged interview" is an excellent example of a small intervention. This is when, as a leader, you meet a teacher in the hall and a brief conversation occurs regarding the initiative. The name "one-legged" since both the principal and the teacher need to be somewhere else when the next bell rings.

Slide 58

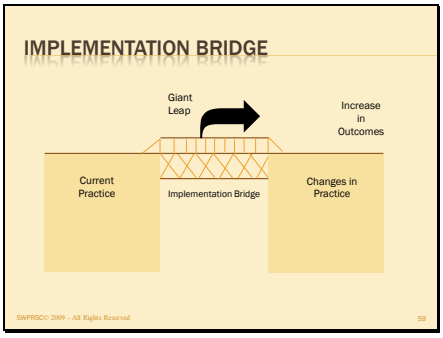


In order for change to be successful, there must be an implementation bridge. Each individual within the change has to cross this bridge in order to the change to be fully implemented.

Without long term support from the leader, the change initiative will wither and die. On-going, active support is necessary.

Without an implementation bridge, individuals and organizations must make a giant leap.

Slide 59



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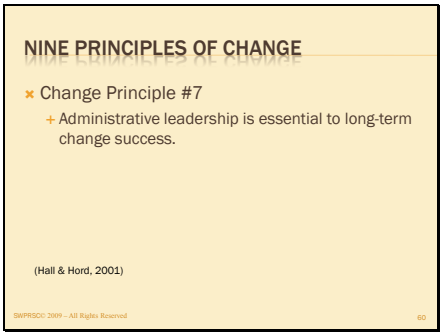

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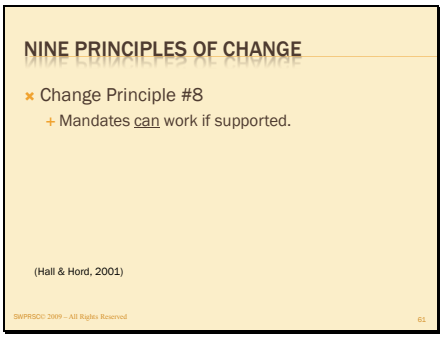
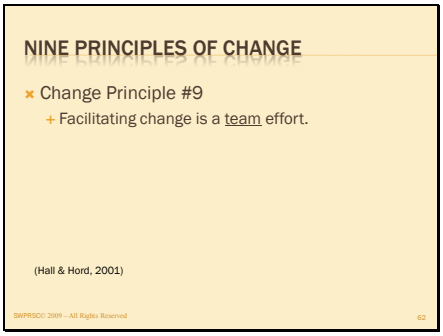


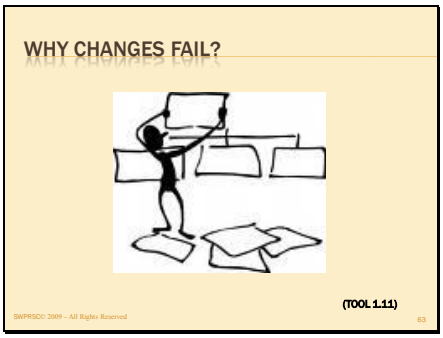
A mandate is one kind of strategy that is widely-used. Although mandates are continually criticized as being ineffective because of their top-down orientation, they can be quite successful. The key to a successful mandate is for the leader to accompany the mandate with continual communication, ongoing training, on-site coaching, and time for implementation. I also think sharing the justification and reasoning behind the change can go a long way with educators a leader is trying to convince to come on board.

Slide 62



Although the role of the principal is critical in the success of the change initiative, there are many others that are critical to the success and have some responsibility through the process. Teachers play a critical leadership role in whether or not the change is successful.

Slide 63



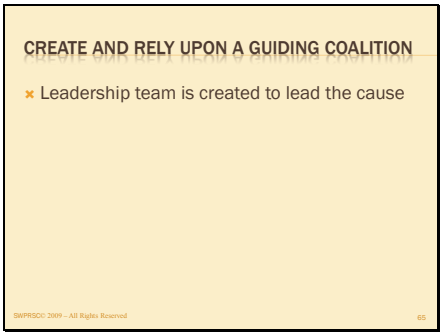
TOOL 1.11: Review/discuss a table groups.

Book Mark: Why Changes Fail – Provide a bookmark because most of you are readers. Use this and review as you are reading new materials and consider the nine principles as you ponder how to integrate the new material into the current culture.

Slide 64

Discuss: During the change initiative, leaders must apply the right amount of pressure to the people within the initiative for it to become ingrained in the culture and entrenched as a daily practice. To little leadership pressure leads to complacency and the change initiative will die away or become over run by other priorities. Leaders must establish a sense of urgency and importance to successfully integrate the change.

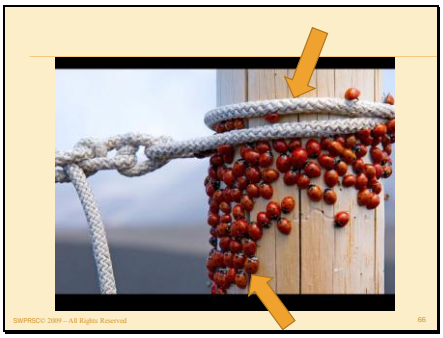
Slide 65



Discuss: The first step a leader should take to enhance student achievement is to create a strong leadership team (Marzano, Waters, McNulty; 2005, p. 98). Leaders must have partners who will lead the charge in institutionalizing the change.

A leader must ask. "Who is my guiding coalition?" It may be different people for different initiatives.

Slide 66

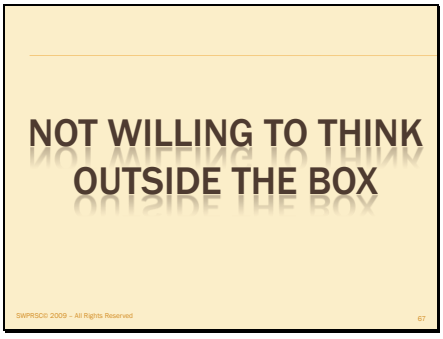


How does this photo represent what happens to the work within a guiding coalition? Discuss at table groups (5 mins). Share responses with entire group.

Ask: "Where are the laggards?"

Have two separate arrows come on with click to show the guiding coalitions and the laggards.

Slide 67



Slide 68

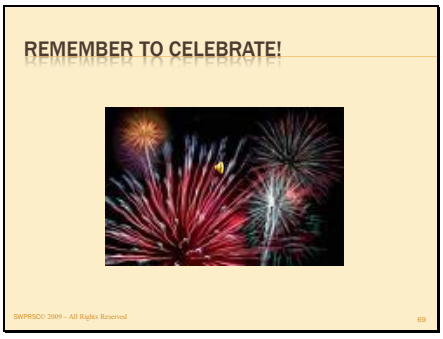
To often leaders think in a box. PLC educators, teachers and leaders all must be willing to think creatively about structural and cultural barriers that block change.

Discuss structural and cultural barriers as a group.

Structural Barriers:
•Schedules
•Bells
•Classroom space
•Gymnasium space
•Bus routes
•Number of teaching staff
•Shared teachers

Cultural Barriers:
•That's how we've always done it.
•Hidden rules
•Teacher isolation
•Emphasis on sports success at all costs.
•Snow day (academic missed – not made up; ball game missed – made up)

Slide 69

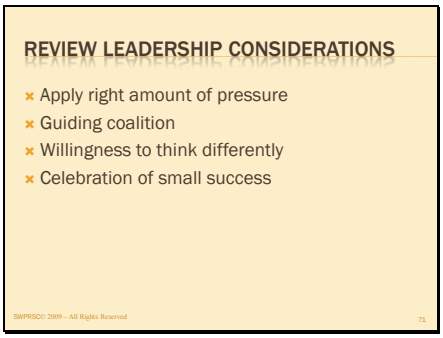


Leaders must set up goals/activities/timelines so teachers can realize short-term winds on the road to goal success. For example – you don't get paid once per year but each month. That paycheck is reward and motivation for continuing the extraordinary effort you are putting in.

Slide 70

Celebration Video Clip…

Slide 71



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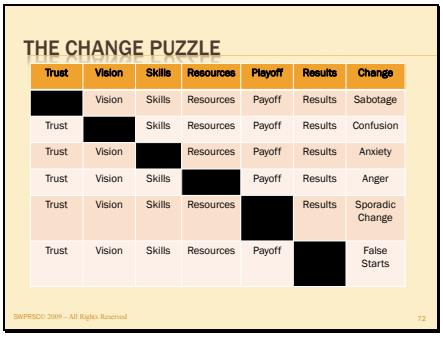


Peter Senge's work on educational change is clearly applicable to our work when we think about PLCs. Here is a brief look at his 8 lessons on the new paradigm of change:

- You can't mandate what matters (the more complex the change, the less you can force it).
- Change is a journey not a blueprint (change is non-linear, loaded with uncertainty and excitement).
- Problems are our friends (problems are inevitable and you can't learn without them).

- Vision and strategic planning come later (premature visions and planning blind).
- Individualism and collectivism must have equal power (there are no one-sided solutions to isolation).
- Neither centralization nor decentralization works (both top-down and bottom-up strategies are necessary as you plan).
- Connections with the wider environment is critical for success (the best organizations learn externally as well as internally…hence the importance of networking and learning from each other in this process).
- Every person is a change agent (change is too important to leave to the experts.

Slide 73

In the research study Lambert's (2003) Leadership Capacity School Survey was used to collect data. Lambert supported building leadership capacity from within the school and community as a method of sustaining school improvement initiatives. The survey consists of 30 multiple-choice questions and asks participants their perceptions using a five-point Likert scale. The range includes the following:

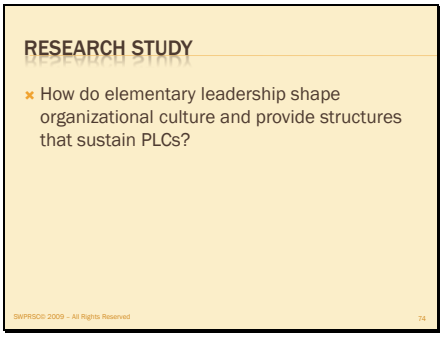
- We do not do this at our school (p. 110).
- We are starting to move in this direction (p. 110).
- We are making good progress (p. 110).
- We have this condition well

established (p. 110).

- We are refining our practice in this area (p. 110).

The survey queries respondents as to their perceptions of current practice within their schools. The LCSS (Lambert, 2003) takes approximately 10-15 minutes for participants to complete. The intent of the survey is to discover spheres of Leadership Capacity (L. Lambert, personal communication, April 10, 2009).

Slide 74



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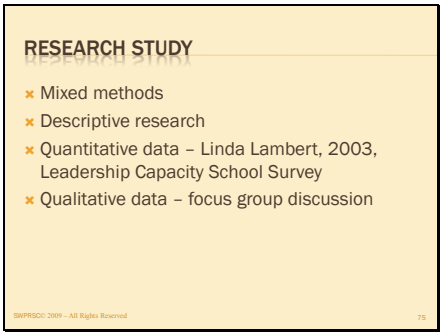

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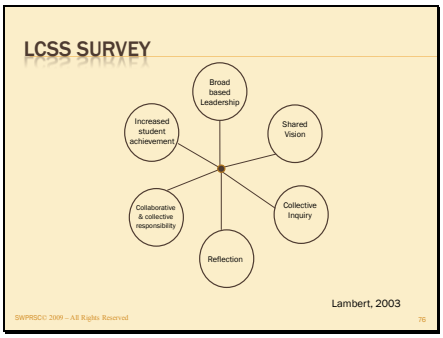
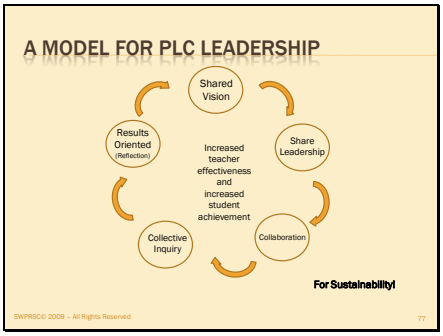


Let's look now at the LCSS Survey in detail. Handout.

There are 6 categories of questions on the LCSS:

- Broad-based, skillful participation in the work of leadership.
- Shared vision results in program coherence.
- Inquiry-based use of information to inform decisions and practice.
- Roles and actions reflect broad involvement, collaboration, and collective responsibility.
- Reflective practice consistently leads to innovation.
- High or steadily improving student achievement and development.

Slide 77



A Model for Principal Leadership in a PLC:

Researchers have suggested that there is a connection between principal leadership behaviors consistent with the five characteristics of PLCs and high student achievement (Blankstein, 2004; DuFour et al., 2008; Hord, 2004; Lezotte, 2005; McLaughlin & Talbert, 2006). They believed that when principals encourage these behaviors, the conditions exist for a school to develop and sustain a PLC. Based upon DuFour and Eaker's (1998) conceptual framework, the following model was developed. The figure illustrates how principal leadership influences student and staff learning. Each bubble in the graphic organizer represents a vital component that needs to be included in effective principal leadership for sustaining school improvement initiatives. These behaviors lead to higher and higher competency for teachers and students.

The five characteristics shown by principals of a PLC create a favorable learning environment for students and for teachers (DuFour et al., 2008). These characteristics also match up with Lambert's six leadership constructs measured by her LCSS survey.

Slide 1

Slide 2

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 2

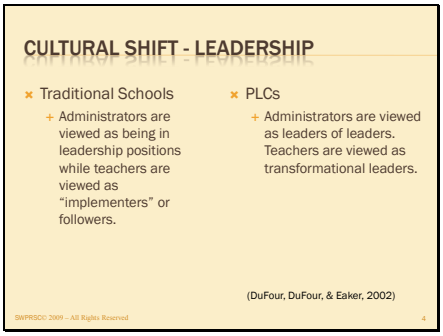
Slide 3

SHARED LEADERSHIP

- "Leadership that is widely distributed throughout a school rather than an individual."
  - (Dufour, DuFour, & Eaker, 2008)

 3

Slide 4



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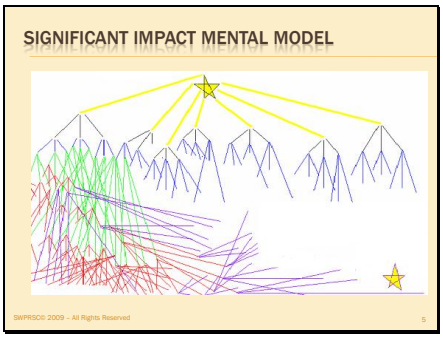


The Impact Model can be compared to your "Circle of Influence". Who can you directly impact with your leadership? Remember your state of being verbs – is, are, was, were, am, be, been, being. You are a holder, creator, influencer, advocator, and calibrator. You don't play at being one – you embody these leadership behaviors.

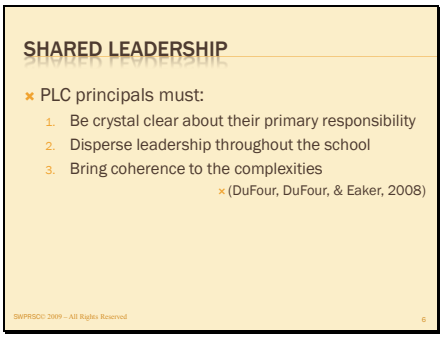
Have individual participants do an impact drawing for their job description. The purpose of this exercise is to demonstrate the importance of positive leadership and the far reaching ramifications that both positive and negative leadership would have on an individual and an organization?

The theory being demonstrated is "To the Power of Ten"

Optional Resource: Film – To the Power of Ten.

Materials: Flipchart paper and markers (display drawings around the room after participants share their drawing).

Slide 6



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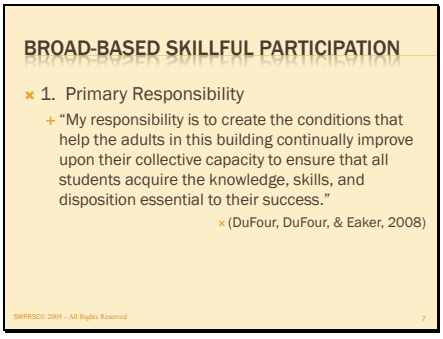
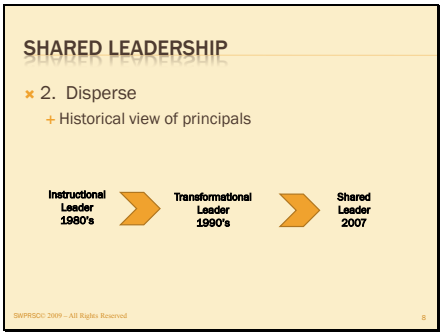


Discuss at your table specific examples of how a principal accomplishes this. Share out loud.

Slide 8



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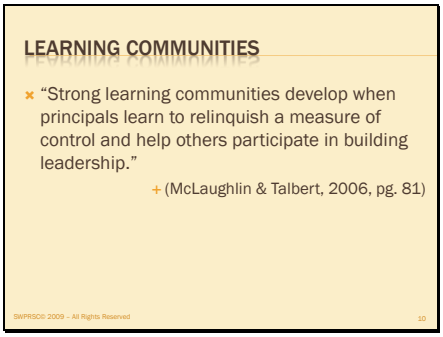
Slide 10



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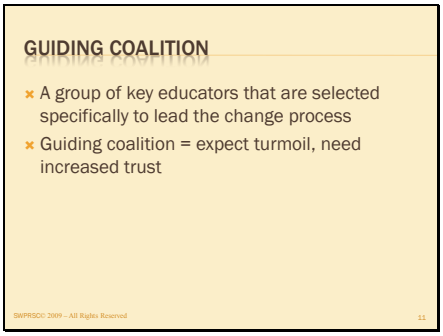

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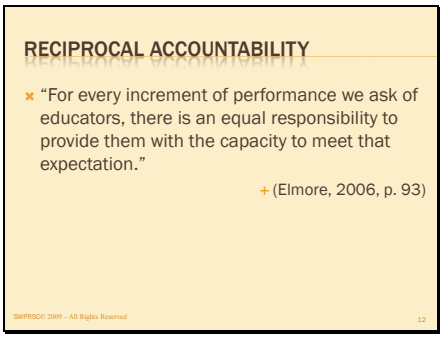
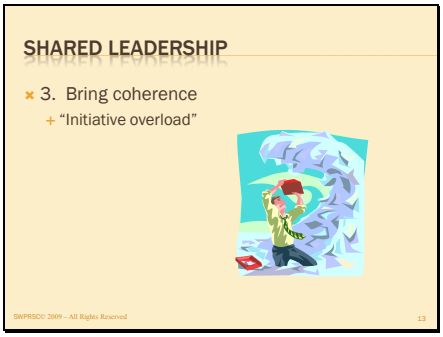


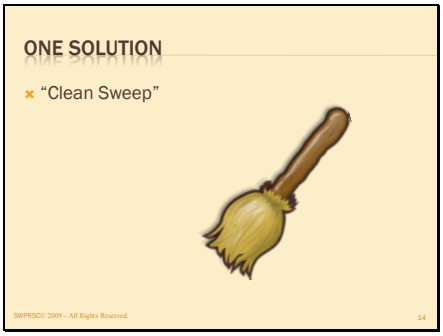
For example, principals of PLCs recognize they have an obligation to provide staff with resources, training, mentoring, and support to help them successfully accomplish what they have been asked to do.

Slide 13



Discuss in pairs initiative overload that is occurring at their school.

Slide 14



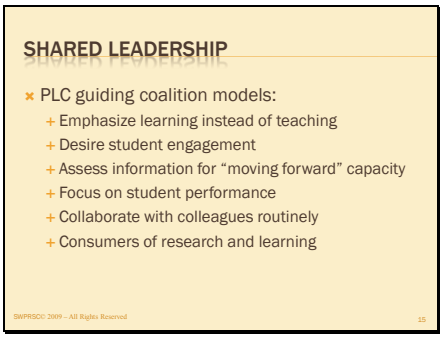
After determining educational priorities, educators must conduct a clean sweep of their rooms, resources, curriculum, interventions, etc.

Three piles:

- Keep
- Sell (give-away)
- Trash

Discuss process.

Slide 15



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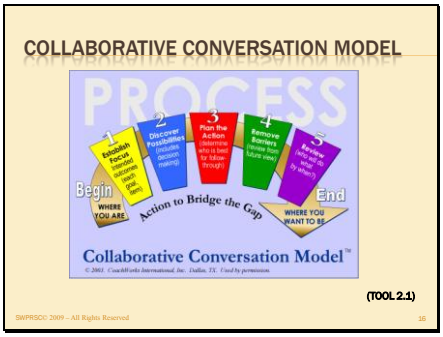
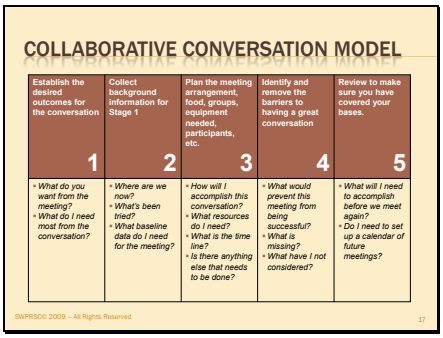


A tool that will provide a structure for decision making is the Collaborative Conversation Model. Each stage of this model must be thoroughly applied – this takes time. Without a significant investment of time to think through each of these stages, our decisions will be just as hasty and ineffective. Level 5 readers know that incomplete dialogue processes, participants will go back to their offices and classrooms and revert to doing what they have always done before. There will be no buy-in to the hastily designed solution.

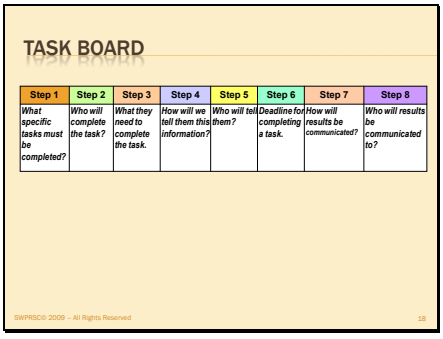
Tool 2.1 – Collaborative Conversation Model

Slide 17



This slide gives a little more detail to the collaborative conversation model. What a great tool to help you set up a collaborative conversation. We ask teachers to plan units and daily lesson plans for successful delivery of content and application of the content. This is simply a lesson plan to prepare for the conversations so that the delivery and participation in the conversation is successful.

Slide 18

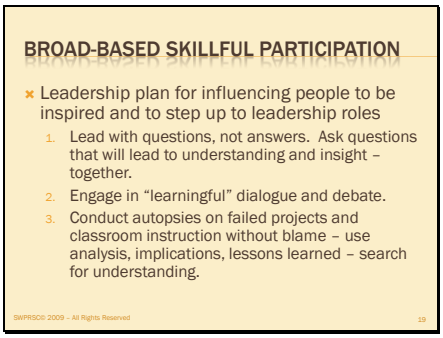


Once the team has completed the planning stage, it is time to assign tasks to a timeline so that the decision can come to life and get accomplished. This is a sample of a task board. When I asked you to develop a leadership plan for yourself so that you pace your actions through the year to accomplish what you want to at the end, I never said that you had to be the DOER for all of the actions. A task board is a public way to assign responsibility – which of course includes you, as well as your team members. If this board can be displayed publically or shared through a

computerized sharing system, it is even more effective as the players watch progress toward task completion.

Have participates practice this process with a topic they are dealing with in their own schools now. (This might be done individually, in pairs, or in small groups)

Slide 19



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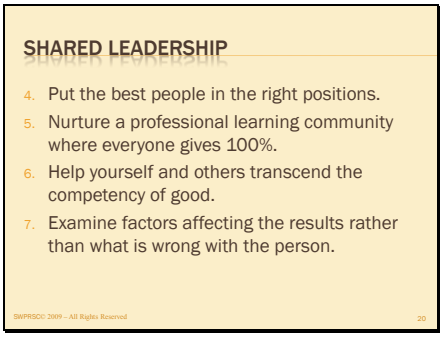

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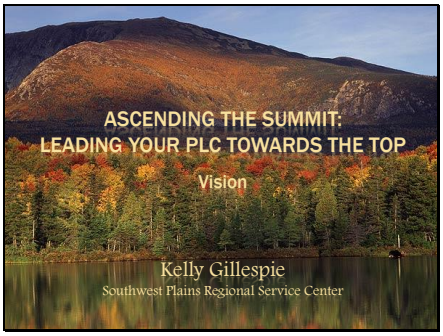

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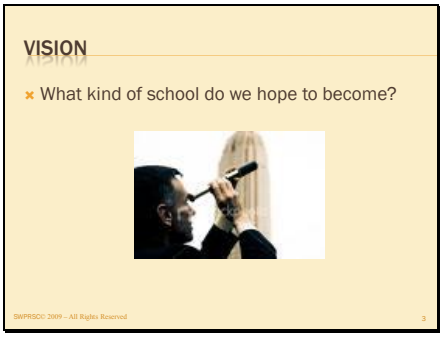
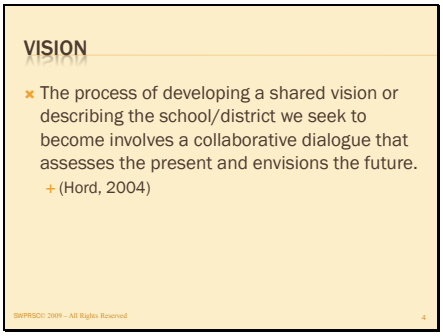


To ensure sustainability of PLCs, a leader's ability to help teachers develop a shared vision is imperative. Although the vision is designed collaboratively, it is necessary for the building principal to have the leadership capacity to keep the vision alive.

Slide 4



A building/district mission is the purpose of the school, a vision …establishes the direction they will go. It should be realistic, credible. Many researchers (Kotter, 1996; Marzano, 2003; Senge, 1990) have found that a collective vision is essential to the success of a learning organization.

Slide 5

Telling: The boss assumes that he/she knows what the vision should be and announces it to the organization in the grand dictatorial tradition: "It's my way or the highway."

Selling: The boss assumes that he/she knows what the vision should be and attempts to persuade members of the organization before proceeding.

Testing: The boss has an idea about what the vision should be but seeks reactions from those in the organization to help him/her refine and redesign the vision before proceeding.

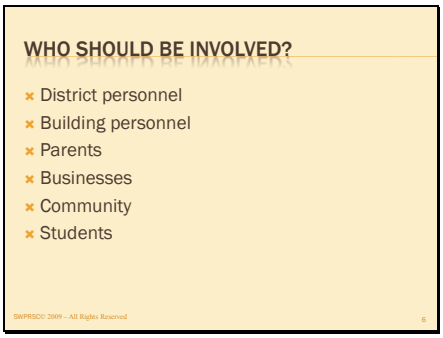
Consulting: The boss puts together a representative committee of members of the organization and encourages it to develop a vision for his/her review and approval. The boss then reserves the right to accept or ignore the recommendations.

Co-creating: The boss and members of the organization, through a collaborative process, build a shared vision together (Senge, et al., 1994, p.

314).

Reflection: Think/pair/share of the 5 options discussed. Consider your building's current vision statement. Which method was used to create the vision? What steps do you need to take in the future?

Slide 6



We should involve all of these stakeholders in creating the vision for three reasons:

- They offer different perspectives.
- Each group represents a "customer" of the school.
- Change and initiative often create conflict and chaos.

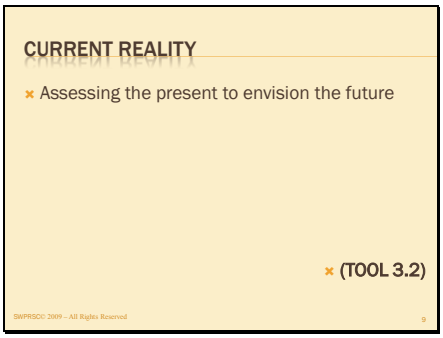
The more stakeholders are involved with direct knowledge and input, the more they can offer support.

Slide 7

Slide 8

Tool 3.1
We need to learn and study research about effective schools as we begin to consider development of our vision. Tool 3:1 is a list of researchers I would recommend. Always look at research no more than five years old.

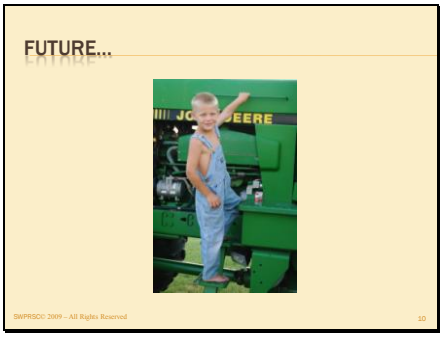
Slide 9



As learning communities begin to develop their vision, they need to take stock of where they are now. Identify areas of strength and opportunities. A reality check is necessary to accurately create a vision for the future.

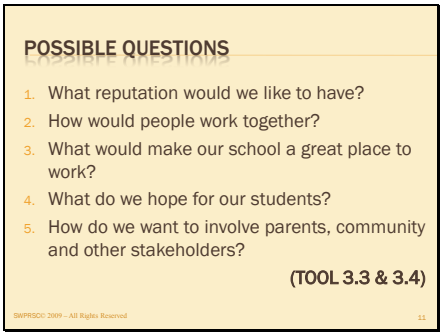
Tool 3:2: Reality check Survey
Leaders can use this to get a glimpse of their current reality.

Slide 10



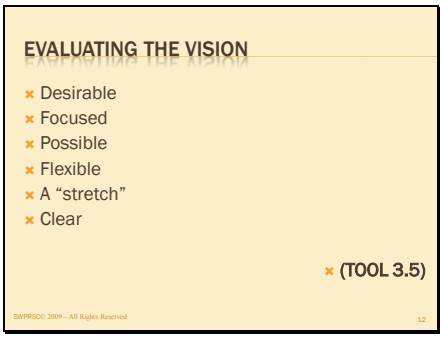
When effective schools research has been reviewed and a reality check has been completed, schools are ready to begin to think about the future. What kind of school do we hope to become? This happens through asking questions.

Slide 11



Tool 3.3 – Tool that outlines a process of developing the vision with all stakeholders.
Tool 3.4– Survey that might be sent out in advance to get participants thinking about the process.

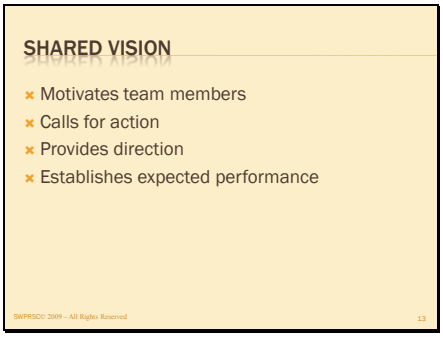
Slide 12



At the conclusion of writing this vision, learning communities need to be sure it meets the criteria they set out to meet in the beginning. Learning communities could ask the question above and use the "fist of five" voting method to get a quick read of satisfaction.

Tool 3.5 – will provide additional ideas to use in the evaluation phase.

Slide 13



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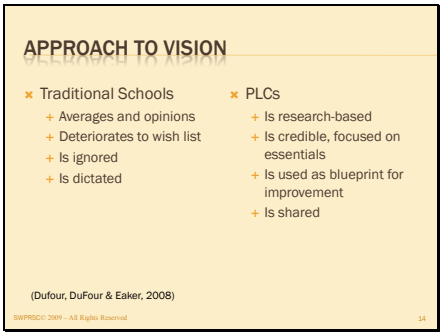

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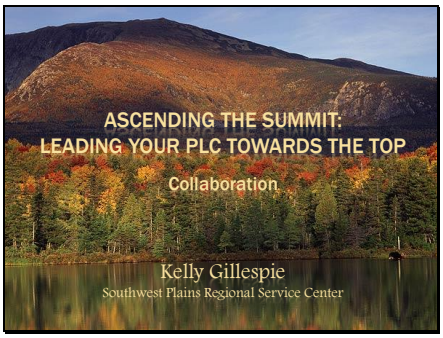

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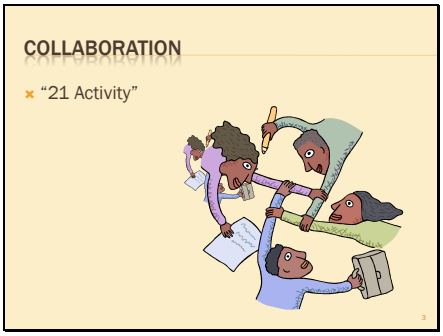
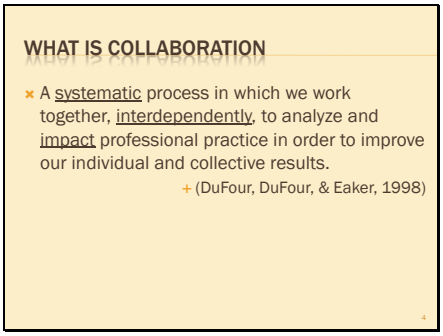


On an index card, each participant writes their best definition of collaboration. They do not put their name on the card. The presenter collects the cards and distributes back to the participants randomly.

With a card (may or may not be theirs) and a pen/pencil, participants roam around the room. At signal to stop from the presenter, participants find a partner. At that point they read both definitions and distribute 7 points between their two cards based on mutual decision and on accuracy of the definition on card. Example: one card may be awarded 7 points and the other card 0 points; or one card may be awarded 2 points and the other card 5 points; or one card 6 points and the other card 1 point. Half points may also be given. Write scores on back of cards. When all are finished, give signal to roam again. Participants then again stop on signal from the presenter and find a new partner and repeat process. Repeat entire process a third time. Participants total their card’s final score and return to seats.

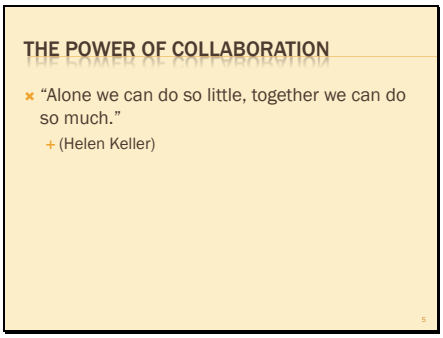
Starting at 21 points and working down, participants read the definition from their card to large group. Could also start at 0 and work up to 21 also.

Slide 4



Common goal
100% participation
Working in common direction
Supportive of each other
Culture of trust

Slide 5



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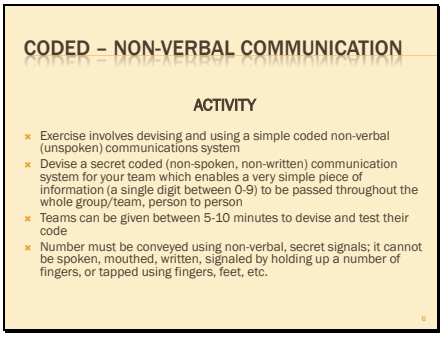
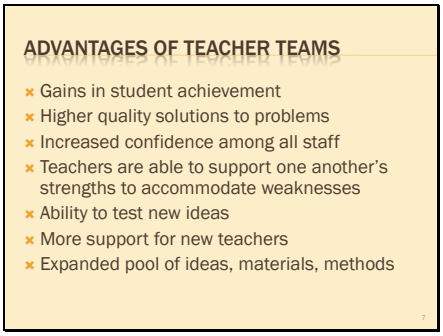


Divide participants in teams of 10. Each team gets in a straight line. Review the guidelines of the collaboration activity on the slide. Conduct activity. Allow time for reflection.

Slide 7



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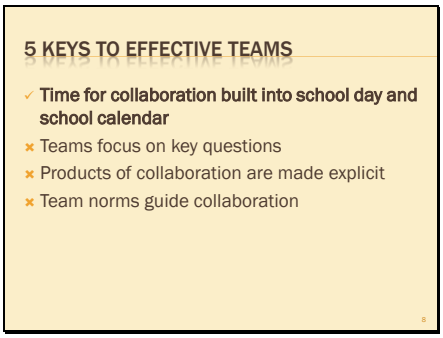
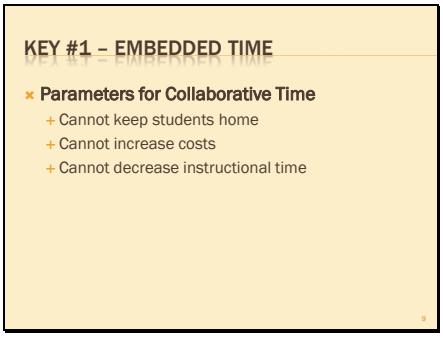


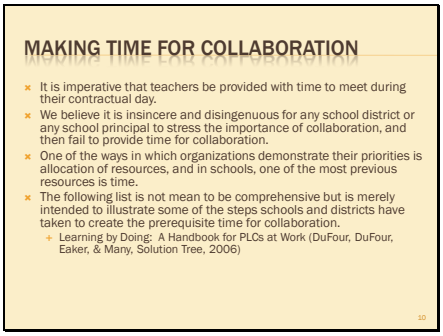
There are six keys to effective teams. The first key is time must be provided.

Slide 9



We must think outside the box on this one and get input from our teachers on ideas. See handout K and discuss. Ask participants if they have other suggestions. Discuss importance of communicating with parents ?????

Slide 10



Slide 11

Tool 4.1

Common Preparation – Build the master schedule to provide daily common preparation periods for teachers of the same course or department. Each team should then designate one day each week to engage in collaborative, rather than individual planning

Parallel Scheduling – Schedule common preparation time by assigning the specialists (teachers of PE, music, art, foreign language; librarians, instructional technologists, guidance counselors, etc.) to provide lessons to students across an entire grade level at the same time each day. The team should designate one day each week for collaborative planning. Some schools build back-to-back special classes into the master schedule on each team's designated collaborative day, thus creating an extended block of time for the team to meet.

Adjusted Start & End Time of Contractual Day – members of a team, department or an entire faculty agree to stat their workday early or extend their workday one day each week to

gain collaborative team time. In exchange for adding time to one end of the workday, the teachers are compensated by getting the time back on the other end of that day. For example, on the first day of each school week, the entire staff at Adlai Stevenson High School in Lincolnshire, IL begins their workday at 7:30 am, rather than 7:45. From 7:30-8:30, the entire faculty engages in collaborative team meetings. Students begin arriving at 7:40 as usual but the start of class is delayed from 8:05 to 8:30. Students are supervised by administration and non-instructional staff in a variety of optional activities such as breakfast, library and computer research, open gym, study halls, and tutorials. To accommodate for the 25 minutes of lost instructional time, five minutes is trimmed from 5 of the 8 50-minute class periods. The school day ends at the usual 3:25, buses run their regular routes, and the teachers are free to leave at 3:30 rather than 3:45 as stipulated in their contract. By making these minor adjustments to he schedule on the first day of each week, the entire faculty is guaranteed an hour of collaborative planning to start each week, but their work day/week has not been extended by a single minute

Shared Classes – Teachers across two different grade levels or courses combine their students into one class for instruction. While one teacher/team instructs the students during that period, the other team engages in collaborative work. The teams alternate instructing and collaborating to provide equity in

learning time for students and teams. Some schools coordinate shared classes to ensure that older students adopt younger students and serve as literacy buddies, tutors, and mentors.

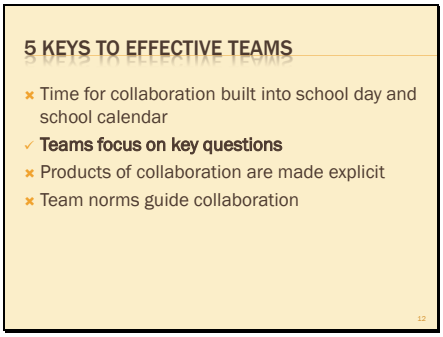
Group Activities/Events/Testing – Teams of teachers coordinator activities that require supervision of students rather than instructional expertise (i.e., videos, resource lessons, read-alouds, assemblies, testing). Non-teaching staff supervise students while the teachers engage in team collaboration.

Banking Time – Over a designated period of days, instructional minutes are extended beyond the required school day. After banking the desired number of minutes on designated days, the instructional day ends early to allow for faculty collaboration and student enrichment. In a middle school, for example, the traditional instructional day ended at 3:00; students boarded buses at 3:20 and the teacher contractual day ended at 3:30. The faculty decided to extend the instructional day until 3:10 rather than 3:00. By teaching an extra ten minutes nine days in a row, they "bank" ninety minutes. One the tenth day, instruction stops at 1:30 and the entire faculty has collaborative team time for two hours. The students remain on campus and are engaged in clubs, enrichment activities, and assemblies sponsored by a variety of parent/community partners and co-supervised by the school's non-teaching staff.

Inservice/Faculty Meeting Time – Schedule extended time for teams to work together on staff development days and during faculty meeting time.

Rather than requiring staff to attend a traditional whole staff inservice session or sit in a faculty meeting while directives and calendar items are read to highly educated professionals, shift the focus and use of these days/meetings so members of teams have extended time to learn with and from each other.

Slide 12



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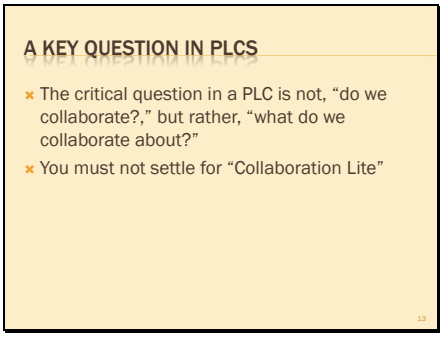

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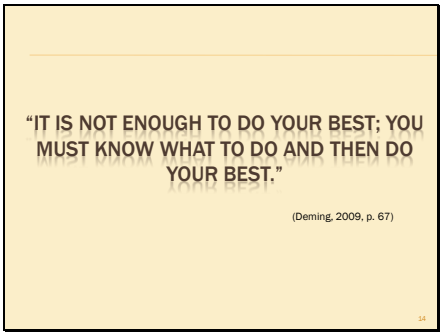
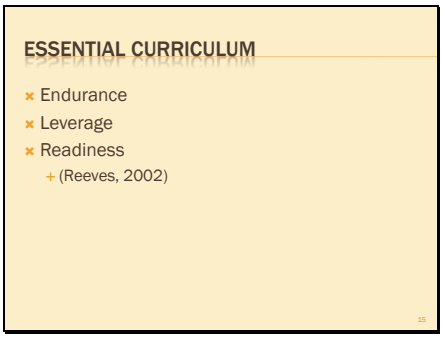


Teachers typically do their best; however, they have not always known what to do. The key to improving schools is doing the right thing. The key to effective collaboration is being sure teachers are collaborating or co-laboring on the right thing. These "things" should focus on impacting students' achievement. So, how do leaders decide what to focus on?

Slide 15



Endurance: "Standards that meet the criterion of endurance give students skills or knowledge that remains with them long after a test is completed. Standards on research skills, reading comprehension, writing, map reading, and hypotheses testing are all examples of enduring knowledge." (p. 49-50)

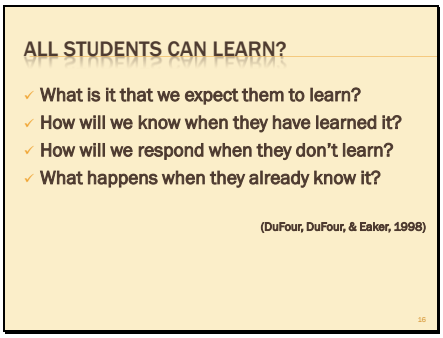
Leverage: "The criterion of leverage helps the leader and teachers identify those standards applicable to many academic disciplines. Two examples that one can find in every set of academic standards are nonfiction writing and interpretation of tables, charts, and graphs. The evidence is quite clear that if students engage in more frequent nonfiction writing, their performance in other academic disciplines improves." (p. 50)

Readiness for the next level of learning: To address this criterion, a collaborative team of teachers would ask the team of colleagues in the grade level above them to identify the essential knowledge and skills students must acquire to be successful in their class

next year.

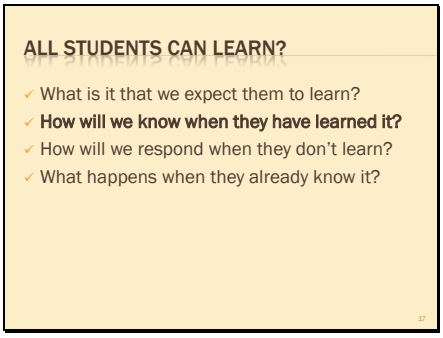
A school committed to helping all students learn at high levels must have a process in place to ensure that every teacher is clear on the question, “Learn what?” for each course, grade level, and unit of instruction.

Slide 16



WHAT ARE THE FOUR QUESTIONS EACH TEACHER MUST ASK IN ORDER TO IMPROVE STUDENT ACHIVEMENT? An absolute priority of every team in a PLC is to clarify what students must learn. In doing so, members of the team will be asked to identify both the most essential skills and concepts students must acquire, as well as curriculum content that should be eliminated to provide more instructional time for what is deemed essential.

Slide 17



How will we respond when some of our students do not learn? What process will we put in place to ensure students receive additional time and support learning in a timely, directive, and systematic way?

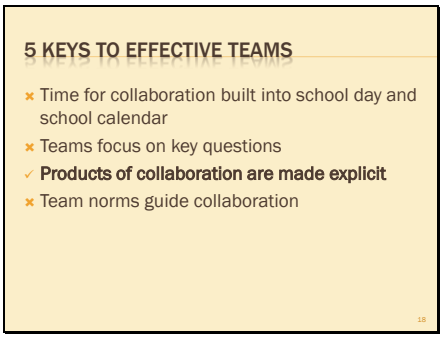
We submit that what typically happens when a student does not learn will depend on the practices of his or her individual teacher rather than on any coordinated, collective response. Furthermore, in traditional schools, teachers bear no responsibility for the learning of students who are not

specifically assigned to their classroom. This traditional structure has contributed to the norm of teacher isolation and to uneven and inequitable support for students. We will explore how teams and schools address the challenge of this question.

How will we enrich and extend the learning for students who are already proficient?

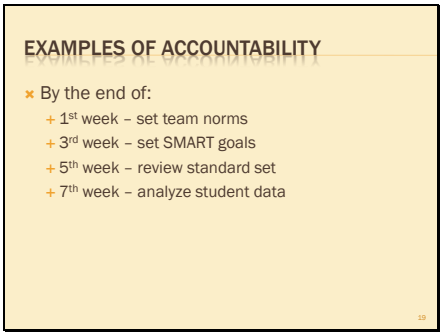
One of the concerns expressed about the PLC concept is that its attention to the learning of all students will divert resources and attention to students who are struggling to the detriment of students whose learning could be enriched. Weill explore how teams and schools address this challenge in a PLC.

Slide 18



There should be an "outcome" of each PLC session. Physical evidence about what was accomplished (minutes, lesson plans, data analysis sheets, etc.) and identified next steps and preparation needs for the next meeting.

Slide 19

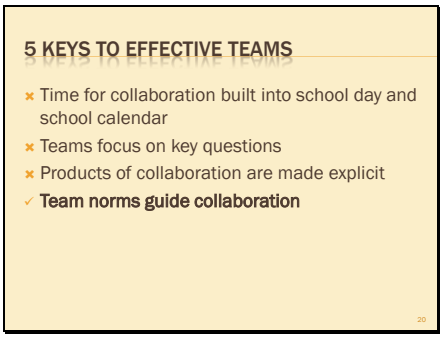


Tools to assist you in leading explicit product process of PLC time:

4.2 – Suggested PLC team focus
4.3 – Meeting agenda template
4.4 – Meeting evaluation form
4.5 – Meeting record

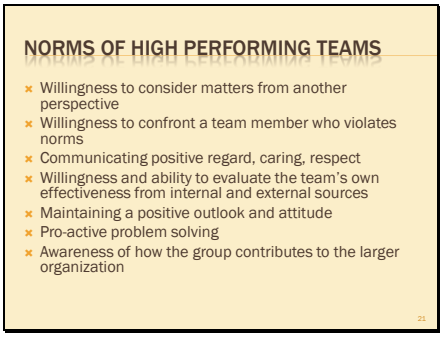
Discuss each form and advise how to implement in PLC process.

Slide 20



Ground rules that govern the PLC team. Includes protocol and commitments team members are willing to make to each other and their students. Norms leave no doubt of PLC time expectations.

Slide 21



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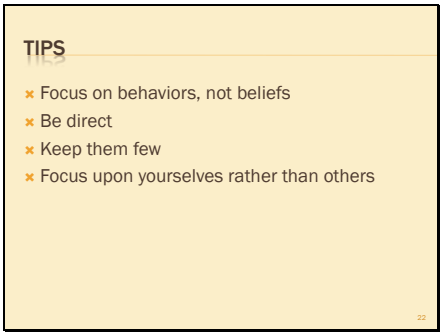
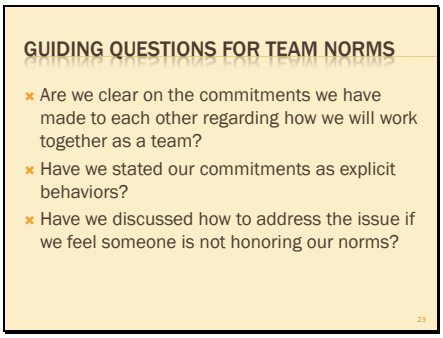


Remember, God only needed 10 commandments to govern all of life.

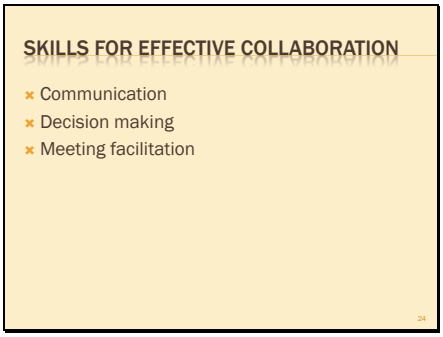
Slide 23



Keep these three questions in mind as teams are developing norms.

Tools to assist leaders with development of norms in their school.
4.6 – Developing Norms Process
4.7– Developing Norms Consideration

Slide 24



Slide 25

TEAM SKILLS 1: COMMUNICATION

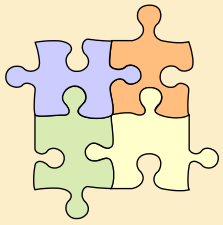
- Pay attention!
  - Share
  - Discuss
  - Dialogue
  - Active listening

25

Slide 26

ACTIVITY

- Five Easy Pieces



26

Complete Activity in Groups of 4-6.
Tool 4.8

Slide 27

WAYS TO SHARE & STAY CONNECTED

- Maintain accurate records
- Check in with team members between meetings
- Share information with colleagues outside the team
- Use a variety of ways to communicate

27

Slide 28

ACTIVE LISTENING

- Hear and understand what is being said
- Barriers
  - Stress
  - Emotions
  - Pre-occupation
  - Bias
  - Physical state
  - Closed mind
  - Lack of interest

28

Slide 29

3 WAYS TO MOVE TO ACTIVE LISTENING

- Paraphrasing
- Perception checking
- Probing

29

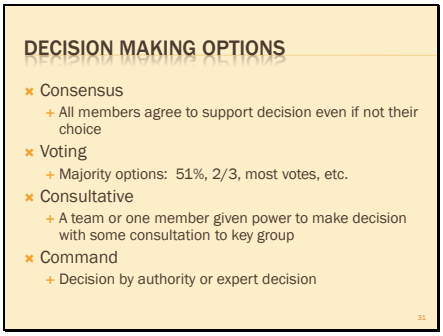
Slide 30

TEAM SKILL 2

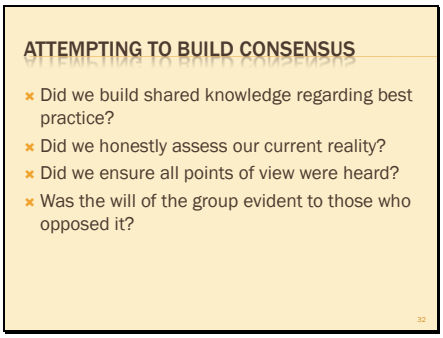
- Decision making
  - Decide how to decide
- Collaborative decision making
  - Decisions require diverse, creative ideas
  - Many perspectives are needed to understand the issue or problem
  - A fundamental or significant change is likely
  - Many people or groups share the same problem

30

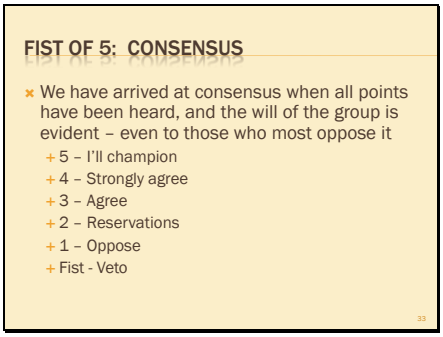
Slide 31



Slide 32

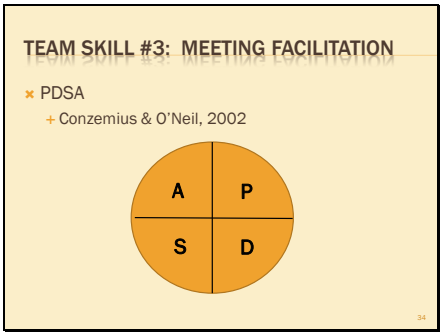


Slide 33

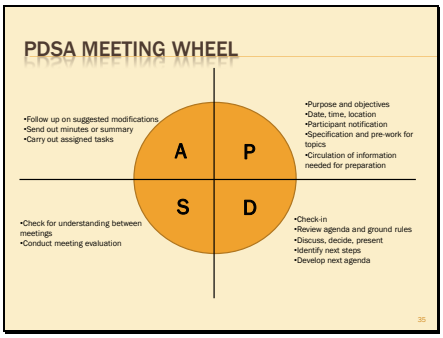


Quick, easy assessment of where members stand on a topic. Presenter demonstrate it with examples.

Slide 34



Slide 35



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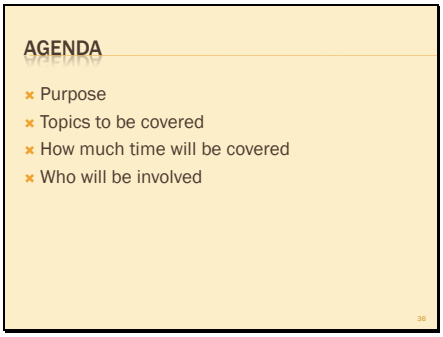

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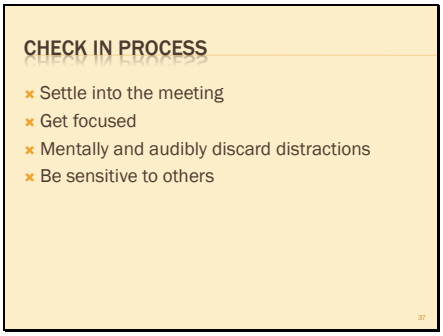

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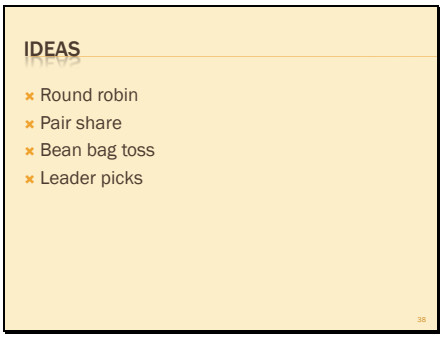

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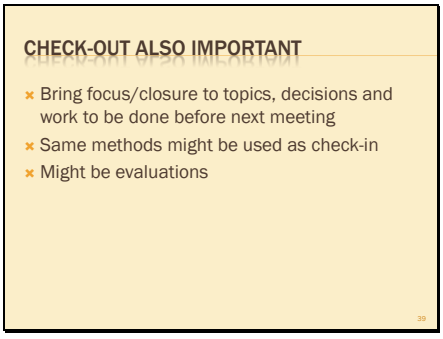

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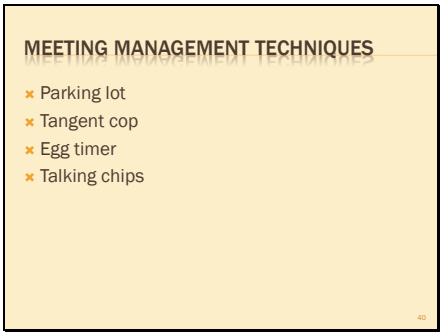

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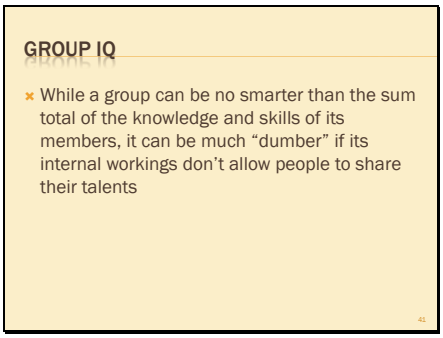
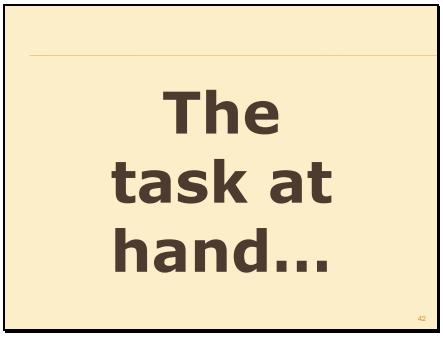


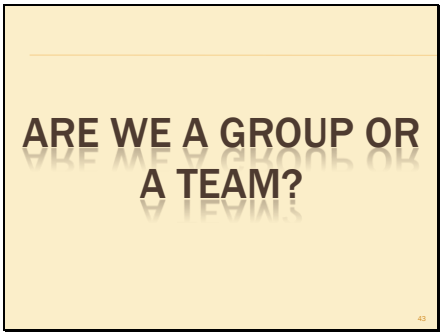
Number Heads Together: Teams discuss this statement and share their thoughts and conclusions.

Slide 42



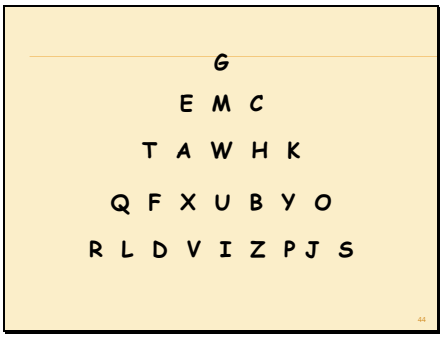
Let's see how much collaboration really helps us.

Slide 43



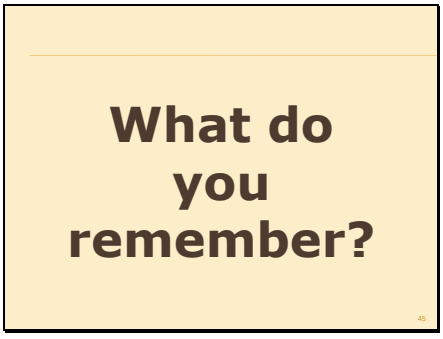
Show the participants the next slide for one minute. Tell them they are to try and remember as much of the slide as they can and recreate what they saw once time is called. The figure uses the letters of the alphabet and they are used only once. Ask for questions. They are not allowed to write anything down.

Slide 44



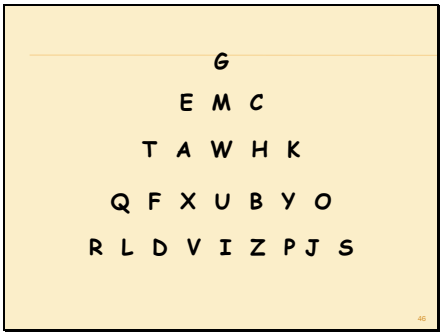
Hide slide in participant handout. Show slide for one minute. Go to next slide and ask them to recreate what they saw.

Slide 45



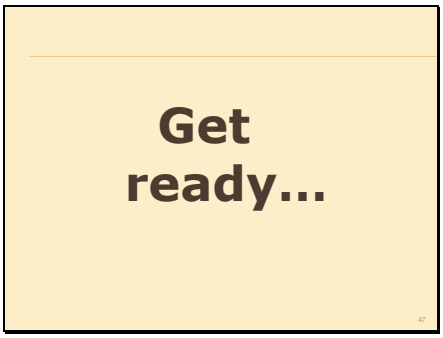
Allow participants to recreate what they saw.

Slide 46



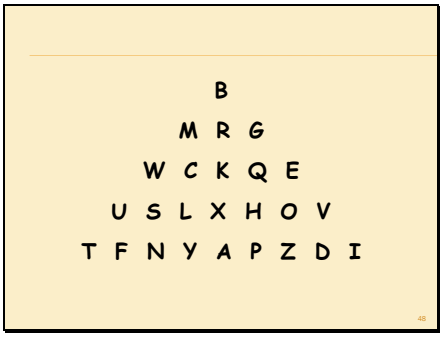
Hide slide in participant handout. Show this slide and ask the participants to check their work..how many answers did they get correct? Correct answers represent the correct letter in the correct position. Have they share with a partner or with the entire group their success.

Slide 47



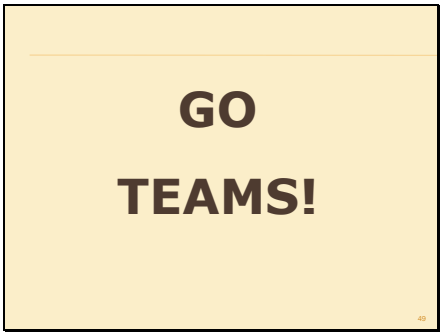
Now have the participants form teams of 4 and create a plan to accomplish this same type of task together. The letters will be placed differently and it may be a different shape, but they are allowed to work together. Allow 2-3 minutes for teams to plan. Ask for questions.

Slide 48



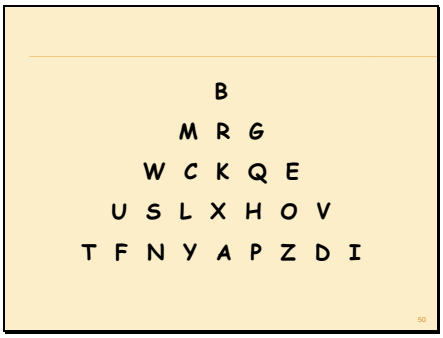
Hide slide in participant handout.

Slide 49



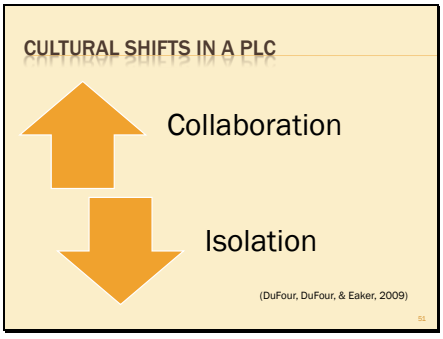
Discuss

Slide 50



Hide slide in participant handout. How many responses did you get correct this time. Did your score improve. How did you feel when you had to the task alone? (Brainstorm list and put on a flip chart). How did you feel when you participated as a team? (Brainstorm list and put on a flip chart).

Slide 51



Tool 4.9

Slide 52

FINAL THOUGHT ON COLLABORATION

- A precondition for doing anything to strengthen our practice and improve a school is the existence of a collegial culture in which professionals talk about practice, share their craft knowledge, and observe and root for the success of one another. Without these in place, no meaningful improvement – no staff or curriculum development, no teacher leadership, no student appraisal, no team teaching, no parent involvement, and no sustained change – is possible.
  - (Barth, 2006, p. 13)

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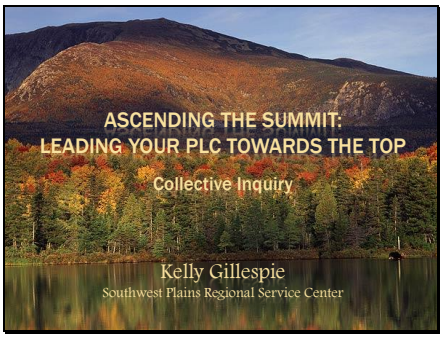
Slide 1



Slide 2

CONTACT INFORMATION

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- Southwest Plains Regional Service Center
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- Sublette, Kansas 67877
- Ph: 800-728-1022
- E-mail: kgillespie@swprsc.org
- Web Site: http://www.swprsc.org

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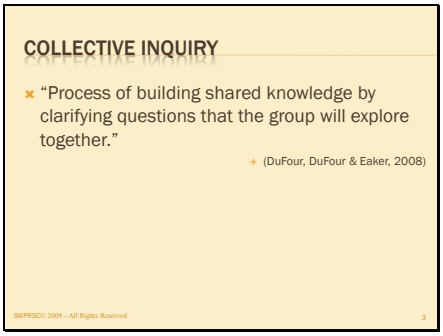
Slide 3



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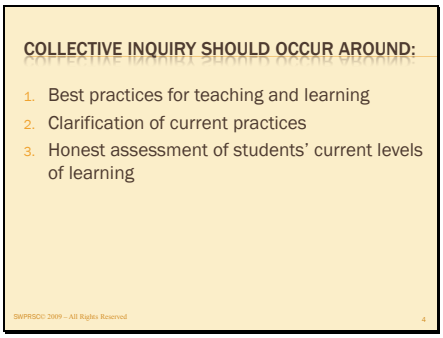

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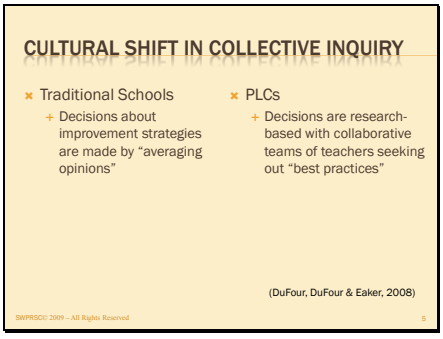
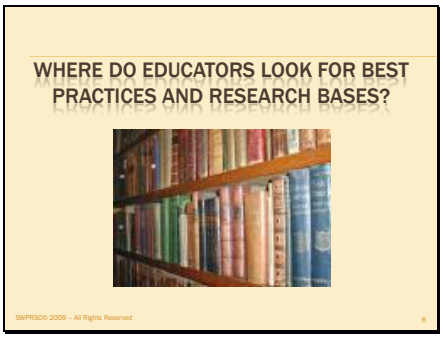


Here is an important aspect of this cultural change: More traditional schools tend to make decisions based primarily on how well teachers "like" particular approaches.

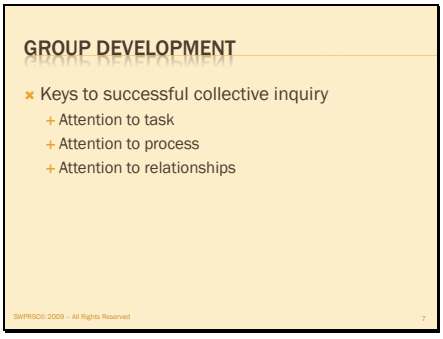
A PLC recognizes that feelings are important, but makes the primary basis for embedding particular practices into the school culture the effect that these practices have on student learning. This emphasis on how practices affect learning helps to create a results-oriented culture.

Slide 6



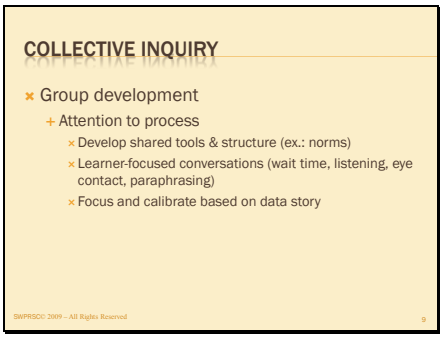
Have participants brainstorm ideas…they might include: Books, journals, dissertations, workshops, conferences, visiting other schools, websites, state department, consultants, service centers, state department of education, education research laboratories,….

Slide 7



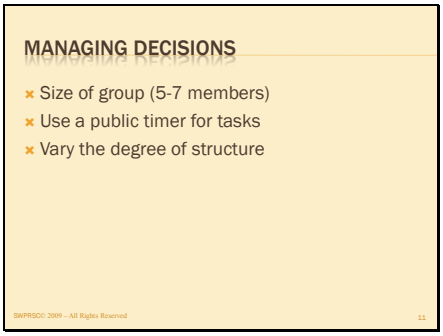
Slide 8

Slide 9



Slide 10

Slide 11



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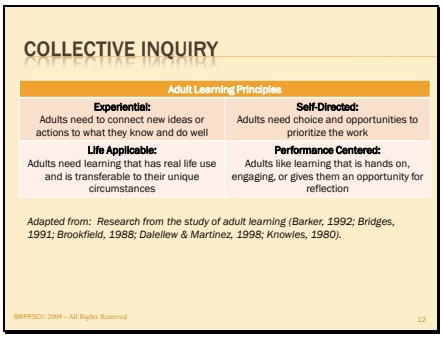

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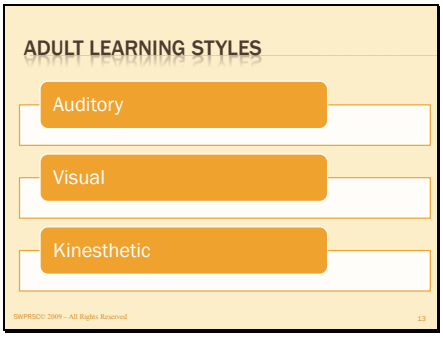


Tool 5.1

Slide 14

Beach balls respond to choice and options for experimentation and creativity. But we also must recognize that these learners need deadlines, guidelines, and boundaries or else they may have trouble focusing or completing assignments. Balancing their creativity and spontaneity with time management and "stick to it" skills can be very important for beach balls.

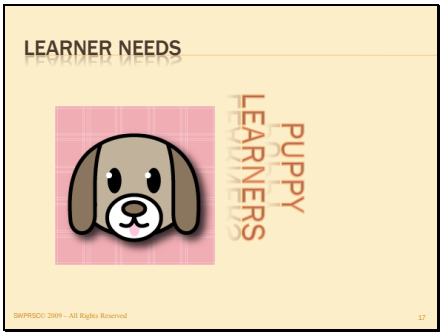
Slide 15

Clipboards like to have order, structure, and routine with clear guidelines and expectations. But life is not always predictable and organized. The unexpected occurs, and then what? Clipboards need to break out of the routine and learn to deal with ambiguity, spontaneity, and anomalies. Dealing with the unexpected is also a life skill.

Slide 16

Microscopes are more in-depth learners who like to analyze and investigate the truth they seek. They need sufficient time to go as deeply as they need for their learning, also recognizing that sometimes they have to move on. They also need help in working with others, developing collaborative skills, and seeing other people's point of view.

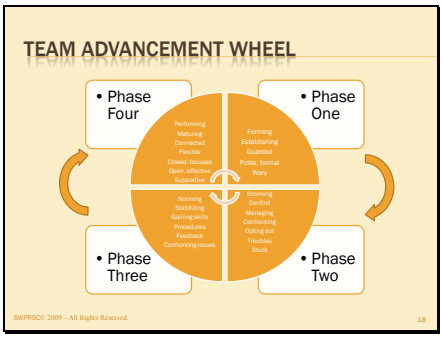
Slide 17



Puppies are generally collaborative learners and enjoy partner and group work, yet they also need develop independent skills and to take risks and learn to trust their own judgment and work alone in new areas.

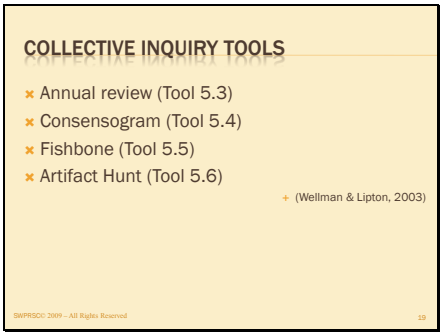
Diversity, rather than being a problem in collaboration, is really a gift as we recognize the different strengths of various group members and capitalize on them. The awareness of styles and diversity in the group also helps each member to be cognizant and tolerant of the individuals and their contributions and limitations to the group process.

Slide 18



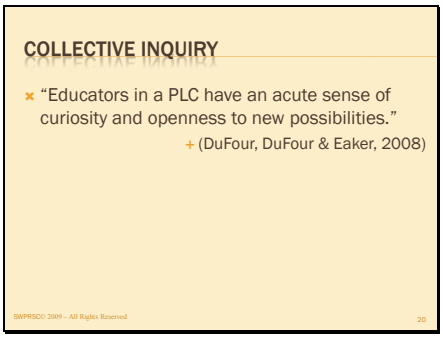
Tool 5.2

Slide 19

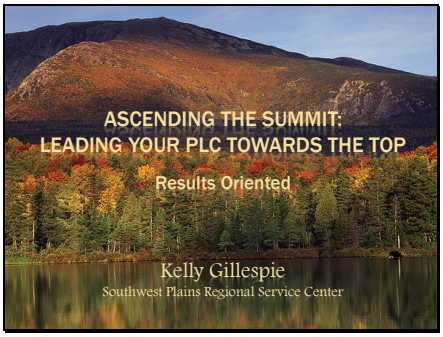


Share/discuss each tool. Select 1 to demo to the group.

Slide 20



Slide 1



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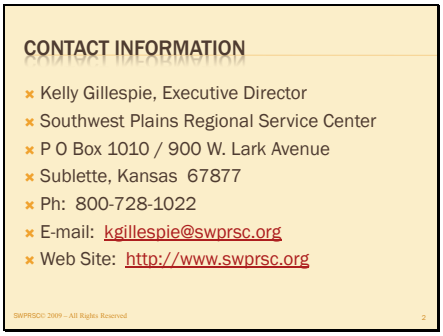

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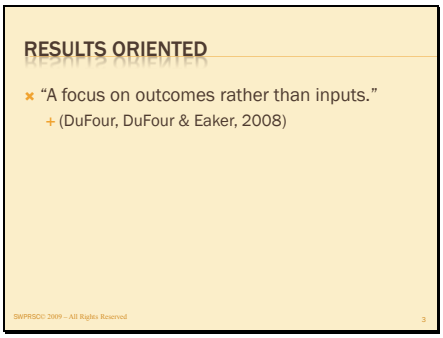
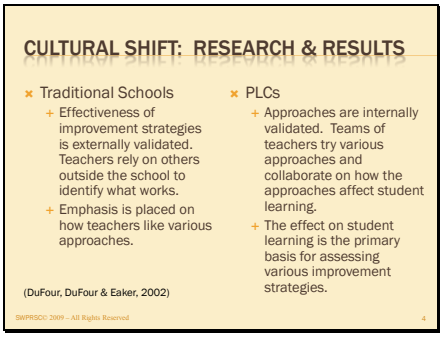


PLC members are committed to achieving desired results.

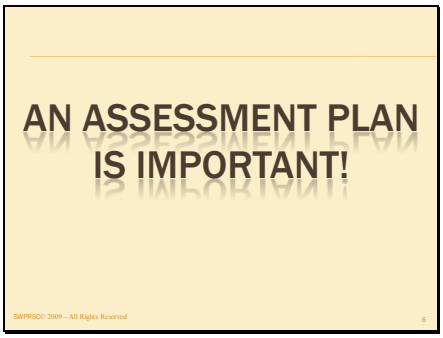
Slide 4



Slide 5

Tool 6.1

Slide 6



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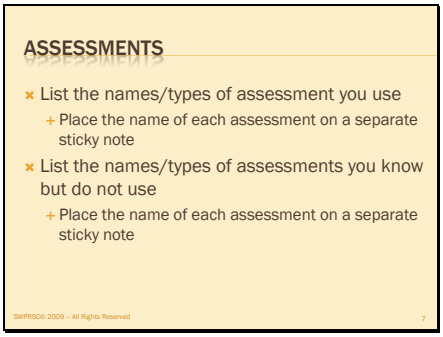

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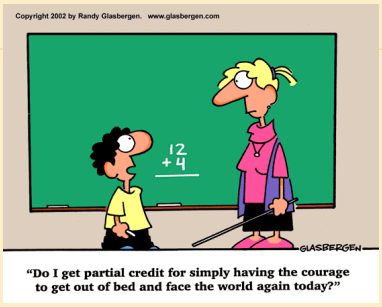

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Slide 9

WHY DISCUSS ASSESSMENT?

- SINI & DINI Root Cause Analysis
  - A review of the data shows that there is a lot of testing happening in the district, but that assessment does not necessarily drive curriculum and instruction
  - District educators indicated that the timelines of receiving data impacts their ability to use it effectively
  - Educators expressed a frustration related to their ability to analyze and synthesize the data

 9

Slide 10

WHAT IS ASSESSMENT?

- The word 'assess' comes from the Latin verb 'assidere' meaning to 'sit with'
- In assessment one is supposed to sit with the learner. This implies it is something we do 'with' or 'for' students and not 'to' students
  - (Green, 1999)

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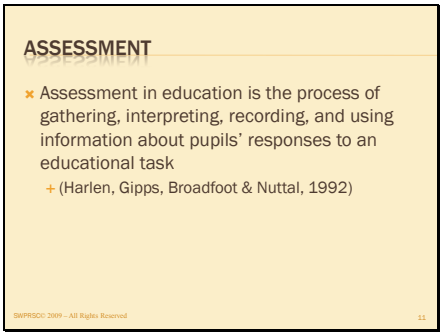
Slide 11



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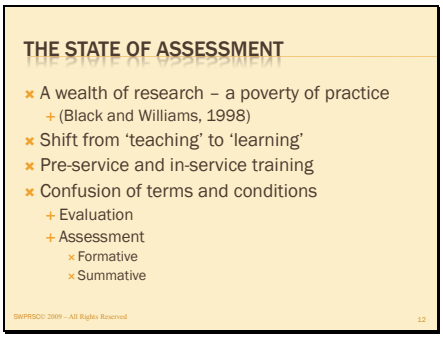

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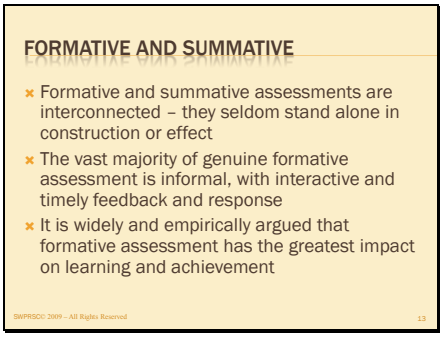
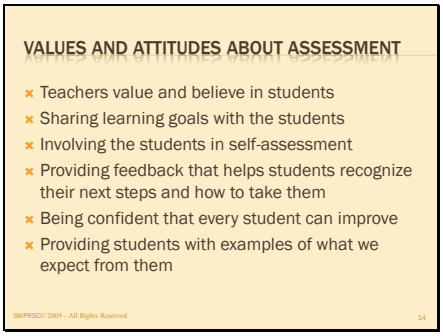


Slide 14



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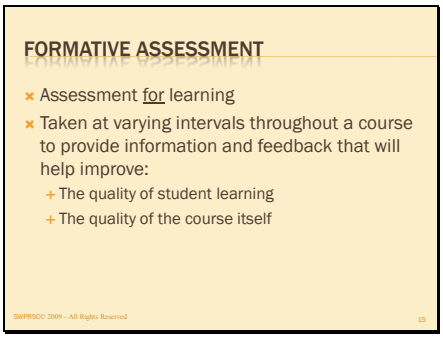

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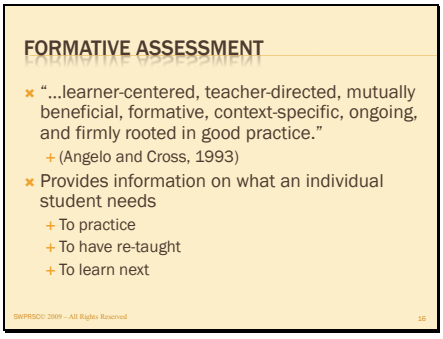

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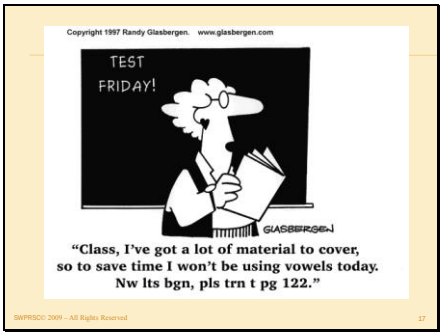

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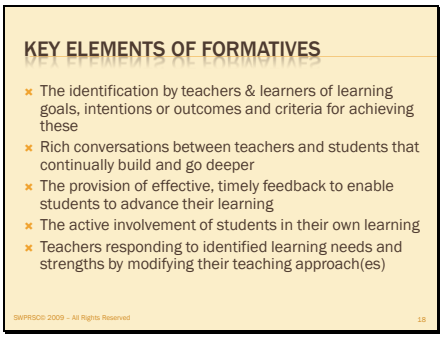

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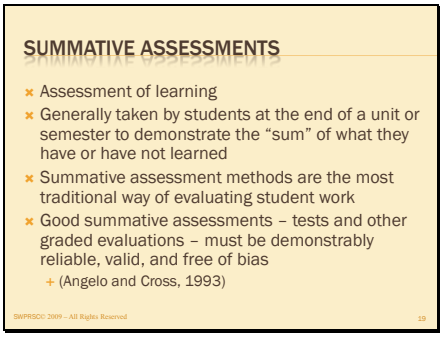

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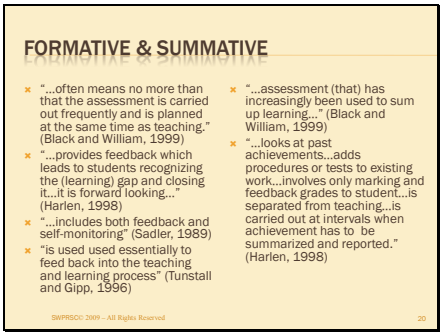

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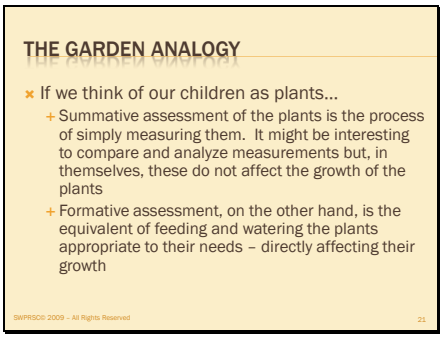

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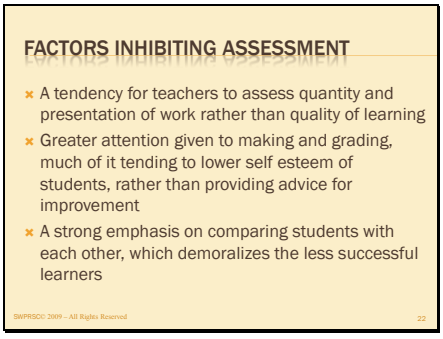

Slide 23

SELF EVALUATION

- Where would you place your assessment practice on the following continuum?
- The main focus is on:
  - Quantity of work/presentation ⟷ Quality of learning
  - Marking/grading ⟷ Advice for improvement
  - Comparing students ⟷ Identifying individual progress

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Slide 24

 24

Slide 25

FORMS OF SUMMATIVE ASSESSMENT

- Performance assessment
- Portfolio
- Traditional tests

 25

Slide 26

IMPLICATIONS FOR CLASSROOM PRACTICE

- Share learning goals with students
- Involve students in self-assessment
- Provide feedback that helps students recognize their next steps and how to take them
- Be confident that every student can improve

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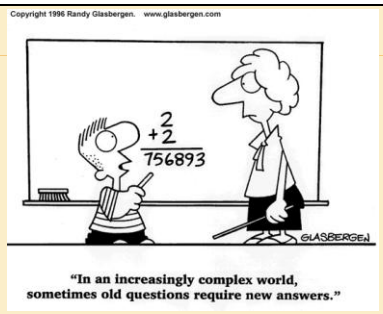
Slide 27



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ASSESSMENT CONTINUUM

Classroom Assessments	Common Assessments	District Level Assessments	External Assessments
Most Formative	More Formative	More Summative	Most Summative
Daily Weekly	Unit Monthly	Semester	Annual
On going Student & Teacher Assessment	Collaboratively Developed and Curriculum Embedded	Identify Groups of At-Risk Students-Entrance and Exit Criteria	Ranks and Benchmarks
Quizzes, Essays, and Projects	Pyramid of Interventions	DIBELS NWEA-MAP Gates-MacGinitie Programmatic Support	Terra Nova ITBS ACT ISAT

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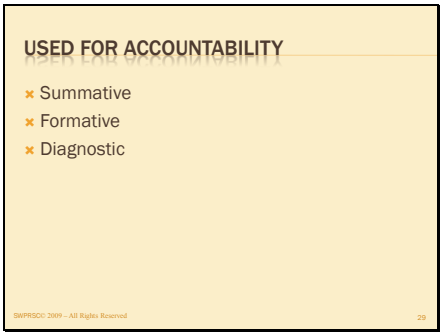
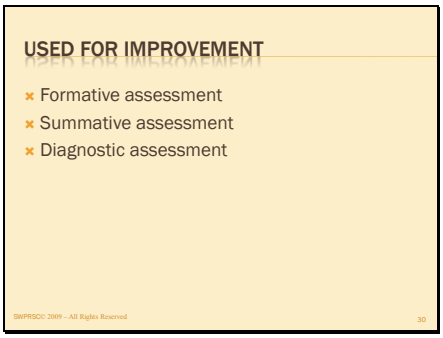


Summative

Slide 30



Formative assessment

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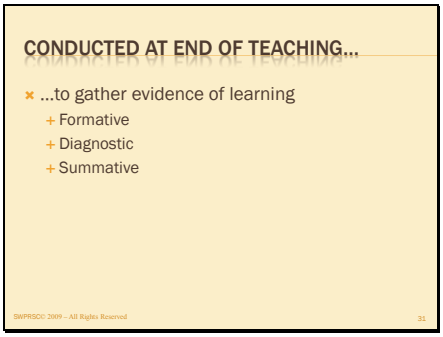
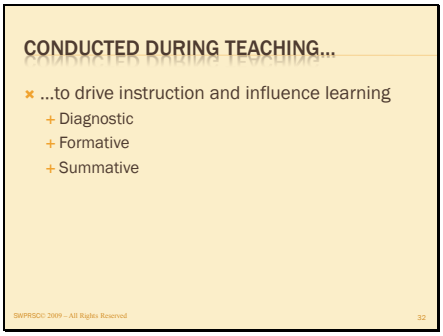


Summative

Slide 32



Formative

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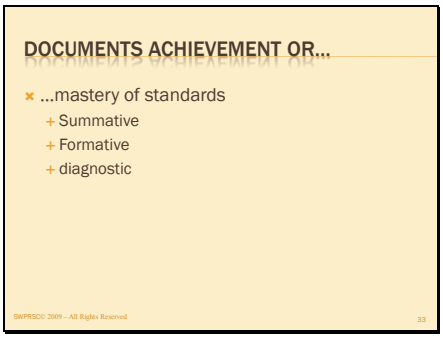
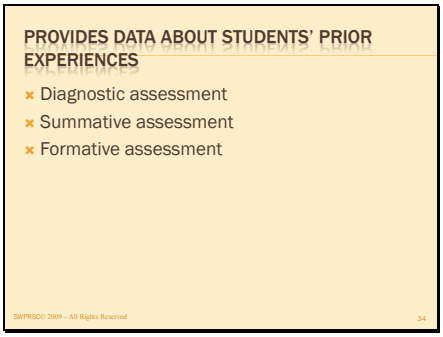


Summative

Slide 34



Diagnostic assessment

Slide 35

GIVEN CONTINUOUSLY THROUGHOUT THE LEARNING PROCESS

- Summative
- Formative
- Diagnostic

 35

Formative

Slide 36

PROVIDES A BASELINE OF UNDERSTANDING

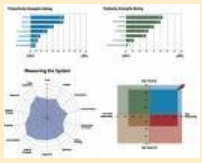
- Formative
- Diagnostic
- Summative

 36

Diagnostic

Slide 37

ASSESSMENT GRAPHIC



(Tool 6.2)

 37

Tool 6.2

Slide 38

ASSESSMENT

- What to collect
  - Achievement
  - Perception
  - Demographics

(Tool 6.3)

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Discuss each type of data to collect in achievement, perception, and demographics.

Tool 6.3

Slide 39

DATA CAROUSEL ACTIVITY

(Tool 6.4)

 39

Tool 6.4

Slide 40

RESULTS ORIENTED

- "The seamless coherence among assessments, analysis, and action creates the ideal classroom environment for significant gains in student learning."
  - (Paul Bambrick-Santoyo, 2008)

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Tools for Parts 1 – 6

MISSION
VISION
VALUES
GOALS

Tool 1.1a

Why? Why do we exist?		Purpose

What? What do we hope to become?		How? How must we behave?
Collective Commitment		Which steps and when?

Timelines and Targets		

Tool 1.1b

Sample Mission Statements

Sample #1:

- "We believe all kids can learn…based on their ability.
    - The extent of students' learning is determined by their innate ability or aptitude. This ability is relatively fixed, and as teachers, we have little influence over the extent of student learning. It is our job to create multiple programs or tracks that address these differences in ability in our students and then to guide students to the appropriate program. This ensures that students have access to the proper curriculum and an optimum opportunity to master material appropriate to their abilities.

Sample #2:

- "We believe all kids can learn…if they take advantage of the opportunity to learn."
    - Students can learn if they choose to put forth the effort to do so. It is our job to provide students with this opportunity to learn, and we fulfill our responsibility when we attempt to present lessons that are both clear and engaging. In the final analysis, however, while it is our job to teach, it is the student's job to learn. We should invite them and encourage them to learn, but we should also honor their decision if they elect not to do so.

Sample #3:

- "We believe all kids can learn…and we will accept responsibility for ensuring their growth."
    - Certainly it is our responsibility to help each student demonstrate some growth as a result of his or her experience in classrooms. But the extent of that growth will be determined by a combination of the student's innate ability and effort. It is our job to create a warm, inviting classroom climate and to encourage all students to learn as much as possible, but the extent of their learning depends on factors over which we have little control.

Sample #4:

- "We believe all kids can learn…and we will establish high standards of learning that we expect all students to achieve."
    - It is our job to create an environment in our classrooms that engages students in academic work that results in a high level of achievement. WE are confident that with our support and help, students can master challenging curricula, and we expect them to do so. We are prepared to work collaboratively with colleagues, students, and parents to achieve this shared educational purpose.

Core Values Activity

Determine Core Values:

- Each participant needs to write down three core values they believe are necessary to possess in order for student achievement to occur. (5 minutes)
- In groups of two, discuss individual values and then come to consensus of three common values per group. (10 minutes)
- In groups of four, repeat above step. (10 minutes)
- One spokesperson from each group will share three values with everyone.
    - By consensus, all will agree upon the top three values that we will center our mission around. (20 minutes)

Values Defined:

- Appoint a facilitator, recorder, and spokesperson.
- In your group of four, answer the following questions. (10 minutes)
    - What does each value mean to your group?
    - What would it look like when exhibiting each value?
    - How would it feel to exhibit each value?

Values Communicated:

- In your groups, answer the following questions. (10 minutes)
    - How can we communicate our values?
    - How do we get students, community and staff to buy into this value?

Daily Practice:

- Individually, answer the following question. (10 minutes)
    - What can you do as an individual to demonstrate the core set of values and follow the mission of the district?

Designing Successful Values

On way to approach this task of identifying shared values is to create a representative task force and challenge its members with the following responsibilities:

1. Carefully review the school's vision statement.
2. Identify the attitudes, behaviors, and commitments that must be demonstrated by the group in order to move the school closer to this vision.
3. Develop a draft of the statement of these attitudes, behaviors, and commitments, limiting it to no more than 10 statements.
4. Arrange small-group meetings with colleagues to present task force findings, solicit feedback, and answer questions.
5. Revise initial draft as appropriate.
6. Continue small-group meetings and revisions until there is a strong consensus for the statements.
7. Present your findings to the entire staff and obtain its endorsement of the final product.

Sample Value Statements

For Teachers:

In order to advance our shared vision of an exemplary school, we will:

- Provide an inviting classroom environment for students – an environment with clear expectations, consistent consequences, and specific, articulated academic goals.
- Help all students achieve the intended out-comes of the curriculum by addressing their individual needs and learning styles.
- Use methods of assessment that enable us to monitor the learning of individual students.
- Collaborate with one another and our students so that we can achieve our collective goals more effectively.
- Demonstrate our commitment to ongoing professional development and continuous improvement.
- Promote a positive school climate by modeling the qualities and characteristics that we hope to instill in our students.
- Involve parents in the education of their children by keeping them informed of student progress and offering suggestions for assisting their students.

For Administrators/Boards of Education:

- We will model and promote the behaviors called for in the District Vision Statement. These behaviors include, but are not limited to, open and effective communication, collaborative problem solving and decision making, high expectations for achievement, commitments to life-long learning and continuous improvement, and a work ethic that reflects the importance of our mission.
- We will recruit and retain individuals who are best suited to advancing the vision and goals of the District, and we will create conditions which support their ongoing professional growth.
- We will facilitate the development of curricular and co-curricular programs which result in high levels of student engagement, reflect student needs and interests, integrate technology when appropriate for achieving program goals, and enable students to understand and appreciate diverse cultures.

Sample Value Statements
Page 2

For Support Staff:

Although we have diverse responsibilities as members of the support staff, each of us is in a position to help our school achieve its mission of success for every student. Furthermore, in fulfilling our respective responsibilities, we share common commitments. These include the following:

- We will support the collective effort to create the school described in the school's Vision Statement.
- We will continue to develop and support positive relationships with our colleagues, our students, and our community.
- We will approach every situation with an open mind and a commitment to continuous improvement.
- We will participate in effective communication throughout the school and community.
- We will promote a safe and nurturing environment that is conducive to the academic and social growth of each individual student.

(DuFour and Eaker, 1999)

School Name
School Improvement Plan

Template

Goal: All students will improve…skills across the curriculum.			
Support Data (used to select the goal)	**Standardized Assessments** (include grade/subtest)	**Local Assessments** (include grade/subtest)	(Please indicate which is your performance assessment.)
Intervention: All students…		**The research base describing this intervention and how it applies to our students is included on an attached page.**	

	Activities to Implement the Intervention	**Person(s) Accountable**	**Timeline**		**Resources**	**Classroom Level Monitoring System**
			Begin	**End**		
SUPPORTING EXPECTING PRACTICING MODELING TEACHING						Teacher Implementation:
						Student Performance:

School Name
School Improvement Plan

Directions

Goal: All students will improve _____ skills across the curriculum. (May want to include SMART goal(s) with this main goal.			
Support Data (used to select the goal) 3 data points from the profile that you used to select your goal	**Standardized Assessments** (include grade/subtest) State assessments, Norm-Referenced Tests: ITBS, CAT, ACT, etc.	**Local Assessments** (include grade/subtest) Curriculum embedded tests – CRTs, CBMs Locally Developed Assessments, Unit Tests	(Please indicate which is your performance assessment.)
Intervention: Must be student based. What is it that you want students to know, and be able to do.		**The research base describing this intervention and how it applies to our students is included on an attached page.**	

	Activities to Implement the Intervention	**Person(s) Accountable**	**Timeline**		**Resources**	**Classroom Level Monitoring System**
			Begin	**End**		
SUPPORTING EXPECTING PRACTICING MODELING TEACHING	A checklist of what teachers, parents, students, community members, businesses, etc. must do to implement this intervention. Either an intervention or an activity must be included that will address flagged students. The group of interventions must include the five components to the left. Include enough detail that a new teacher or a parent would have a good idea of what will be happening and the expectations for them. How often will the interventions be used and practiced? This might be different for core and exploratory teachers. May want to identify Tiers 1, 2, & 3.	THE person as well as the teachers who will be expected to teach it.	When you will start each activity	When you will end each activity.	Collaborative Time Training Funding Personnel Materials	Teacher Implementation: What will you use to hold teachers accountable? Examples: Lesson Plans Logs Student Samples Lesson Samples
						Student Performance: What formative data will be used to check for understanding in the classroom? Examples: Unit tests, Writing samples, Checklists, Assignments, Project Rubrics

School Name
School Improvement Plan

Thinking Maps

Goal: All students will improve reading comprehension skills across the curriculum.

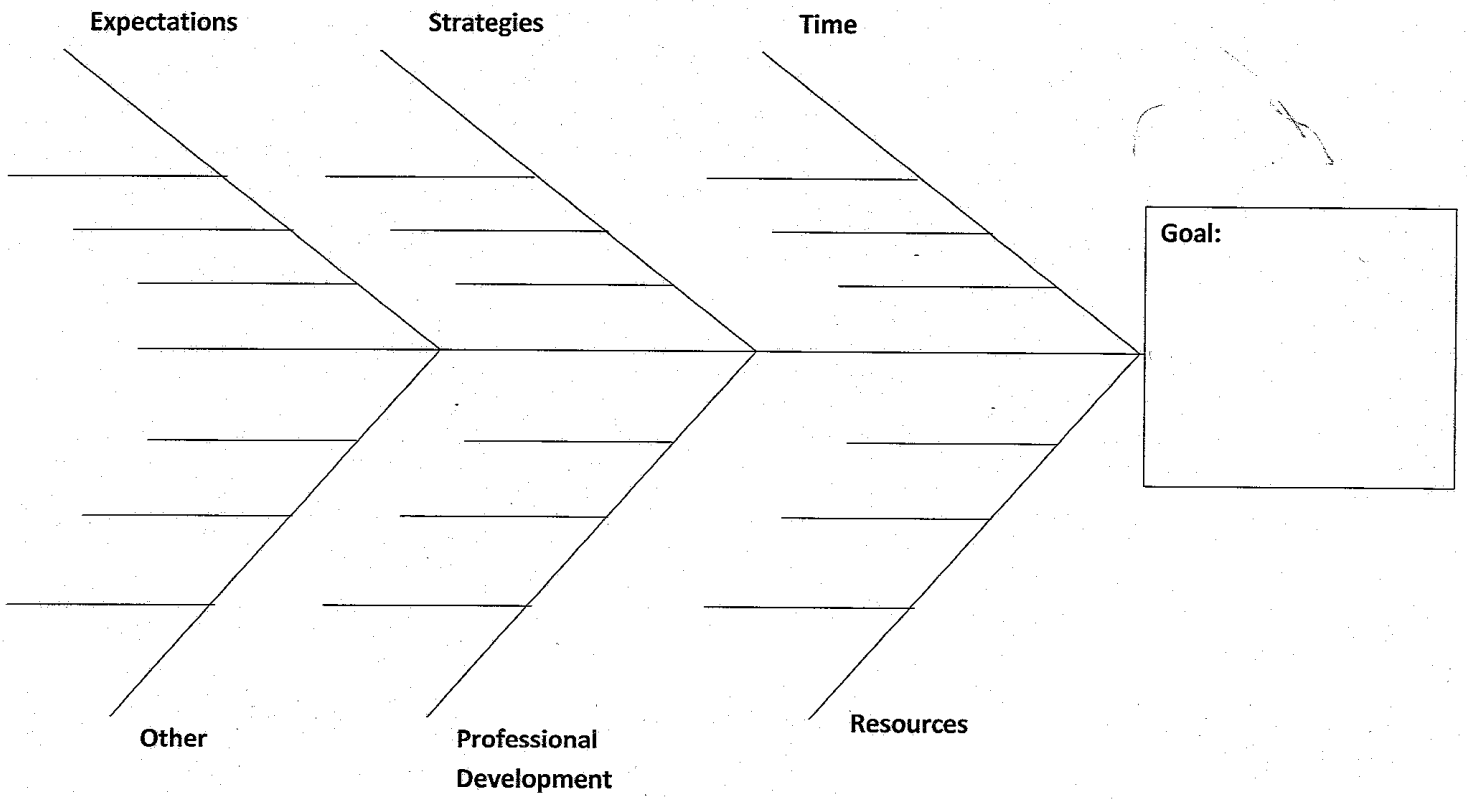
Support Data (used to select the goal)	**Standardized Assessments** (include grade/subtest)	**Local Assessments** (include grade/subtest)	(Please indicate which is your performance assessment.)
Kansas Reading Assessment ITBS, CRTs	Kansas Reading Assessment – Gr. 5 (Gr. 3-5 in 06) ITBS Reading Comprehension Subtest – Gr. 3-5 Bader Diagnostic Reading Assessment – Gr. 2	CRTs – K-5 Kansas Reading Performance – Gr. 5 (Gr. 3-5 in 06)	

Intervention: All students will learn and use Thinking Maps® across the curriculum to improve comprehension.

The research base describing this intervention and how it applies to our students is included on an attached page.

	Activities to Implement the Intervention	**Person(s) Accountable**	**Timeline**		**Resources**	**Classroom Level Monitoring System**
			Begin	**End**		
SUPPORTING EXPECTING PRACTICING MODELING TEACHING	1. Teachers will learn the Thinking Maps® model.	All Teachers	8/03	8/03	Inservice Time Collaborative Time Data Analysis Time Thinking Maps® Tools for Learning Newspapers in Education	Teacher Implementation: Administrative Walk-Through Teacher Log Sheet
	2. Teachers collaborate on Thinking Maps® usage.	All Teachers	8/03	5/07		
	3. Teachers will instruct students in the Thinking Maps® skills in their classrooms and implement across the curriculum by instructing, modeling, and providing student applications.	All Teachers	1/04	5/07		
	4. Students will learn and use Thinking Maps® as appropriate but at least monthly in each content area. (Tier 1)	All Teachers	1/04	5/07		
	5. All students will apply Thinking Maps® skills using newspapers across the curriculum at least weekly. (Tier 1)	All Teachers	8/04	5/07		Student Performance: Monthly assignment to determine student progress (low achieving students will be placed in weekly Thinking Maps® enrichment program). Timely data analysis of assessment from above.
	6. Students who are struggling as per classroom documentation will have after school tutoring time. (Tier 2)	All Teachers	8/04	5/07		
	7. Low performing students will have additional weekly learning opportunities using Thinking Maps®. (Note: This meets the requirement for flagged students.) (Tier 3)	All Teachers	8/04	5/07		

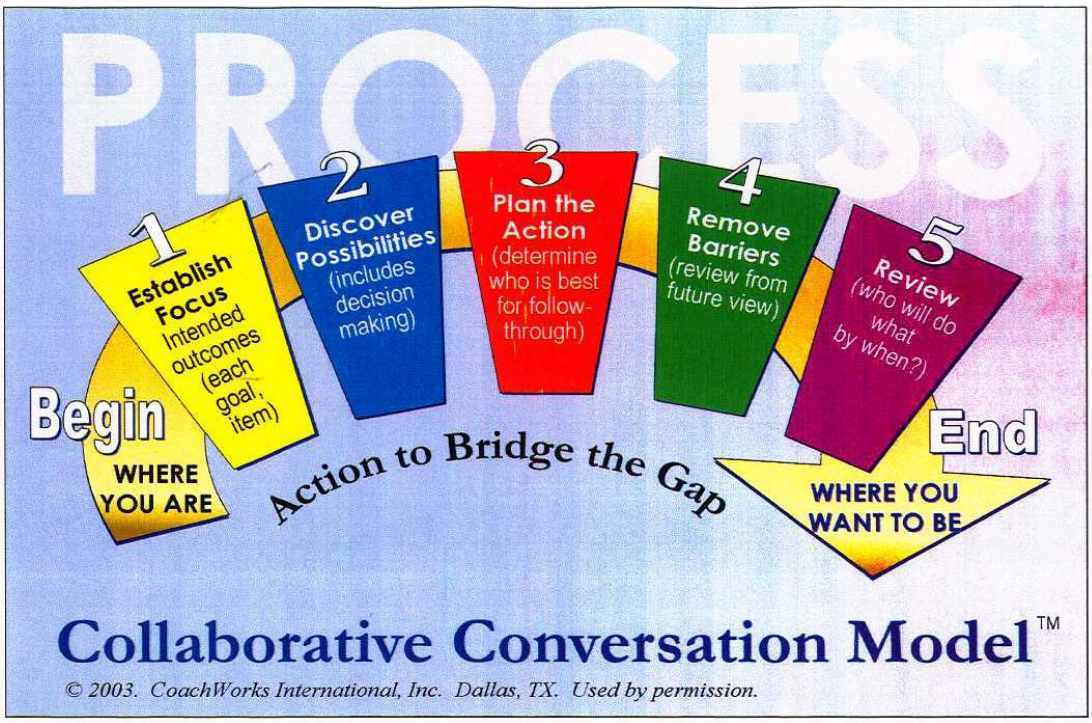
Cause and Effect: Fishbone



SIP Planning Worksheet: Building Resistance

Concerns	Potential Barriers	Solutions
• Lack of the familiar	• Our desire for familiar surroundings is strong. Change threatens us as we are forced to alter routines and habits.	• Make connections to what is known. • Honor past accomplishments. • Stress the purpose for change. • Provide structure for discussions. • Allow choice in how to proceed with change.
• Loss of face	• Loss of face means having to admit that the way things were done in the past was wrong or at least not the best way.	• Work off of successes and not gaps. What actions made something positive happen? Could we apply those same actions to tackle new problems? This is called asset mapping. • Create blame-free zones through norm setting and monitoring the risk level.
• Doubts about competence	• We become concerned about our competence. Will I make it under the new circumstances? Do I have the skills to compete or contribute in the new situation?	• Forster an attitude of "We are all in this together." • Create a sense that if everyone is a learner, no one is expected to have the changes perfected yet. • Teams that create an "ongoing learner" perspective overcome this worry.
• Disruption of personal life	• Change often disrupts personal time or needs.	• Manage and respect time in a team. • Careful pre-planning makes the time worthwhile. • Divide the work into manageable chunks with regard to load and time.
• Perception of "more work"	• The effort to manage one's affairs is multiplied when things are changed.	• Even if we are doing things "smarter, not harder" or replacing old strategies with new, we need to help each other with the little "how to's" that make new things work better quicker. • Be explicit in describing which strategies or actions we are replacing or substituting. • Help each other with the logistics as well as the big ideas.

Nine Principles of Change	Nine Principles of Change	Nine Principles of Change	Nine Principles of Change
1) Change is a process, not an event.	1) Change is a process, not an event.	1) Change is a process, not an event.	1) Change is a process, not an event.
2) There is a significant difference in what happens during the development and implementation of innovation.	2) There is a significant difference in what happens during the development and implementation of innovation.	2) There is a significant difference in what happens during the development and implementation of innovation.	2) There is a significant difference in what happens during the development and implementation of innovation.
3) An organization does not change until the individuals within it change.	3) An organization does not change until the individuals within it change.	3) An organization does not change until the individuals within it change.	3) An organization does not change until the individuals within it change.
4) Innovations come in different sizes.	4) Innovations come in different sizes.	4) Innovations come in different sizes.	4) Innovations come in different sizes.
5) Interventions are actions that are key to success of change.	5) Interventions are actions that are key to success of change.	5) Interventions are actions that are key to success of change.	5) Interventions are actions that are key to success of change.
6) Top-down and bottom up change can work, a horizontal perspective is best.	6) Top-down and bottom up change can work, a horizontal perspective is best.	6) Top-down and bottom up change can work, a horizontal perspective is best.	6) Top-down and bottom up change can work, a horizontal perspective is best.
7) Administrative leadership is essential to long-term change success.	7) Administrative leadership is essential to long-term change success.	7) Administrative leadership is essential to long-term change success.	7) Administrative leadership is essential to long-term change success.
8) Mandates can work if supported.	8) Mandates can work if supported.	8) Mandates can work if supported.	8) Mandates can work if supported.
9) Facilitating change is a team effort.	9) Facilitating change is a team effort.	9) Facilitating change is a team effort.	9) Facilitating change is a team effort.
"Conflict is essential to any successful change effort." Fullen, 1993	**"Conflict is essential to any successful change effort." Fullen, 1993**	**"Conflict is essential to any successful change effort." Fullen, 1993**	**"Conflict is essential to any successful change effort." Fullen, 1993**


PROCESS
1
Establish Focus
Intended outcomes (each goal, item)
2
Discover Possibilities
(includes decision making)
3
Plan the Action
(determine who is best for follow-through)
4
Remove Barriers
(review from future view)
5
Review
(who will do what by when?)
Begin
WHERE YOU ARE
Action to Bridge the Gap
End
WHERE YOU WANT TO BE
Collaborative Conversation Model™
© 2003. CoachWorks International, Inc. Dallas, TX. Used by permission.

Tool 2.1

Effective Schools Research Resources

- Keys to Effective Schools
  - Willis D. Hawley (2007)
  - ISBN: 1-4129-4101-6
- Results Now
  - Mike Schmoker (2006)
  - ISBN: 13:1-4166-0358-1
- Getting By or Getting Better
  - Wayne Hulley & Linda Dier (2008)
  - ISBN: 13:9781934009406
- Enhancing Student Achievement: A Framework for School Improvement
  - Charlotte Danielson
  - ASCD: 102109
- Correlates of Effective Schools (DVD)
  - Larry Lezotte (2009)
  - ISBN: 1-000000-15-0

Current Reality Versus Our Future Ideal

An important step in creating a learning organization is making an honest assessment of the current conditions in your school. The following survey includes conclusions presented by different researchers who have examined conditions in schools across the country. To assess the current reality of your school, use the following scale to rate each statement in terms of how well it describes conditions in your own school.

SCALE:
1 – 3 We are not at all like this.
4 – 7 We are somewhat like this.
8 – 10 We are very much like this.

Schools and Change:

- ☐ Schools are not organized to respond to the needs and interests of students. They are bureaucratic monopolies that rely on a captive audience for their customers. There are few incentives – and fewer rewards – to improve.
- ☐ The issue is not that individual teachers and schools do no innovate and change all the time. They do. The problem is that the change is unproductive, focusing on the margins of practice rather than on the core of teaching and learning.
- ☐ From the perspective of teachers, much of school life is an endless cycle of first implementing and then abandoning new initiatives. Teachers are left with the impression that no one in the system really understands why change is occurring.
- ☐ For teachers, the concept of change becomes a matter of coping with management's tendency to introduce and then abandon educational fads.

Teaching:

- ☐ Teachers believe that it is their job to teach and the student's job to learn. Thus, they are responsible for teaching but not for student learning.
- ☐ Typical classroom instruction is dominated by "teacher talk." Teachers work very hard, and students sit passively and watch them work.
- ☐ Teachers work in isolation. There is little opportunity for serious professional interaction in which teachers share ideas, observe each other teaching, or assist each other in professional development activities.

Process to Create A Vision

The following process represents one practical strategy to ensure that everyone has an opportunity to discuss his or her hopes and aspirations for the school.

1. Each staff member is given a pad of Post-It™ notes.
2. Each staff member thinks of what he or she hopes the school will become and writes one descriptor or idea per Post-It™ note.
3. Staff members are arranged into groups of five or six.
4. Each group is given a big piece of chart paper, and group members post their notes on the paper.
5. Members of each group read each note on their chart paper.
6. Each group arranges the notes into categories or classifications.
7. Each group writes a statement that best describes its collective vision for that category or class.
8. A writing committee collects the statements from each group and develops a draft of a vision statement based on the common trends and themes that have been identified by all the groups.
9. The draft is shared with the entire staff, and each small group critiques the draft and proposes revisions, additions and deletions.
10. The writing committee reviews the revisions, meets with each small group to clarify any confusion about its recommendations, and makes changes as it deems appropriate.
11. A second draft of the statement is presented to the entire staff for review and discussion.
12. Every staff member is asked if he or she believes the statement is meaningful and, if not, what changes would be made that would make it more meaningful.
13. Every staff member is asked if he or she could “own” the statement.

School Vision Clarification Survey

For clarifying the vision of your school or district, ask the following questions:

1. Can you describe the school we are trying to create?

2. What would our school look like if it were a great place for students?

3. What would our school look like if it were a great place for teachers?

4. It is five years from now and we have achieved our vision as a school. In what ways are we different?

5. It is five years from now. Describe what is going on in terms of practice, procedures, relationships, results, and climate.

6. Imagine we have been given 60 seconds on nightly news to clarify the vision of our school district to the community. What do we want to say?

Shared Vision

A shared vision is:

- **Actionable**: It can be lined to specific actions that people can undertake.
- Inspiring and motivating: It taps people's sense of mission and wish to contribute.
- **A target, not a plan**: By all stakeholders (anyone who has a stake in the system and its activities).
- **Broadly accepted**: It helps pull together people of differing opinions or positions.

Question:

1. There is an explicit vision describing this organization's aspirations and wishes for the future, and expressing the themes that are intended to help guide people's actions.
2. The vision and the themes it embodies have been widely communicated throughout the organization. Everyone has had and still has many opportunities to see it and reflect on it.
3. There have been and continue to be adequately opportunities for feedback and comment, from every group in the organization, on the vision.
4. All our people understand the vision as it currently exists, even if they do not agree with it or its implications.
5. The process by which our vision was developed has been explicit and visible (within our school or district) people from across the organization.
6. The vision is clear and communicable; it can be readily conveyed to anyone who is interested in it or who could help support it, including our external stakeholders – parents, community agencies, etc.
7. Our vision is broad and comprehensive, and everyone in the organization could use it to develop the implications for their local unit.
8. The themes it suggests for our people are clear and broad; they don't over-specify details or a lot of "how-tos."
9. The senior leaders in our school or district have been personally active and involved in the whole process of developing a shared perspective throughout our organization.
10. Our senior leaders have made it clear, that they believe in the aspirations the vision puts forward, and are committed to help us realize them in practice.

Tool 3.5

Suggestions for Collaboration Time

- **Common Preparation** – Build the master schedule to provide daily common preparation periods for teachers of the same course or department. Each team should then designate one day each week to engage in collaborative, rather than individual planning
- **Parallel Scheduling** – Schedule common preparation time by assigning the specialists (teachers of PE, music, art, foreign language; librarians, instructional technologists, guidance counselors, etc.) to provide lessons to students across an entire grade level at the same time each day. The team should designate one day each week for collaborative planning. Some schools build back-to-back special classes into the master schedule on each team's designated collaborative day, thus creating an extended block of time for the team to meet.
- **Adjusted Start & End Time of Contractual Day** – members of a team, department or an entire faculty agree to stat their workday early or extend their workday one day each week to gain collaborative team time. In exchange for adding time to one end of the workday, the teachers are compensated by getting the time back on the other end of that day. For example, on the first day of each school week, the entire staff at Adlai Stevenson High School in Lincolnshire, IL begins their workday at 7:30 am, rather than 7:45. From 7:30-8:30, the entire faculty engages in collaborative team meetings. Students begin arriving at 7:40 as usual but the start of class is delayed from 8:05 to 8:30. Students are supervised by administration and non-instructional staff in a variety of optional activities such as breakfast, library and computer research, open gym, study halls, and tutorials. To accommodate for the 25 minutes of lost instructional time, five minutes is trimmed from 5 of the 8 50-minute class periods. The school day ends at the usual 3:25, buses run their regular routes, and the teachers are free to leave at 3:30 rather than 3:45 as stipulated in their contract. By making these minor adjustments to he schedule on the first day of each week, the entire faculty is guaranteed an hour of collaborative planning to start each week, but their work day/week has not been extended by a single minute
- **Shared Classes** – Teachers across two different grade levels or courses combine their students into one class for instruction. While one teacher/team instructs the students during that period, the other team engages in collaborative work. The teams alternate instructing and collaborating to provide equity in learning time for students and teams. Some schools coordinate shared classes to ensure that older students adopt younger students and serve as literacy buddies, tutors, and mentors.
- **Group Activities/Events/Testing** – Teams of teachers coordinator activities that require supervision of students rather than instructional expertise (i.e., videos, resource lessons, read-alouds, assemblies, testing). Non-teaching staff supervise students while the teachers engage in team collaboration.

- **Banking Time** – Over a designated period of days, instructional minutes are extended beyond the required school day. After banking the desired number of minutes on designated days, the instructional day ends early to allow for faculty collaboration and student enrichment. In a middle school, for example, the traditional instructional day ended at 3:00; students boarded buses at 3:20 and the teacher contractual day ended at 3:30. The faculty decided to extend the instructional day until 3:10 rather than 3:00. By teaching an extra ten minutes nine days in a row, they "bank" ninety minutes. One the tenth day, instruction stops at 1:30 and the entire faculty has collaborative team time for two hours. The students remain on campus and are engaged in clubs, enrichment activities, and assemblies sponsored by a variety of parent/community partners and co-supervised by the school's non-teaching staff.
- **Inservice/Faculty Meeting Time** – Schedule extended time for teams to work together on staff development days and during faculty meeting time. Rather than requiring staff to attend a traditional whole staff inservice session or sit in a faculty meeting while directives and calendar items are read to highly educated professionals, shift the focus and use of these days/meetings so members of teams have extended time to learn with and from each other.

PLC Team Focus Activities

Team Name:	
Team Members:	

.		We have identified team norms and protocols to guide us in working together.
.		We have analyzed student achievement data and have established goals that we are working interdependently to achieve.
.		Each member of our team is clear on the standard of our course in general as well as the essential learnings of each unit.
.		We have aligned the curriculum with state standards and the high-stakes exams required for our students.
.		We have identified course content and/or topics that can be eliminated so we can devote more time to essential curriculum.
.		We have agreed on how to best sequence the content of the course and have established pacing guidelines to help students achieve the intended essential learnings.
.		We have identified the prerequisite knowledge and skills students need in order to master the essential learnings of our course and each unit of this course.
.		We have identified strategies and created instruments to assess whether students have the prerequisite knowledge and skills.
.		We have developed strategies and systems to assist students in acquiring prerequisite knowledge and skills when they are lacking in those areas.
		We have developed frequent common formative assessments that help us to determine each

0.		student's mastery of essential learning.
1.		We have established the proficiency standard we want each student to achieve on each skill and concept examined with our common assessments.
2.		We have developed common summative assessments that help us assess the strengths and weaknesses of our program.
3.		We have established the proficiency standard we want each student to achieve on each skill and concept examined with our summative assessments.
4.		We have agreed on the criteria we will use in judging the quality of student work related to the essential learnings of our course, and we practice applying those criteria to ensure consistency.
5.		We have taught students the criteria we will use in judging the quality of their work and have provided them with examples.
6.		We evaluate our adherence to and the effectiveness of our team norms at least twice each year.
7.		We use the results of our common assessments to assist each other in building on strengths and addressing weaknesses as part of a process of continuous improvement designed to help students achieve at higher levels.
8.		We use the results of our common assessments to identify students who need additional time and support to master essential learnings, and we work within the systems and processes of the school to ensure they receive that support.

Tool 4.2

Meeting Agenda Template

Facilitator:	
Timekeeper:	
Recorder:	
Other:	
Meeting Purpose:	

Estimated Time	Topic	Lead Person	Method	Outcome
5 min.	Check-in	All	Round Robin	We're all present!
5 min.	Agenda review	Facilitator	Discussion	Agenda adjusted as needed
5 min.	Next agenda	All	Brainstorm	Input for next meeting agenda
5 min.	Meeting evaluation		+/- on flipchart	Meeting process improvements for next time

Meeting Evaluation Form

Date: Time of Day:

Question	Comments
Did the meeting start on time?	
Were meeting objectives met?	
Was the agenda followed?	
Did the discussion remain focused?	
Were participants adequately prepared?	
Was the location appropriate?	
Did the meeting end on time?	
Has a follow-up report been sent?	
Were ground rules	

es o

. adhered to?

Was everyone involved?

0.

The strengths of the meeting were:

This meeting could have been improved by:

I could have assisted in making this meeting more effective by:

Tool 4.4

Meeting Record

Team Name:

Members Present:

		Name	Facilitator	Timekeeper	Recorder	Other

Next Meeting(s):

Date:		Time:		Location:	
Date:		Time:		Location:	

Facilitator:		Recorder:	
Timekeeper:		Other:	

Tool 4.5

Agenda for Next Meeting:
Check-In: Check-Out:

Topic	Discussion Points	Decisions

Issues/Ideas for Future Meetings:

Assignments:

What	Who	When

Tool 4.5

Developing Norms Process

Comments to the Facilitator: This activity will enable a group to develop a set of operating norms or ground rules. In existing groups, anonymity will help ensure that everyone is able to express their ideas freely. For this reason, it is essential to provide pens or pencils or to ask that everyone use the same type of writing implement.
Supplies: Index cards, pens or pencils, poster paper, display board, tape, tacks
Time: Two hours
Directions:

1. Explain to the group that effective groups generally have a set of norms that govern individual behavior, facilitate the work of the group, and enable the group to accomplish its task.
2. Provide examples of norms by posting the list of norms that appears on page 212.
3. Recommend to the group that it establish a set of norms:
    a. To ensure that all individuals have the opportunity to contribute in the meeting.
    b. To increase productivity and effectiveness; and
    c. To facilitate the achievement of its goals.
4. Give five index cards and the same kind of writing tool to each person in the group.
5. Ask each person to reflect on and record behaviors they consider ideal behaviors for a group. Ask them to write one idea on each of their cards. Time: 10 minutes.
6. Shuffle all the cards together. Every effort should be made to provide anonymity for individuals, especially if the group has worked together before.
7. Turn cards face up and read each card aloud. Allow time for the group members to discuss each idea. Tape or tack each card to a display board so that all group members can see it. As each card is read aloud, ask the group to determine if it is similar to another idea that already has been expressed. Cards with similar ideas should be grouped together.
8. When all of the cards have been sorted, ask the group to write the norm suggested by each group of cards. Have one group member record these new norms on a large sheet of paper.
9. Review the proposed norms with the group. Determine whether the group can support the norms before the group adopts them.

Developing Norms Considerations

When Establishing Norms, Consider:	Proposed Norm
Time • When do we meet? • Will we set a beginning and ending time? • Will we start and end on time?	
Listening • How will we encourage listening? • How will we discourage interrupting?	
Confidentiality • Will the meetings be open? • Will what we say in the meeting be held in confidence? • What can be said after the meeting?	
Decision Making • How will we make decisions? • Are we an advisory or decision-making body? • Will we reach decisions by consensus? • How will we deal with conflicts?	
Participation • How will we encourage everyone's	

participation? • Will we have an attendance policy?	
Expectations • What do we expect from members? • Are there requirements for participation?	

Tool 4.7

5 Easy Pieces
(or The Schein Schuffle)

As we see in our everyday lives, the basic pattern of life is a network of interconnected systems. Within a community, for example, there are many sets for interconnected systems: education, business, social service, religious organizations, healthcare, etc. Yet often under the pressure of time and everyday life, we act as isolated, disconnected units. The author and physicist Fritzjof Capra reminds us that the first principle of ecology is interdependence. How can we develop the habit of mind to be attuned to this principle in our everyday lives?

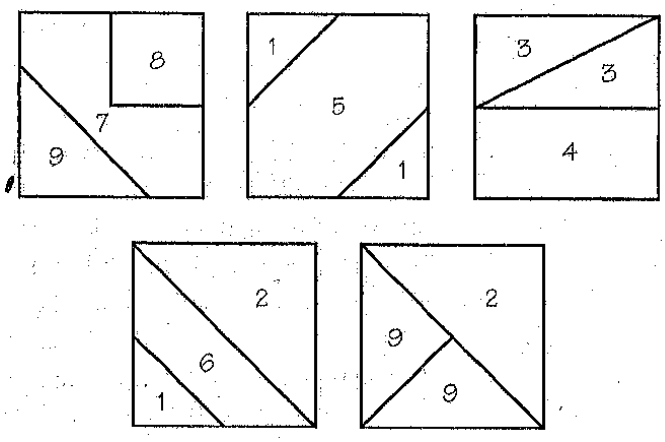
This exercise is unpretentious, slightly disarming and ideal for illustrating interdependence, an awareness of which is vital to the development and practice of systems thinking.

- To experience a shift in perception from object (the set of cut-up pieces) to relationships (among the team)
- To explore our knee-jerk tendency to "go it alone"
- A greater ability to identify mental models in real time, and see key inter-relationships and systemic structures

This exercise takes some advance planning, so I usually use it when I'm working with a group for a day or more. I like using **Five Easy Pieces** to jump start a conversation about the "Ways of a System Thinker" (see **Guiding Ideas**, page 5).

To Run This Exercise:

- You will need a minimum of five people and than any additional multiples of 5.
- The exercise itself should take no more than 20 minutes. The debrief, when related to similar organizational experiences, can take about a half hour.
- You will need enough space for five people to sit in a circle in chairs at a table, or on the floor without a table.
- You will need five pieces of 10 inch by 10 inch colored paper or cardboard, scissors, ruler, and a pencil.
- Prepare the pieces: for each group of five, cut up five 10" x 10" pieces of colored paper (cardboard is preferable, or something that you can laminate). Cut the shapes as described below. The numbers are to guide you in the cutting process (same number, same shape) but the pieces used by the participants should not show a number. Once the shapes are cut, mix them up and divide the pieces into five piles, with three pieces in each.



Tool 4.8

Instructions:
Step 1: Ask participants to gather in groups of five (you must have a minimum of five per group) around a circular table or in a circle on the floor. If, for example, you have 50 people, you can either divide them into 10 groups of five, or five groups consisting of five pairs.
Step 2: Give every person or pair three random pieces.
Step 3: Participants are told the objective of the exercise: "Each team member is to form a square (flat on the table or ground) with the cut up pieces of paper."
Special Rules:

- No talking
- No folding of paper pieces
- No overlapping of pieces
- All pieces should be used (each square is comprised of three pieces)
- Exchange one piece at a time

Debrief:
Most often, unless someone on the team has played this game before, the first reaction will be for each person to try to solve the puzzle individually. Eventually, someone (or a pair) will either sit smugly with a square in front of them or raise their hands and says, "I got it!" At this point, you may have to remind the group of the objective: each team member is to form a square with the cut up pieces of paper. Therefore, one complete square is not enough. There must be five complete squares in the group.
The person who completed the square may have to give up a piece of that square so all members are able to form squares. This exchange seems counter-intuitive to many at first.
As usual, I ask the simple question: "What happened?" and then let the story unfold as the group experienced it. The key points to touch on in this exercise are:

- How, in real-time, we can shift our perceptions from objects (the cut up pieces of paper) to relationships (among the players)?
- How our knee-jerk tendencies to "go it alone" can create barriers to effectively to effectively seeing the interdependencies in systems and inhibit problem solving.
- How a greater ability to identify mental models enables us to more readily see underlying systemic structures and key inter-relationships.

(Five Easy Pieces, © L. Booth 1995)

Tool 4.8

Adult Learning Styles

	Gregorc (1982)	Kolb (1984)	True Colors (Lowry, 1979)	4MAT (McCarthy 2000)	Silver/Strong/ Hanson (Silver & Hanson, 1998)
Puppy 	**Abstract Random** • Imaginative • Emotional • holistic	**Diverger** Values positive caring environments that are attractive, comfortable, and safe	**Blue** Best in open, interactive environments where teachers add a personal touch	**Type 1** Feel and reflect Create and reflect on experience	**Interpersonal** Appreciates concrete ideas and social interaction to process and use knowledge **SF (Sensing-Feeling)**
Microscope 	**Abstract Sequential** • Intellectual • Analytical • Theoretical	**Assimilator** Avid reader who seeks to learn Patience for research Value concepts	**Green** Best when exposed to overall theory and interpretation	**Type 2 Analytical** Reflect and think Observers who appreciate lecture	**Understanding** Prefers to explore ideas and use reason and logic based on evidence **NT (Intuitive-Thinking)**
Clipboard	**Concrete Sequential**	**Converger**	**Gold**	**Type 3**	**Mastery**

	• Task oriented • Efficient • Detailed	Values what is useful and relevant Immediacy and organizing the essential is important	Best in well structured and clearly defined situations	**Common Sense** Think and do Active, practical Make things work	Absorbs information concretely and processes step by step **ST (Sensing-Thinking)**
Beach Ball 	**Concrete Random** • Divergent • Experiential • Inventive	**Accommodator** Likes to try new ideas Values creativity, flexibility and opportunities	**Orange** Best in competitive situations especially with action	**Type 4** **Dynamic** Creating and acting Usefulness and application of learning	**Self-Expressive** Uses feelings to construct new ideas Produces original or unique materials **NF (Intuitive-Feeling)**

Adapted from: Teacher Team That Get Results (Gregory & Kuzmich, 2007).

Tool 5.1

Phases of Group Development & Behaviors

Establishing: Forming Strategies to use: Building climate and sharing knowledge	Members may be very positive or very apprehensive as the group begins to work together. They need to feel connected and included. This is done through team building activities and ice breakers. Members need opportunities to get to know one another and build trust and relationships.
Dissatisfaction: Storming Strategies to use: Building climate, problem solving, and determining priorities	It is during this time that members become more frustrated because of the need for clarification, purpose, and roles. People need strategies for conflict resolution and methods of making decisions and solving problems. This is also the conscious process of discussing openly what the team needs to succeed and

	sometimes redefining the tasks.
Stabilizing: Norming Strategies to use: Determining priorities, creating excellence, and building resilience	Clarity helps the team move forward. Skill development helps members feel more competent and efficacious. Personal satisfaction increases, and team feels like it is beginning to jell.
Production: Performing Strategies to use: Sharing knowledge and skills, creating excellence, and sustaining change	The team is working well together and demonstrates creativity and resilience. This is autonomy and interdependence. Leadership is shared, and the best of each individual is used by the team to help more students succeed.

Tool 5.2

Annual Review: Ups and Downs
(Wellman & Lipton, 2003)

Group Development:
Annual Review gives novice groups a third point to focus upon, as well as a visual summary of multiple perspectives. Scaffolded with discussion questions, novice groups can successfully structure collaborative conversations about their own programs and progress. For skillful groups, the visual provides a focus for an examination of diverse perspectives, assumptions and frames of reference around a particular event, project or period of time.

Attention to Task:
The visual display used in this strategy provides an opportunity to gain perspective on highs and lows. The process also establishes a forum and a focus for goal setting.

Moving Along the Developmental Continuum:
As the group develops, you might expect to see/hear:

- Critical inquiry about patterns, impact and more proactive future choices
- Development of insights, expressions of self-awareness and increasing understanding of other's perspectives

Managing:

- Time: 30-45 minutes
- Grouping: 4-6 participants per task group
- Materials: Masking tape or yarn and tacks; sticky notes in two different colors; labels for time segments; open-ended questions on overhead transparency, chart or handout
- Lay out a grid of five horizontal lines spanning the length of a full wall. (Masking tape or yarn works well for this purpose). Using the center line as the baseline, label the lines above +1 and +2. Label the lines below -1 and -2. Divide the wall chart into time segments, again using masking tape or preprinted labels. For example, if you are reflecting on a traditional school year, the wall would have ten segments, September through June.
- Organize table groups of 4-6 participants.
- Place sticky notes of two different colors on each table. Each participant will need three notes of each color.

Instructions to Facilitator:

1. Emphasize to participants that the first step is individual.
2. Direct each group member to think of three high points of the school year. Provide several possible examples. Have them write their high points on one color sticky note – one highlight per sticky note.
3. Repeat this process noting low or challenging points of the school year, written on the second color sticky notes.
4. Once the notes have been posted, structure table group dialogue regarding their observations and impressions on the wall graph.

Consensogram
(Wellman & Lipton, 2003)

Group Development:
The Consensogram strategy develops a climate of conscious curiosity and purposeful uncertainty within the group. The graphs establish shared points of reference, focusing energy and attention on ideas and perceptions not on each other. Consensograms produce a visually vibrant focal point for group dialogue.

Attention to Task:
Generating the Consensogram questions clarifies critical dimensions of an issue, problem, or change initiative for facilitators and group leaders. The graphic displays facilitate exploration of the tensions within individuals and the group related to issues, problems, and change initiatives.

Moving Along the Developmental Continuum:
As the group develops, you might expect to see/hear:

- Increasing willingness by individuals to be open and honest in their responses to the Consensogram questions; this includes an increasing comfort with taking outlier positions
- Increasing willingness and skill in pursuing a stance of conscious curiosity, especially for opinions or positions that vary from expectations or any group norm
- Increasing use of paraphrasing of previous comments prior to adding thoughts or inquiring
- Greater comfort with extended pauses between comments

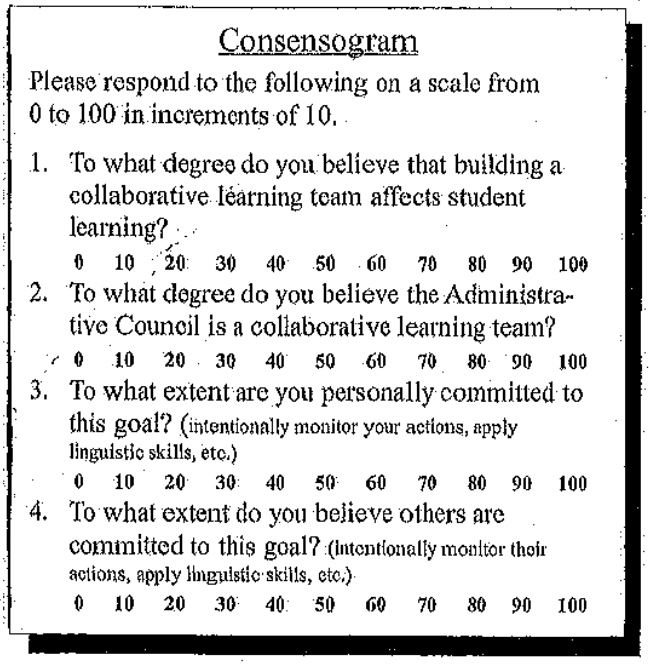
Managing:

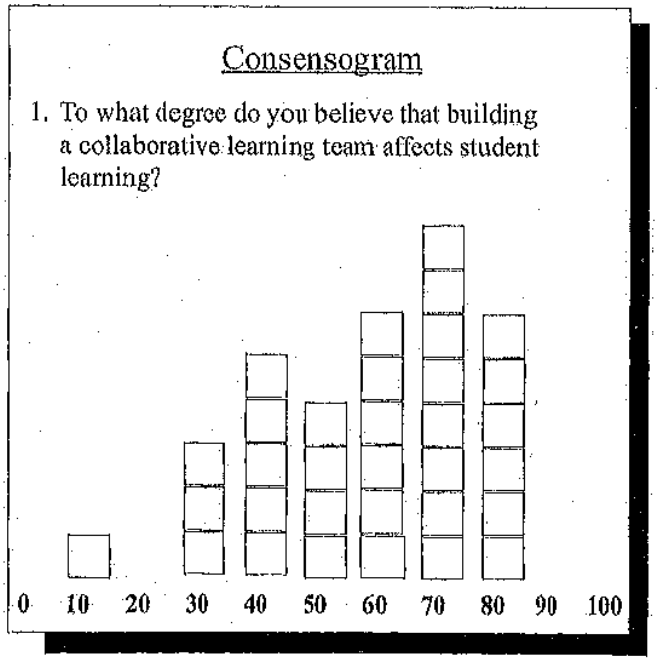
- Time: Approximately 45 minutes
- Grouping: 6-8 participants per task group
- Materials:
    - Transparency of task directions. Note: It is also useful to have an overhead transparency of the worksheet.
    - One worksheet per participant.
    - Sticky notes or adhesive colored dots (one per question times the number of participants).
    - A chart for each question displayed on the wall or clustered chart stands.
- Craft 3-5 Consensogram questions to which participants can respond on a 0-100 scale. The most effective questions surface levels of skill, interest, knowledge, commitment, belief, importance, or values.
- Reproduce a worksheet for each participant with Consensogram questions and scales.
- Prepare large charts for displaying group data as bar graphs. Place each question as a heading and a 0-100 scale on the bottom.
- Organize table groups of 6-8 participants representing a variety of roles and perspectives
- Have ready enough sticky notes or adhesive colored dots for individual transfer of responses to the appropriate column on the group graphs.

Instructions to Facilitator:

5. Provide each member of the group with a sticky note or adhesive dot for each question to be explored. (Be sure the sticky notes or dots are all the same size).
6. Display the questions for consideration on a charge or overhead.
7. Direct participants to individually respond to each question, based on their own perceptions, using the scale of 0-100. Responses must be in increments of 10, with no negative numbers.
8. Have participants place their 0-100 responses on a sticky note or colored dot corresponding to each specific question.
9. Participants then place their sticky note or dots on the prepared charts in the appropriate columns, forming bar graphs.
10. When all responses have been posted and the graphs are complete, organize a group exploration of the data.

Sample Consensograms:





Fishbone: Cause-Effect Diagrams
(Wellman & Lipton, 2003)

Group Development:
For both novice and expert groups, the Fishbone Diagram provides a think point to focus group work. It visually displays the complex dynamics of interrelated elements in a system, increasing the capacity of the group members to view a problem with a systems lens. Most importantly, it focuses the group on the causes – not the symptoms.

Attention to Task:
Understanding the causal structure of a presenting problem is a necessary prerequisite to addressing it. This strategy offers a time-effective process for exploring multiple dimensions of a problem or issue, revealing important relationships among various variable and potential causes.

Moving Along the Developmental Continuum:
As the group develops, you might expect to see and hear:

- Multiple and unusual causal roots developed and explored
- Decreasing use of personal storytelling and explanations
- Group members seeking and expressing value for diverse possibilities

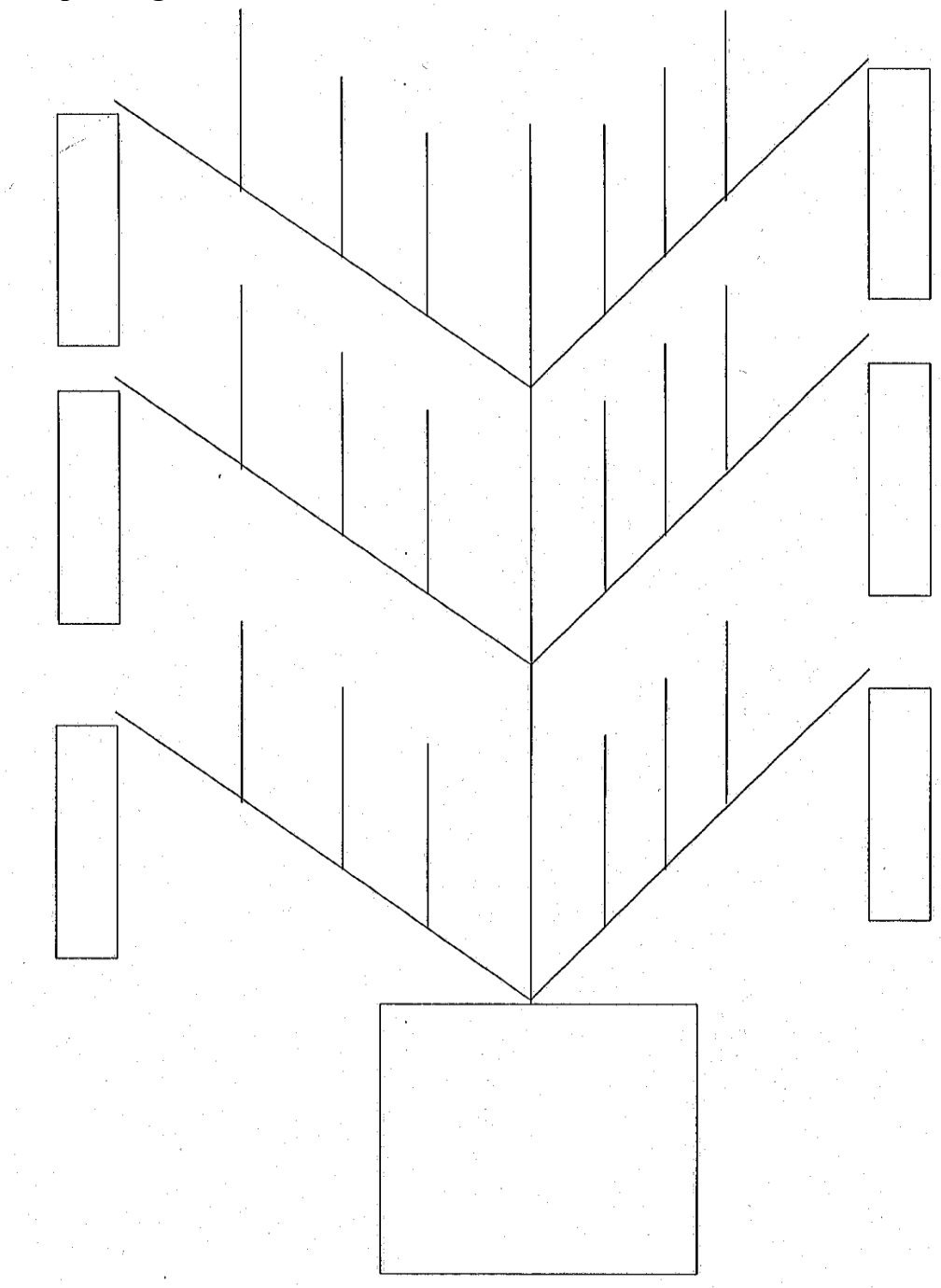
Managing:

- Establish task groups of 4-6 participants. Note: Depending on group size, you can create one Fishbone Diagram with the entire group.
- Time – approximately 30-45 minutes.
- Provide chart paper or overhead transparency of fishbone, markers, masking tape.
- Set up stations with chart stands or charts on the wall..

Instructions to Facilitator:

1. Identify a condition or problem for which the group will be generating possible causes. Note: The group may have previously identified this topic.
2. Generate the possible causes using a brainstorming process.
3. Categorize the causes into 4-6 major categories. Note: You many want to provide the categories, and then have the groups place their brainstormed ideas on the category 'fishbone'.
4. Construct the Fishbone Diagram (or direct each task group to construct its own) as follows:
    a. Place the problem statement in a box on the right side of the chart (the head of the fish). Draw a straight line, or spine, from the head to the tail.
    b. Draw one fishbone for each cause category angled away from the spine. Place the major causal category labels in a box at the end of each fishbone.
    c. Fill in the specific causes related to each category along each fishbone. Note: It is possible that a specific cause will be placed in more than one category.
5. Review each major cause category. Circle the most likely causes and explore the reasons that they are a cause.

Sample Diagram:



Tool 5.5

Artifact Hunt

(Wellman & Lipton, 2003)

Group Development:

The Artifact Hunt provides both novice and more skillful groups with a structure for inquiring into individual and group values. The artifacts provide a safe third point to focus group members' attention and energy. The strategy permits groups to step outside themselves and examine core beliefs and values that can be difficult to discuss.

Attention to Task:

The artifact focus makes a highly effective organizer for dialogue and inquiry. The process surfaces many different ideas and perspectives in an efficient manner. It also generates a list of core values and beliefs as a foundation for continued work.

Artifact Hunt:

An Artifact Hunt is an anthropological quest to better understand the culture that surrounds an issue, a group, or a plan. This tool offers a reality check for plans and projects by opening a window into the cultural context necessary to implement plans for support intended actions. By examining the symbols and artifacts that hold meaning for participants, group members surface the underlying values that produce and energize key elements of the present culture. The hunt then moves to envisioning the future, seeking ways to amplify the positive aspects of any desired changes. Along the way, there are checks for congruence and incongruence in the system.

Managing:

Establish task groups of 3-4 participants Time – approximately 45-60 minutes.
Provide chart paper and markers (and artifacts provided by participants).

Instructions to Facilitator:

1. Describe the essence of anthropological inquiry as it applies to this activity. That is, objects and artifacts hold symbolic meaning that represents underlying values (e.g., a trophy case represents athletic accomplishment, as well as a belief in the importance of heroes, and a value for competition).
2. Direct small groups to collect and/or envision artifacts they might show to a visitor from another culture as a means of explaining what is important to their school or organization. These might be examples of events, rituals, routines, or objects that have meaning for their group.
3. Have small groups categorize their collections and label their categories on chart paper.
4. Groups then record the values and beliefs represented by the artifacts within each category. These values might be both positive and negative.
5. Each small group then selects an artifact or artifacts that exemplify important values within the existing state of their culture and share these with the larger group.
6. With reference to the problem, plan or issue under consideration, small groups then identify and select three or four core values within their culture they will need to address in order to successfully implement the plan. These core values may have a positive or negative effect on the plan.
7. When steps one through six are completed, focus the whole group on a specific date in the future when they might revisit the culture as anthropologists. Have small groups list artifacts, events, rituals and routines they might find as evidence of successful implementation of their plans.

First Turn / Last Turn Activity

Time:
30-60 Minutes

How the Activity Works:

- Divide the team into small groups.
- Each group will receive copies of one of the following articles:
  - *Research Summary on High Performing Districts*
  - *The Eight-Stage Planning Process for District and Schools*
  - *Critical Success Factors for School Leaders*
  - *Multi-Tiered Systems of Support*
  - *21st Century Learning Skills*
- Each group is given instructions for First Turn / Last Turn Activity and completes the activity.
- Groups are rearranged. At least one person from each of the first groups is in the second group. Each member shares highlights from their first discussion with the second group.

Explaining the Activity:
First Turn / Last Turn
From *Data-Driven Dialogue: A Facilitator's Guide to Collaborative Inquiry* by Bruce Wellman and Laura Lipton, page 138.

1. Read individually. Highlight 2-3 items.
2. In turn – share one of your items – but do not comment on it.
3. Group members comment – in round robin fashion* - about the item (without cross-talk).
4. The initial person who named the item then shares his or her thinking about the items and takes the last turn, making the final comments.
5. Repeat the pattern around the table.

*Round-robin is a highly structured participation strategy. Group members speak in turns, moving around the table in one direction.

Assessment Graphic

Peter W. Airasian <u>**Classroom Assessment**</u>	**Formative**	**Summative**
Purpose	**To monitor and guide a process while it is still in progress.**	**To judge the success of a process at its completion.**
Time of Assessment	**During the process.**	**At the end of the process.**
Type of Assessment	**Informal observation,**	**Formal tests, projects, and**

Technique	**quizzes, homework, pupil questions, worksheets.**	**term papers.**
Use of Assessment Information	**Improve and change a process while it is still going on.**	**Judge the overall success of a process; grade, place, promote.**

"What to Collect" Worksheet

ACHIEVEMENT DATA:

Indicator	Who is responsible for getting the data?	What do we want to learn from this data	What, if any, additional data should we collect for this area?

Tool 6.3

PERCEPTION DATA:

Indicator	Who is responsible for getting the data?	What do we want to learn from this data	What, if any, additional data should we collect for this area?

Tool 6.3

DEMOGRAPHICS DATA:

Indicator	Who is responsible for getting the data?	What do we want to learn from this data	What, if any, additional data should we collect for this area?

Tool 6.3

Data Carousel Activity

There are many ways to do this! The essence of the activity is that the team has a chance to see the data and formulate what they believe are strengths and challenges.

Time:
Approximately 2-3 hours.

How the Activity Works:

- Data in four categories is prepared for staff member groups to review at four different stations.
- Each group should not have more than eight people. If your team is collectively more than about 32 persons, the data "stations" should be duplicated, i.e., two stations for each of the four types of data. Important: Mix up the groups of team members, so they have the benefit of various perspectives as they consider the data.
- Each group considers the data and writes narrative statements. After approximately 16 minutes, the group looks at a new type of data.

How to Present the Data:
The Packet Method: One packet per data type (achievement, perception, contextual, and demographic) placed at each table.

Direct staff members to review the data individually in their small groups. After each person has considered all data, the group discusses strengths and concerns and the recorder writes these key points on two different sheets. At the end of the rotation, the sheets are collected and the group rotates to the next data station (or the data is rotated). This process continues so that each group looks at all types of data.

The Large Chart Method: Data displayed on walls and tables. All data is enlarged so that it is easier to digest and understand. An advantage of this method is that it makes it easier to have conversations about the data.

Explaining the Activity:

1. Each group will consider all the data at a station and information that has been collected for each area. A different type of data is displayed at each station.
2. Each group should choose a recorder and a facilitator who will keep you on track.
3. The task is to look at all the data sets at the station.
4. As a whole group, generate a brief narrative statement about each set of data using the Narrative Tally Sheets. Narrative statements should be simple,

communicate a single idea about student performance and be non-evaluative. See Three Tips for Writing Powerful Narrative Statements.

5. After 20 minutes, each group moves on to the next station, first reading what the other group wrote; then, creating new and/or modified statements the group agrees on. Groups will have 15 minutes at the second, third, and fourth tables.

Very Important!:
The group should not spend time during this exercise generating solutions or having conversations about how to fix the concerns – this comes later.

Determining Whether Narrative Statements/Key Findings Are Strengths, Challenges, or Both:
When the last rotation is finished, a member of the team should collect the narrative statements for each data category while others take a break, eliminate redundant statements and prepare them for presentation to the team for the next exercise – determining strengths and challenges.

When the team regroups, the statements are displayed on an overhead or LCD projector. This whole group agrees on the most accurate statements and then decides if each statement is a strength or a challenge. It may be both!

Adapted from "Figuring Out What It Means." Holcomb, E. L. (1999) *Getting Excited About Data: How to Combine People, Passion, and Proof*. Thousand Oaks, CA: Corwin Press.

Tool 6.4

Appendix B:

Leadership Capacity School Survey

This school survey is designed to assess the leadership capacity conditions that exist in your school. Beside each item is a Likert scale:
1 = We do not do this in our school.
2 = We are starting to move in this direction.
3 = We are making good progress here.
4 = We have this condition established.
5 = We are refining our practice in this area.

Circle the most appropriate number.

In our school, we …					
keep our vision alive by reviewing it regularly	1	2	3	4	5
model leadership skills	1	2	3	4	5
talk with families about student performance and school programs	1	2	3	4	5
encourage individual and group initiative by providing access to resources, personnel and time	1	2	3	4	5
seek to perform outside of traditional roles	1	2	3	4	5
use data/evidence that are used to inform our decisions and teaching practices	1	2	3	4	5
develop our own criteria for accountability regarding individual and shared work	1	2	3	4	5
engage each other in opportunities to lead	1	2	3	4	5
have designed our roles to include attention to our classrooms, the school, the community, and the profession	1	2	3	4	5
develop our school vision jointly	1	2	3	4	5
make time available for this learning to occur (e.g., faculty meetings, ad hoc groups, teams, etc.)	1	2	3	4	5
have redesigned roles and structures to develop and sustain resiliency in children (e.g. teacher as coach/advisor/mentor, school-wide guidance programs, community service)	1	2	3	4	5
have established representative governance (leadership) groups	1	2	3	4	5
have developed a plan for shared responsibilities in the implementation of our decisions and agreements	1	2	3	4	5

In our school, we …					
focus on student learning	1	2	3	4	5
express our leadership by attending to the learning of the entire school community	1	2	3	4	5
provide feedback to children and families about student progress	1	2	3	4	5
practice and support new ways of doing things	1	2	3	4	5
have developed new ways to work together	1	2	3	4	5
have designed a comprehensive information system that keeps everyone informed and involved	1	2	3	4	5
share authority and resources	1	2	3	4	5
teach and assess so that all children learn	1	2	3	4	5
think together about how to align our standards, instruction, assessment, and programs with our vision	1	2	3	4	5
make time for ongoing reflection (e.g., journaling, peer coaching, collaborative planning)	1	2	3	4	5
perform collaborative work in large and small groups	1	2	3	4	5
ask each other questions that keep us on track with our vision	1	2	3	4	5
work with members of the school community to establish and implement expectations and standards	1	2	3	4	5
use a learning cycle that involves construction of new meanings, inquiry, dialogue, action, and reflection	1	2	3	4	5
have joined with networks of other schools and programs, both inside and outside the district, to secure feedback on our work	1	2	3	4	5
organize for maximum interaction among adults and children	1	2	3	4	5

Appendix C:

Survey Permission

Dear Ms. Gillespie,
In response to your request from February 17, 2009, ASCD grants you the one-time, non-exclusive right to make the following ASCD material ("Material") available on a secure server, with up to 13 individuals having access, during the month of April 2010, in connection with your dissertation through Walden University.

Lambert, L. (2003) Appendix A: Leadership Capacity for Lasting School Improvement. In Leadership Capacity for Lasting School Improvement (pp. 110-113). Alexandria, VA: ASCD.

This permission covers the text portion of the Material only and does not extend to content that is separately copyrighted. Please note that it is your responsibility to secure permission for any text, photographs, illustrations, cartoons, advertisements, etc. that are referenced to another source. The reproduction of covers, mastheads, and logos of ASCD publications is strictly prohibited.

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We would appreciate your acknowledging the above by return email. Otherwise, thank you for your interest in ASCD publications.

**Also, regarding your questions on the reliability and validity of the survey, you may wish to contact the author of the book, Linda Lambert. She can be reached via email at:Linlambert@aol.com.

Sincerely,
Kat Rodenhizer
Coordinator for Rights & Permissions
ASCD
703-575-5443
ASCD's Web site has a new look. Visit www.ascd.org

Appendix D:

Letters of Cooperation

SEP-04-2009 FRI 02:36 PM FAX NO. P. 01

LETTER OF COOPERATION FROM COMMUNITY RESEARCH PARTNER

Superintendent of the School
This type of letter must be obtained from any type of organization involved in identifying potential participants or collecting data. Please contact irb@waldenu.edu if you have any questions about the appropriate content for a letter of cooperation. Either letter or email format is acceptable, from the porspective of the Walden University Institutional Review Board (IRB).

Community Research Partner Name: USD #480 Liberal, Kansas
Contact Information: Superintendent, Vernon Welch
vernon.welch@usd480.net 620-604-1000
Date: Sept. 1, 2009

Dear Mrs. Gillespie,
Based on my review of your research proposal, I give permission for you to conduct the study entitled "Leadership to Sustain Professional Learning Communities" within my school organization. As part of this study, I authorize you to invite elementary principals of my district to complete the Leadership Capacity School Survey (Lambert, 2003) and selected I grant my permission for the principal to participate in the focus group discussion. The principals participation will be voluntary and at their own discretion. We reserve the right to withdraw from the study at any time if our circumstances change. I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Walden University IRB.
Sincerely,

Vernon E Welch
Superintendent

Contact Information:

Superintendent of the School
This type of letter must be obtained from any type of organization involved in identifying potential participants or collecting data. Please contact irb@waldenu.edu if you have any questions about the appropriate content for a letter of cooperation. Either letter or email format is acceptable, from the perspective of the Walden University Institutional Review Board (IRB).

Community Research Partner Name: USD #457 Garden City, Kansas
Contact Information: Dr. Rick Atha, Superintendent
ratha@gckschools.com ~~620-276-5112~~ 620-805-7012
Date: Sept. 1, 2009

Dear Mrs. Gillespie,
Based on my review of your research proposal, I give permission for you to conduct the study entitled "Leadership to Sustain Professional Learning Communities" within my school organization. As part of this study, I authorize you to invite elementary principals of my district to complete the Leadership Capacity School Survey (Lambert, 2003) and selected I grant my permission for the principal to participate in the focus group discussion. The principals participation will be voluntary and at their own discretion, We reserve the right to withdraw from the study at any time if our circumstances change. I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Walden University IRB.
Sincerely,

Richard D. Atha

Superintendent

Contact Information:

Superintendent of the School
This type of letter must be obtained from any type of organization involved in identifying potential participants or collecting data. Please contact irb@waldenu.edu if you have any questions about the appropriate content for a letter of cooperation. Either letter or email format is acceptable, from the perspective of the Walden University Institutional Review Board (IRB).

Community Research Partner Name: USD #443 Dodge City, Kansas
Contact Information: Alan Cunningham, Superintendent
alancunningham@usd443.org Phone: 620-227-1700
Date: Sept. 1, 2009

Dear Mrs. Gillespie,

Based on my review of your research proposal, I give permission for you to conduct the study entitled "Leadership to Sustain Professional Learning Communities" within my school organization. As part of this study, I authorize you to invite elementary principals of my district to complete the Leadership Capacity School Survey (Lambert, 2003) and selected I grant my permission for the principal to participate in the focus group discussion. The principals participation will be voluntary and at their own discretion. We reserve the right to withdraw from the study at any time if our circumstances change. I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Walden University IRB.

Sincerely,

Superintendent

Contact Information:

Appendix E:

Letter of Introduction/Consent

Date
Fellow Administrators,
I am Kelly Gillespie, Executive Director of Southwest Plains Regional Service Center in Sublette. I am a doctoral candidate at Walden University. For my dissertation, I am conducting a study to examine how elementary school leadership teams in selected school districts shape organizational culture and provide the structures to sustain professional learning communities. You were selected to participate in this study because you are currently an elementary principal in Southwest Kansas.
I understand that being an elementary principal can be a very demanding job that provides you with minimal free time, but the results of this study will be of value to your work and the achievement of your students. If you agree to participate in this study you will be asked to electronically complete the Leadership Capacity School Survey. This survey will be e-mailed to you as an attachment, you will complete it, and e-mail it back to the me. This survey will take approximately 10 minutes.

The records of this study will be kept private. In any report of this study that might be published, the researcher will not include any information that will make it possible to identify you. Research records will be kept in a locked file, and only the researcher will have access to the records.

Participation in this study is voluntary and there is no compensation. Also, there is no penalty for refusing to participate or discontinuing once it has started. Please retain a copy of this cover letter for your records. If you have any questions regarding this study please contact Kelly P. Gillespie at 620-353-0130, Dr. Steven Wells (my mentor) at 651-208-3857, or Dr. Leilani Endicott (Research Participant Advocate) at 1-800-925-3368. Again, I understand how busy your day can be and truly appreciate you taking the time to consider participating in this study.

A consent to participate in this study is included with this cover letter, if you would please read it carefully, sign, date and return it to me as soon as possible that would be appreciated. Returning this signed consent constitutes your consent agreement to participate in this study.

Sincerely,
Kelly P. Gillespie

Consent Form

You are invited to take part in a research study of Kelly Gillespie concerning Leadership effects on sustaining Professional Learning Communities. You were chosen for the study because you are an elementary principal in Southwest, Kansas. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Kelly Gillespie who is a doctoral student at Walden University.

Background Information:
The purpose of this study is to determine how elementary principals effect their schools culture and provided constructs to sustain a Professional Learning Community

Procedures:
If you agree to be in this study, you will be asked to:
Complete the Leadership Capacity School Survey (Lambert, 2003) electronically using the Survey Monkey tool. This will take about 10-15 minutes.
Six participants will then be asked to participate in a one hour focus group discussion.

Voluntary Nature of the Study:
Your participation in this study is voluntary. This means that everyone will respect your decision of whether or not you want to be in the study. No one at Southwest Plains Regional Service Center will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind during the study. If you feel stressed during the study you may stop at any time. You may skip any questions that you feel are too personal.

Risks and Benefits of Being in the Study:
The researcher can identify no risks associated with being involved in this study. The benefits will be numerous. The data from this research project will be used as a framework to create a professional development program that will be delivered in a targeted and rigorous training session with support materials to guide other principals' behavior and provide them with constructive direction as they build and sustain their professional learning communities. Thus, this project study will conduct and synthesize research pertaining to specific leadership behaviors that will contribute to a new professional development program designed to facilitate sustained professional learning communities.

Compensation:
There will be no compensation for participating this in this study.

Confidentiality:

Any information you provide will be kept confidential. The researcher will not use your information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in any reports of the study.

Contacts and Questions:

You may ask any questions you have now. Or if you have questions later, you may contact the researcher via Kelly Gillespie 620-353-0130 or kgillespie@swprsc.org. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 1-800-925-3368, extension 1210. Walden University's approval number for this study is 09-17-09-0358713 and it expires on September 16, 2010.

The researcher will give you a copy of this form to keep.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By signing below , I am agreeing to the terms described above.

Printed Name of Participant

Date of consent

Participant's Written or Electronic* Signature

Researcher's Written or Electronic* Signature

Electronic signatures are regulated by the Uniform Electronic Transactions Act. Legally, an "electronic signature" can be the person's typed name, their email address, or any other identifying marker. An electronic signature is just as valid as a written signature as long as both parties have agreed to conduct the transaction electronically.

Appendix F:

Focus Group Discussion Questions

1. How would you describe your school's leadership?

How is your leadership shared?

How is your leadership supportive?

Describe how opportunities are provided for increased interaction between adults and students.

2. How would you describe your school's vision?

How were staff, students, and stakeholders involved in the creation of the vision?

What accountability processes are in place to assure the vision drives daily decisions?

What process do you use to review your vision on a regular basis?

3. How does your school apply inquiry based information to drive daily decisions?

Describe the data-driven dialogue processes that are used in your school.

How are teachers involved with student data in order to make instructional decisions?

How is time provided with groups of teachers to discuss student information?

4. How would you describe your school's collaboration efforts?

How do teachers in your school learn collectively?

How does staff work together in teams?

How does staff from multiple grade levels work together?

What efforts are made to involve personnel within the school other than teachers in the educational process?

5. How would you describe your school reflective practice?

How is time provided for individual teachers and groups of teachers to reflect on student assessment data?

What changes or innovations have occurred due to reflective practice in your school?

What individual accountability is in place that encourages reflective practice?

6. How would you describe the student achievement in your school?

How are standards and expectations communicated to teachers and to students?

How do you instill the desire for all teachers to feel responsible for all students' learning?

How has your school involved parents, community, and other stakeholders in the mission of successful student achievement

Appendix G:

Confidentiality Agreement

Name of Signer: Debbie Schartz

During the course of my activity in collecting data for this research: "Leadership to Sustain Professional Learning Communities" I will have access to information, which is confidential and should not be disclosed. I acknowledge that the information must remain confidential, and that improper disclosure of confidential information can be damaging to the participant.

By signing this Confidentiality Agreement I acknowledge and agree that:

1. I will not disclose or discuss any confidential information with others, including friends or family.
2. I will not in any way divulge, copy, release, sell, loan, alter or destroy any confidential information except as properly authorized.
3. I will not discuss confidential information where others can overhear the conversation. I understand that it is not acceptable to discuss confidential information even if the participant's name is not used.
4. I will not make any unauthorized transmissions, inquiries, modification or purging of confidential information.
5. I agree that my obligations under this agreement will continue after termination of the job that I will perform.
6. I understand that violation of this agreement will have legal implications.
7. I will only access or use systems or devices I'm officially authorized to access and I will not demonstrate the operation or function of systems or devices to unauthorized individuals.

Signing this document, I acknowledge that I have read the agreement and I agree to comply with all the terms and conditions stated above.

Signature:	Date:
Debbie Schartz	May 30, 2009

Appendix H:

Participant Reminder

Date
Fellow Administrators,

My name is Kelly Gillespie. I am Executive Director of Southwest Plains Regional Service Center in Sublette. I am working toward my doctoral degree from Walden University. Last week I sent an e-mail asking you to participate in my doctoral research study on how elementary school principals in selected school districts shaped organizational culture and provided the constructs to sustain professional learning communities. Walden University's approval number for this study is 09-17-09-0358713 and it expires on September 16, 2010.

Below is a link to a 30-item survey of questions. It should take approximately ten minutes to complete. This survey is divided into six leadership categories: (1) shared leadership, (2) vision, (3) inquiry, (4) collaboration, (5) reflection, and (6) high student achievement. Your responses are important in helping to provide further information on leadership skills that help sustain a PLC. As a participant in this study, you will receive a summary of its results and conclusions by e-mail. This information could be useful to you as a principal in your efforts to improve student achievement.

You were selected to participate in this study because you are currently an elementary principal in Southwest Kansas and have served as a principal in your school for more than three years. Participation in this study is voluntary and you may choose to discontinue participation at any time without penalty by not clicking "Done" at the end of the survey. All responses will be kept strictly confidential. No specific individual, school, or building will be identified in my dissertation or in any other publications describing this study. Only summary statistics will be reported.

All electronic survey data will be downloaded to a CD Rom after the dissertation is completed and stored in a file along with hard copies of data in my home. Please note that by completing this survey you are giving consent to participate in this study. You may wish to print this cover letter, which is a consent statement, for your personal files.

If you have any questions or concerns, with this research, please feel free to contact me by replying to this e-mail. Thank you in advance for your time and consideration to participate in this doctoral study. Your input is important to help ensure that there is sufficient information to make the results meaningful. Please click on the link below to complete the survey.

Yours in education,

Kelly Gillespie

Appendix I:

Participant Thank You

Date

My name is Kelly Gillespie. I am Executive Director of Southwest Plains Regional Service Center in Sublette. A week ago, I sent a survey asking for your participation in my doctoral study. Would you please take approximately ten minutes from your busy schedule to complete this research survey? As I indicated before, your input is important to help ensure that there is sufficient information to make the results meaningful.

As a participant in this study, you will receive a summary of its results and conclusions by e-mail. This information could be useful to you as a principal in your efforts to improve student achievement.

Thank you in advance for your time and consideration to participate in this doctoral study. For your convenience, I have included a link to the survey below. Please click on the link to complete the survey.

Yours in education,

Kelly Gillespie

Curriculum Vitae

Kelly P. Gillespie

P O Box 63, Copeland, Kansas 67837
(Home) 620-668-5620 or (Cell) 620-353-0130
kgillespie@swprsc.org

EXPERIENCE

2004–Present — Southwest Plains Regional Service Center, Sublette, Kansas

Executive Director/Chief Executive Officer

- Increased member districts from 19 to 80
- Developed educational product division
- Host annual universal inservice with attendance of 2000 educators
- Developed partnership with Northwest Kansas Educational Service Center
- Initiated a KSDE Migrant Program with 8 employees
- Increased employee pool from 5 to 25 consultants

1998–2004 — Southwest Plains Regional Service Center, Sublette, Kansas

Assistant Executive Director

- Inservice Director: Responsible for scheduling and hosting professional development opportunities for educators
- District Consultant: Assisted member districts with curriculum development, school improvement, assessments, and other needs
- Grant Writer: Authorized cooperative grants for member districts
- On-line Curriculum: Developed web-based curriculum program
- Other: Staff supervision and evaluation; district communication; needs assessment research

2004–2007 — Kansas North Central Association, Wichita, Kansas

Assistant Director

- Designed and delivered inservice workshops and training
- Provided training and support in school improvement procedures for Western Kansas

1994–1998 — Unified School District 371, Montezuma, Kansas

K–12 Assistant Principal

- Curriculum Coordinator: Responsible for curriculum development, K–12
- School Improvement Process: Developed Profile, School Improvement Plan, and Documentation Report for KNCA Accreditation
- Scheduling: Implemented block scheduling and expanded SGHS schedule to include 18 hours college credit and six applied vocational classes
- DCCC Vo-Tech Outreach Program: Developed cooperative agreement with Dodge City Community College to allow SGHS students dual credit
- Activities Director: Responsible for scheduling activities and event management
- Director of Professional Development: Staff evaluation; Testing Coordinator; student discipline; day-to-day school operations

EXPERIENCE

1986–1994 Unified School District 476
Copeland, Kansas

Family and Consumer Science Teacher

- Responsible for new program development, grades 7–12 scope and sequence curriculum
- Other: cheerleading sponsor; class sponsor; quiz bowl coach

Gifted Facilitator

- Served two school districts (371 and 476)
- Responsible for screening, assessment, and writing Individual Development Plans
- Provided program instruction
- On-going re-evaluation of students

EDUCATION

2007–Present Walden University

- Doctoral Candidate—Emphasis: Administrative Leadership for Teaching and Learning

1990–1992 Fort Hays State University
Hays, Kansas

- Master of Education—Special Education, K–12

1980–1984 Kansas State University
Manhattan, Kansas

- Bachelor of Science—Family and Consumer Science Certification, K–12

ADDITIONAL ENDORSEMENTS

1998 English As a Second Language Learner
1997 District Administrator
1993 Building Principal

PROFESSIONAL MEMBERSHIPS

Kansas Association of Supervision and Curriculum Development
United School Administrators
Kansas Association of Secondary School Principals
Kansas Foundation for Partners in Education
Association for Supervision and Curriculum Development
Kansas Staff Development Council
National Staff Development Council
Kansas Association of Education Service Agencies

HONORS

North Central Accreditation Department of Defense Trainer—Germany, 2003
Excellence in Education: Claradine Johnson Award, 2002 from North Central Association
Kansas—Area IV: Assistant Principal of the Year, 1997