A QUALITATIVE INSTRUMENTAL CASE STUDY INVESTIGATING THE INTERRELATEDNESS OF ADULT LEARNING THEORY, TARGETED PROFESSIONAL DEVELOPMENT, AND THE CREATION OF PROFESSIONAL LEARNING COMMUNITIES DURING THE IMPLEMENTATION OF AN ELEMENTARY SCHOOL IMPROVEMENT MODEL

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Doctor of Education

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by

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The undersigned, appointed by the dean of the Graduate School, have examined the dissertation entitled

A QUALITATIVE INSTRUMENTAL CASE STUDY INVESTIGATING THE ROLE OF TARGETED PROFESSIONAL DEVELOPMENT IN THE CREATION OF PROFESSIONAL LEARNING COMMUNITIES DURING THE IMPLEMENTATION OF AN ELEMENTARY SCHOOL IMPROVEMENT PLAN

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and hereby certify that, in their opinion, it is worthy of acceptance.

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DEDICATION

In honor of:

My husband, Thomas H. Langston,

Who for 30 years has been my best friend, greatest supporter,

and one very good listener.

Without your love, support, and patience, this great dream

would never have been fulfilled.

When I jumped off this cliff it was so reassuring to know

I was not jumping alone.

My mother, Thelma F. Caringer,

who always told me I could accomplish anything

if I set my mind to it and supported me on this journey.

You always provided such a great example for me to follow.

My father, Rev. Charles G. Caringer,

who encouraged me through word and example

to always push the limits and pursue my dreams

with bulldog tenacity.

Your inspiration is always with me.

Wish you could have been here to see this!

May 27, 1928 – December 18, 2000

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A QUALITATIVE INSTRUMENTAL CASE STUDY INVESTIGATING THE INTERRELATEDNESS OF ADULT LEARNING THEORY, TARGETED PROFESSIONAL DEVELOPMENT, AND THE CREATION OF PROFESSIONAL LEARNING COMMUNITIES DURING THE IMPLEMENTATION OF AN ELEMENTARY SCHOOL IMPROVEMENT MODEL

By

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ABSTRACT

Federal school reform mandates and open enrollment policies have challenged U.S. public school leaders to find and implement innovative improvement programs. Research has shown effective professional development that is targeted to student, teacher, and school needs is essential to implementing new programs. The purpose of this study was to illustrate the interconnectedness of adult learning theory, targeted professional development, and the creation of professional learning communities (PLCs) during the implementation of the International Baccalaureate Primary Years Program (IB PYP) at Southeast and Midtown Elementary Schools in the Midwestern U.S. The conceptual underpinnings of the study were adult learning theory and learner-centered theory for adults. Research questions developed investigated the extent to which staff members perceived the schools' professional learning activities supported their adult learning needs. The study's data indicated targeted professional development activities at both school met the adult learning needs of the teachers and PLCs were formed. Data and discussion of findings of this investigation would be useful to school leaders seeking guidance with implementing school improvement models.

CHAPTER ONE

INTRODUCTION TO THE STUDY

Background

School reform legislation motivated by *A Nation at Risk*, the seminal report detailing the decline of U.S. public education, has served to set standards for improving student achievement and the quality of American education (Hord, 2004). National school improvement efforts have evolved from initial, less intrusive government policies to the strict requirements of the *No Child Left Behind* (*NCLB*) Act of 2002 and, more recently, the incentive-for-improvement specifications of 2009's *Race to the Top* (*RTTT)* (Desimone, 2002; Klein, 2012). For better or worse, *NCLB*, with its stringent requirements and punitive sanctions has had a tremendous impact on public education (Hursh, 2005; Karen, 2005; Kim & Sunderman, 2005). Political opposition to *NCLB* prompted President Obama's administrative team to develop *RTTT* as a national educational reform policy based on "incentives instead of sanctions to drive state reform" (McGuinn, 2012**,** p. 138).

One requirement of *NCLB*, and continued in *RTTT*, is that all schools provide effective professional development for teachers which results in improved classroom practices. Benton and Benton (2008) argued, "The need for relevant professional development has never been as important as it is today because of *No Child Left Behind* and state mandates that require…an increase in student achievement" (p. 24). Studies have indicated, however, that professional development as it has been traditionally practiced does not effectively translate into classroom practice (Nelson & Cudeiro, 2009).

NCLB established the expectation for schools to show adequate yearly progress (AYP) each year toward a goal that all students be proficient in communication arts and mathematics by 2014 as demonstrated through state achievement testing (Kim & Sunderman, 2005). Schools that do not meet AYP expectations are labeled as failing and "can be restructured, taken over by the state or a private management contractor, converted to a charter school, or constituted with a new staff" (Kim & Sunderman, 2005, p. 12). In addition, leaders must inform students of the schools' failing status and offer the option of transferring to other schools. In response to the severe penalties established by *NCLB* as incentive for school improvement Bullough (2007) lamented, "Ours is a faithless time, when threats, punishments, and externally imposed mandates are thought to produce desired reforms" (p. 179).

RTTT was introduced in an effort to move away from the coercive policies of *NCLB* and use federal funding to reward states for educational reforms. McGuinn (2011) explained, ""*RTTT* is an attempt to circumvent the perceived failings of *No Child Left Behind (NCLB)*, and in particular, the law's reliance on coercive federal mandates and the compliance culture that it fostered at the state level" (p. 138). Under *RTTT,* states apply for federal grant money to implement innovative school programs that produce higher student achievement. Rather than allocating education funds based on need, as has been historical practice, federal funds were distributed based on a competitive grant process. States no longer received funds automatically. They were required to apply for the funding grants and have been graded on "a 500-point scale according to the rigor of the reforms proposed and their compatibility with four administration priorities: developing

common standards and assessments; improving teacher training, evaluation, and retention policies; creating better data systems; and adopting preferred school-turnaround strategies" (McGuinn, p. 139). Out of 40 states that applied in the first round of applications, only 10 were selected prompting critics to christen *RTTT* as "Race to the Trough" (Onosko, 2011, p. 1).

Arne Duncan, President Obama's education secretary, called *NCLB* a "slow-motion educational train wreck for children, parents, and teachers" (Mathis, 2011, p. 1). In 2011, as the 2014 proficiency deadline drew nearer, he pointed out *NCLB* set up conditions where most schools in the nation would be failing schools falling under "impractical and ineffective sanctions" (Mathis, 2011, p. 1). *NCLB* has been widely criticized as coercive, and *RTTT* has been berated for continuing policies that have not accomplished intended goals. Critics complain that *RTTT* only extends, but does not fix, the problems associated with *NCLB* and other accountability reforms. Mathis (2011) noted, "Through either *Goals 2000* or *NCLB* test-based accountability schemes have been the rule for the past 20 years…This system just doesn't work…How a failed system will be more effective by embracing it more intensely is not explained" (p. 3). Despite criticism of *NCLB* and *RTTT*, public demand for improved schools has not abated. Federal mandates for school improvement have continued to compel school leaders to examine effectiveness of current education practices and adopt program models to realize school improvement.

Raising performance in low-performing schools has been the objective of school reform policies, but the national outcry for school improvement has also impacted high

performing schools by opening options of school choice for parents. Open enrollment policies, established to allow parental choice regarding the schools their children attend, have pushed leaders in high performing schools to adopt innovative school improvement models to hold on to their student populations. School choice can potentially empty schools of their highest-achieving students and drain schools of resources necessary to continue high-quality educational opportunities. The results can be devastating as traditionally high-performing schools lose teachers, financial resources, and supportive parent involvement (Howe, Eisenhart, & Betebenner, 2002).

Legislative requirements and societal demand for school improvement provide the incentive for change, but change is a difficult concept for schools to embrace. Hall and Hord (2006) explained, "As inescapable as change is in today's world, we still tend to hope that change will avoid us personally and professionally…When confronted with change, there is a natural tendency…to defend ourselves from it instead of…use and succeed with it" (p. 3).

Inducing change for the purpose of school improvement is contingent on the quality of professional development school staff members receive. Bryk (2010) contended, "Schools are only as good as the quality of the faculty [and] the professional development that supports their learning" (p. 24). Garet, Porter, Desimone, Birman, and Yoon (2001) described teacher professional development as "a major focus of systemic reform initiatives" (p. 916). Traditional professional development, however, has not met the need for effective change in schools. Difficult economic times have further

complicated already problematic employment of traditional professional development practices (Hunefeld, 2009).

The nation-wide economic recession of the early 2000's had a devastating effect on school district budgets (Ginsberg & Multon, 2011). Chakrabarti and Setren (2011) explained the combined effects of financial crises caused a decline in tax revenues for state and local governments that fund public schools. "The bursting of the housing bubble and a weakened labor market led to lowered property, income, and sales tax revenues" on which public school funding depends (Chakrabarti & Setren, 2011, p. 1). Loss of revenues forced decline in state and local financial support for education. Mathis (2011) reported, "Federal funds are being reduced and most states are facing deficits and austerity. Local districts are likewise squeezed" (p. 3). Economic conditions caused by shrinking revenues and budget cuts have forced school administrators to be aware of the cost versus the benefits of all their programs.

Bonstingl (2009) suggested administrators should "take a close look at each and every program" and evaluate whether limited school funds are "buying the improvement we need and expect" (p. 9). He argued programs producing "marginal results" should be overhauled or eliminated completely. Blackburn and Williamson (2010) contended the most effective schools are characterized by a commitment to professional growth, and leaders committed to improving student achievement must provide professional development opportunities for teachers that result in changed classroom practices. During a time of economic downturn, unfocused professional development is a waste of time and strained financial resources (Hunefeld, 2009).

Unfortunately, professional development as it has been carried out for several decades rarely impacts teacher practice (Hunefeld, 2009; Royce, 2010). Traditional one-day, "one-size-fits-all" workshops are often seen as irrelevant to teachers' practice and viewed as a waste of time (Hord, 2004; Hunefeld, 2009; Lassonde & Israel, 2010). When teachers cannot see the relevance of their professional learning to their jobs, they question the value of the experiences (Tate, 2009). Teachers have to feel a sense of ownership for new programs in order for new initiatives to succeed. Bryk (2010) advised school leaders must cultivate buy-in for new programs among teachers to ensure the success of these new initiatives.

Targeted professional development that is goal-directed, relevant, learner centered, teacher-directed, and collaborative provides a vehicle for effective implementation of a school improvement model making it an efficient use of school funds (Nelson & Cudeiro, 2009). Schools committed to providing targeted professional development set up structures for continuous improvement that support the development of the school staff as a professional learning community. Researchers have found strong evidence linking increased student achievement to the organization of a school staff as a professional learning community (Hord, 2004). Benefits associated with professional learning communities (PLCs) include support for innovative experimentation and increased teacher leadership capacity that results in increased buy-in for change (Huffman & Hipp, 2003).

Teachers within a professional learning community "maintain an open mind to change, while critically considering those changes" (Couchenour & Dimino, 1999, p.

198). Professional learning community members also take control of their professional development as they set goals to align student learning needs with their own learning needs. They exhibit a sense of increased efficacy or confidence that the staff as a whole regularly implement practices that improve school culture and student achievement (Hall & Hord, 2006). Hord, Roussin, and Sommers (2010) confirmed, "Schools in which the faculty had a strong sense of collective efficacy flourished, whereas those in which faculty had serious doubts about their collective efficacy withered – that is, declined or showed little academic progress" (p. 37).

The processes of school staff members engaged in targeted professional development were explored through this case study of two Midwestern U.S. elementary schools implementing the International Baccalaureate Primary Years Program (IB PYP) as a school improvement model. The first school, Southeast Elementary, is located in a middle- to upper-socioeconomic, low-minority neighborhood in a small Midwestern U.S. city. Southeast Elementary School adopted the IB PYP due to dwindling enrollment. Although it was a traditionally high-performing school, an aging neighborhood population limited the number of elementary-aged students available to fill the school. Declining enrollment prompted district leaders to propose closing the school and transferring students to other neighborhood schools. In response to community petition to keep the school open, the district school board approved the implementation of the IB PYP at Southeast.

The second school, Midtown Elementary, is located in a high-poverty, high-minority neighborhood of the same small Midwestern U.S. city. Midtown Elementary

School adopted the IB PYP to address two issues: declining enrollment as a result of movement of young families to suburban areas and need for improvement in line with *NCLB* provisions to make AYP with all subgroups of its population. Both schools have been reformed into "choice schools" within their school district. Admission into both schools is highly prized by parents seeking high-quality educational experiences for their children.

The main objective accomplished through the case study of Southeast and Midtown Elementary Schools was collecting perceptual data from faculty regarding their collaborative professional learning activities. The role targeted professional development has played in the implementation of the IB PYP was also examined. Data collected were used to determine the extent to which staff members perceived:

- Their needs as adult learners were met by their professional development;
- Their professional development was targeted to impact their classroom practice;
- Their schools' staffs reflected characteristics of professional learning communities as described by Hord (2004); DuFour, DuFour, Eaker, and Many (2006); and Jones, Jones, Pickus, and Ludwig (2010).

Conceptual Underpinnings for the Study

Perceptions adult educators have about their professional learning within the context of implementing new teaching and learning practices were examined by this case study. Two theories of adult learning supported this investigation: functional theory of adult learning and learner-centered theory for adults. Gibb (1960) developed the functional theory of adult learning to address the needs of adult learners. He stressed that

to be “optimally effective” learning must be problem-centered, must be experience-centered, and must be meaningful to the adult learner. The fundamental assumption of functional theory of adult learning relates to relevance of professional development for teachers. Adults must see the application of knowledge to their real lives in order to fully absorb knowledge and change their practices accordingly (Gibb, 1960). New knowledge must be relevant to teachers’ classroom practice in order to be effectively implemented. King and Newmann (2000) concurred with this theory and warned, “Because professional development often presents information that teachers see as irrelevant to student learning in their specific school settings, teachers often don't learn and apply what professional development programs offer” (p. 576).

Learner-centered theory for adults was the second theory that provided a foundation for this study. When teachers are allowed to self-direct their inquiry into best practices according to their needs as learners their professional development becomes learner-centered (Trotter, 2006). Through the learner-centered approach to professional development, teachers are encouraged to ask questions and investigate as inquirers based on their interests or self-determined needs for information. Together functional theory of adult learning and learner-centered theory applied to adults present a theory of adult learning that is supported by the components of targeted professional development for teachers.

Providing authentic learning experiences for teachers requires knowledge of adult learning theory and how adults learn new processes and strategies. Fogarty and Pete (2009) illustrated the special needs of adult learners. Adult learners are self-directed.

"Give [adults] the big picture, offer options for learning, support their practice stages, and they will take charge of their own learning paths" (Fogarty & Pete, p. 32). Adult learners also prefer to work collaboratively and prefer hands-on, practical learning opportunities over theoretical study. They need continued practice and coaching over time in order to truly learn and perfect new strategies. Adult learners need to see the relevancy of their learning experiences to their jobs. Fogarty and Pete emphasized, "There must be clear expectations and understanding of authentic transfer and the application of learning. And every session must include time to allow participants to make real-world connections to their everyday work" (pp. 33-34). Adults are also goal-oriented and must see measurable results of their efforts in order for them to continue to employ new practices.

Traditional professional development is often not effective because it does not support adult learner theory. It is not self-directed, and often, teachers do not see the relevance of the activities to their professional practice. Traditional professional development practice involves formal training sessions in which a leader as expert lectures or guides participants through activities designed to present new information and practice new strategies (Hunefeld, 2009). This approach is often neither teacher-directed nor relevant to teacher needs. In addition, follow-up and coaching have not traditionally been considered essential supports for professional learning. Lassonde and Israel (2010) contended, "Potential effects [of new practices] are frequently weakened by lack of follow-up and inconsistencies in implementation" (p. 6). Without follow-up, teachers lose their motivation to change their practice and go back to their old methods (Joyce & Showers, 2002).

Targeted professional development for teachers is aimed at meeting the needs of adult learners. All of the processes characteristic of targeted professional development support functional theory of adult learning as described by Gibb (1960), learner-centered theory for adults as illustrated by Trotter (2006), and adult learner theory as depicted by Fogarty and Pete (2009). Targeted professional development is teacher-directed and learner-centered in that it provides opportunity for the teachers to set goals for their learning in line with student needs. Targeted professional development also identifies and builds upon the teachers' current level of knowledge and provides "ample time for in-depth investigations" (Hanegan, Friden, & Nelson, 2009, p. 80). Professional development that is targeted to teachers' needs as adult learners allows them to work collaboratively to learn new strategies through hands-on, practical experimentation, and practice of new skills (Benton & Benton, 2008). Professional learning opportunities are directly related to the teachers' professional practice and relevant to their needs to provide improved instruction in their classrooms.

Schools that successfully employ targeted professional development principles provide coaching and feedback experiences to support learning as teachers practice and perfect new skills over time (Cudeiro, Leight, & Palumbo, 2005). Reflection on practice is encouraged, and modification of practice as a result of reflection is foundational to targeted professional development that meets the results-orientation need of teachers as adult learners. "During their learning, educators…try out a new technique with learners, set up a research process to obtain data, receive feedback… reflect on what they are

learning…report results, modify what they are doing, and repeat these processes" (Easton, 2004, p. 757).

Shared decision making and collaboration are essential constructs supporting targeted professional development and are rudimentary features of PLCs that support teacher buy-in for new practices (DuFour, 2004; King & Newmann, 2000). When teachers share in decision making regarding selection and implementation of a new program they are more likely to translate new practices into their classrooms (Bush, 2003, pp. 65-66). Collaboration among teachers through targeted professional development is a powerful functional component of a professional learning community "in which teachers work together to analyze and improve their classroom practice" (DuFour, 2004, p. 9). Setting up the structures for collaboration is an important step in developing a professional community of adult learners.

Statement of the Problem

According to *NCLB* directive, failing schools face severe sanctions. Mathis (2011) reported,

> Under the current system, failure to improve test scores over a period of time triggers one of four ultimate sanctions: turn the school operations over to the state, turn the operations over to a private company, reopen as a charter school, or reconstitute the school by replacing some or all of the teachers, staff, and administrators (p. 3).

Additionally, failing schools must offer the opportunity for student transfer to other higher-achieving schools.

Creating competition between schools in order to force school improvement is one purpose of legally-mandated school choice (Hursh, 2005). During his state of the union address in 2011, President Obama "extended the notion…that school quality is to be advanced through competition between and within schools" (Mathis, 2011, p. 2). *Race to the Top (RTTT),* Obama's contribution to school reform, sets up states to compete for federal funds. MCGuinn (2012) reported schools interested in applying for *RTTT* incentive grants must comply with four school improvement priorities including "developing common standards and assessments; improving teacher training, evaluation, and retention policies; creating better data systems; and adopting preferred school-turnaround strategies" (p. 139). All states and schools are eligible for the incentive funding regardless of financial need.

School reform legislation has impacted all U.S. public schools, not just the lowest achieving ones. Open enrollment policies adopted by most states as part of education reform legislation afford families the option of transferring to other schools whether or not their home schools are failing (Jimerson, 2002). School leaders must satisfy parental demand for high-quality education or risk losing students to other, higher-quality schools (Howe et al., 2002). Parents and students legitimately expect their schools are committed to continuous improvement and providing a high-quality education. They have the legal right to "vote with their feet" if schools fail to meet their expectations (Howe et al., 2002, p. 21). It is in the best interest of school staff members, students, parents, and the community for schools, regardless of their status regarding AYP, to seek out and implement school improvement models.

All public schools are required by law to provide professional development activities that are "high quality, sustained, intensive, and classroom-focused in order to have a positive and lasting impact on classroom instruction and the teacher's performance in the classroom" (Overview: Title IX – General Provisions, 2004, p. 107). Professional development for teachers is essential if schools are to meet school improvement standards established by law (Benton & Benton, 2008). Traditional professional development activities do not meet the standards prescribed by *NCLB* and are ineffectual in changing behavior in the classroom (Desimone, 2002; Easton, 2008; Fenstermacher, 1987; Hunefeld, 2009). In spite of the abundant literature attesting to the ineffectiveness of traditional profession development, the practices continue.

Traditional professional development operates on "one-size-fits-all" and "I know best what you need" principles (Fenstermacher, 1987; Hunefeld, 2009). The general formula for traditional professional development is this: A staff member charged with providing professional development identifies a topic for study. Information is presented in whole group fashion by an expert or experts regardless of whether the teachers have expressed a need for instruction on that particular topic. Problems occur in this traditional scenario because the pace of the activities and level of instruction may be too advanced for some in attendance and too basic for others (Hunefeld, 2009).

Hirsh (2009) noted educators asked to fulfill professional development requirements in schools are often overwhelmed with the task. They "feel the need to find gimmicks to engage learners, but what they really need to do is to determine how they will leverage their new responsibility to support learning for educators and students" (p.

71). Hunefeld (2009) admonished, "If improved teaching practice and better student outcomes are the goal, then these [traditional professional development] methods of keeping teachers up to date and growing professionally are not working" (p. 24).

Return on investment of school budget dollars with traditional professional development is very low. Nelson and Cudeiro (2009) reported, "Research shows that even successful, high-quality [traditional] professional development leads to about a 5% implementation rate" (p. 32). Teachers who have no input into professional development decisions have no personal investment, nor sense of ownership, for it. With no sense of ownership, teachers also have no sense of responsibility for implementing new practices (Kragler, Martin, & Kroeger, 2008). Hunefeld (2009) affirmed research showed traditional professional development techniques "result in extremely poor classroom implementation…In today's economy, no one has extra money to throw into ineffective training events" (p. 24). Although literature provides ample support for reforming professional development in schools, school leaders need examples of how reform has been accomplished.

Purpose of the Study

The purpose of this case study was to describe the transformation of two elementary school staffs into PLCs and the role targeted professional development played in these transformations. Southeast Elementary School and Midtown Elementary School located in socioeconomically different neighborhoods of a small Midwestern city adopted the same school improvement model in 2006. A guiding principle of the school improvement model is collaborative professional development targeted to school and

student needs. The study examined teacher perspectives of their professional learning through analysis of interview, focus group, survey data, observation of formal and informal collaboration, and professional development activities.

In addition, staff perception of their responsibility for the implementation of the school improvement model was investigated to determine staff buy-in for the school improvement model. The researcher also examined the extent to which teachers felt they have shared leadership for decision making regarding the implementation of the improvement model. Finally, the investigation described teacher interaction and examined the role of collaboration in facilitating professional learning among the teachers.

Research Questions

The following central question guided this study: At suburban Southeast Elementary School and urban Midtown Elementary School in the Midwestern United States, what has been the role of targeted professional development in creating professional learning communities during the implementation of the schools' improvement model as perceived by the teaching staff members of the schools? The following sub questions helped frame the investigation:

1. How does the functioning of the professional learning community support the teachers' needs as adult learners?
2. To what extent do teachers feel their professional development is targeted to impact their classroom practices?

3. What characteristics of a professional learning community as defined by Hord (2004) DuFour et al. (2006), and Jones et al. (2010) are evident at the school?

Limitations and Assumptions

This qualitative case study provided an in-depth examination of the implementation of a school improvement model during which data collection was bounded by time and activity (Creswell, 2009). The subjects of the study were Southeast Elementary School located in a suburban setting and Midtown Elementary School situated in the urban center of a small Midwestern U.S. city. Limitations of this study included time constraints, activity boundary, scope of the investigation, context and applicability to other schools, and researcher bias.

Researcher assumptions that biased the study were that the school improvement model has necessitated targeted professional development, collaboration among teachers, and the development of a professional learning community within each school. As suggested by Creswell (2009), the researcher provided how her personal background might affect data analysis and used techniques to ensure qualitative validity such as member checking, intercoder agreement, triangulation, validation of themes, and included negative or discrepant information that did not support identified themes. An external auditor also reviewed the study for inconsistencies.

Limitations

This study was bounded by time and activity. Southeast and Midtown Elementary Schools have been in the process of implementing the school improvement model since 2006. Data from interviews with current staff members along with current documents and

artifacts were collected and compiled over a month-long period. The study represented a snapshot of current practices from the perspective of the current teaching staff of both schools and observations of their interactions. No attempt was made to obtain perceptual data from former staff members. The activity boundary of professional development was the second limitation of the study. The focus of the study was the role targeted professional development plays in the implementation of the school improvement model. The examination did not delve into other practices that might impact the model's implementation. The scope of the research was also limited because the study was carried out at only two elementary schools. Teacher perceptions were limited to the contexts of those two schools.

Another limitation relating to context of the study was the applicability of findings to other schools. Southeast Elementary School is a suburban neighborhood school in a small Midwestern city. The school serves just 424 students and is made up of mostly white (96%), middle class children. Southeast Elementary School was academically one of the higher performing schools in its district prior to the adoption of the school improvement model. The school's achievement scores are currently above the district and state averages.

Midtown Elementary School is an ethnically diverse (27% minority) school serving approximately 260 students in a high-poverty neighborhood. Midtown qualifies as an urban school within the context of the small Midwestern city. Student achievement scores were significantly lower at Midtown Elementary School than Southeast Elementary School prior to the adoption of the school improvement model. Given the

contextual features of the two schools, findings of the study may not be applicable to larger or smaller schools with similar demographics in larger cities or rural communities.

Finally, researcher bias presented a limitation in the study. The researcher taught at Southeast Elementary School for three years and has a personal interest in the school's success. Midtown Elementary School is within the feeder pattern of the schools in which the researcher is currently employed, and the researcher has a professional interest in the school's success. In addition, the researcher is still an employee of the district to which both schools belong. The school improvement model adopted by Southeast and Midtown Elementary Schools is the elementary version of the model the researcher is implementing within the district at a middle school and a high school. The researcher is familiar with the Southeast Elementary School and Midtown Elementary School staff members and works closely with the school improvement model's coordinator who also serves as professional development coordinator for both schools.

Assumptions

The first assumption of the researcher that supported the design of the research was that commitment to professional learning is an essential ingredient for school improvement (Blackburn & Williamson, 2010). Targeted professional development will allow for more direct translation of teacher learning into the classroom. When teachers are allowed to self-direct their professional learning based on school, student, and their own professional needs they are more likely to develop a sense of ownership of the model. Teachers who share ownership of the model are more likely to effectively implement new practices (Bush, 2003).

A further assumption that guided this study was that targeted professional development results in collaboration among teachers and creation of a professional learning community. Targeted professional development incorporates the defining characteristics of a professional learning community (Hord, 2004; Jones et al., 2010). A professional learning community naturally evolves when a school staff adopts the practices of targeted professional development.

Definition of Key Terms

This study was intended to demonstrate the role of targeted professional development in creating a professional learning community during the implementation of a school improvement model as perceived by the teaching staff members of two Midwestern elementary schools. To clarify the study's purpose, definitions of key terms included in the research questions are offered.

Adequate Yearly Progress (AYP). A foundational expectation set by *NCLB* legislation is that all students in U.S. public schools reach the level of proficiency in communication arts and mathematics, as determined on standardized tests, by 2014. Each year between the time of the law's enactment and 2014 schools have been required to show their students are making Adequate Yearly Progress (AYP) toward that goal. Kim and Sunderman (2005) explained, "The purpose of AYP is to ensure that 'all schools' and 'all students' meet the same academic standards in reading and mathematics by the 2013-2014 academic year" (p. 3). AYP is expected for both high poverty schools receiving Title 1 funding from the federal government and non-Title 1 schools, but only the Title 1

schools are subject to mandatory sanctions set by *NCLB* for failing to meet AYP (Kim & Sunderman, 2005).

Adult learners. For the purposes of this study, the term "adult learners" refers to teachers. Teachers are educated professionals who face continuous challenges of providing effective learning experiences for students. This requires them to become learners and participate in professional learning activities designed to improve their performance as educators. Fogarty and Pete (2010) contended, "Adult learners have preferences and predilections that make them different from other learners. That is especially true for teachers who are seeking professional development" (p. 32). As adult learners, teachers need to self-direct their learning, participate in hands-on learning experiences that are relevant to their professional responsibilities, and collaborate with their peers (Fogarty & Pete, 2010; Gibb, 1960; Trotter 2006).

Buy-in. Buy-in refers to commitment to, or ownership for, new programs by the people who are directly responsible for their successful implementation. Bryck (2010) called buy-in a "central concern" for leaders promoting new programs (p. 27). Buy-in is characterized by a belief that employment of a new program will result in greater benefits for students and a commitment to do what is necessary to implement the program with fidelity.

Coaching and feedback. Transfer of new skills acquired during professional learning opportunities is more likely to happen when training is followed up with coaching and feedback (Joyce & Showers, 2002). Coaching is provided through peer observation and feedback sessions following initial explanation of theory, expert

demonstration, and practice. Teachers share experiences over a period of time and discuss challenges they faced and improvements they have made. They observe and are observed and discuss each other's performance using new practices. Feedback provides the basis for continuous improvement.

Joyce and Showers (2002) observed the professional development of both coached and uncoached teachers and reported, "Coached teachers had opportunities to discuss instructional objectives, the strategies that theoretically were best designed to accomplish those objectives and the types of curricular materials needed for specific strategies" (p. 86). On the other hand uncoached teachers they observed, "had difficulty finding appropriate occasions for use in their own curriculum areas and tended to quit practicing" new techniques in the absence of observation and feedback (Joyce & Showers, 2002, p. 86).

Collaboration. In this study, collaboration referred to the sharing of ideas and practices among the staff members of a school. Collaboration can be mandated or happen naturally and spontaneously. Formal collaboration is administratively mandated. Staff members meet together to discuss school or student-related issues on occasions established through scheduling and professional development structures of schools. Informal collaboration is often driven by the need to share experience and ideas. Teachers pursuing a common goal are naturally drawn to work together in order to provide or receive support, receive feedback on ideas or practice, or clarify understanding (Fogarty & Pete, 2009).

Whether formal or informal, collaboration allows teachers to share ideas and expertise, take on leadership roles as mentors, and strengthen their professional practice (Hunefeld, 2009). Still, Corcoran and Silander (2009) warned, "Research…suggests that compulsory teacher collaboration can be less effective than collaborative relationships that evolve naturally from within a teacher community" (p. 163).

Effective professional development. Effective professional development occurs when training in new strategies designed to meet school, student, and teacher needs is successfully transferred into improved classroom practice. Hanegan et al. (2009) further explained, "Effective professional development programs build from the teachers' current knowledge levels…, provide ample time for in-depth investigations, collaborative work, and reflection that connects clearly with teachers' other professional development experiences and activities" (p. 80). Reed (2010) argued effective professional development is vital because "schools will not change or improve unless the performance capacity of everyone who works in the school improves" (p. 62).Since effective professional development is essential to school improvement, "teacher professional development is a major focus of systemic reform initiatives" (Garet et al., 2001, p. 916).

High-quality education. Student achievement on standardized tests, teacher is set by *NCLB* as one measure of high-quality education. Hall and Hord (2006) contended, "In schools, the bottom line is the expectation to have ever-increasing student scores on standardized tests" (p. 9). The higher students score on standardized tests, the higher is public perception of a school's educational quality.

Another measure of high-quality education is teacher preparation. Teachers are presumed by *NCLB* to be providing a higher quality of education to students if they have obtained advanced degrees and participate in "high quality, sustained, intensive, and classroom-focused" professional development activities that transfer into improved classroom practice (Overview: Title IX – General Provisions, 2004, p. 107). Corcoran and Silander (2009) explained the public's definition of high-quality education is expectation that "schools take on more responsibility for equalizing student outcomes and closing 'gaps' and that the outcomes for all students should be more ambitious, more 'world class,' more rigorous" (p. 157).

Higher-quality schools. A great deal of variation exists among U.S. public schools. The intent of national school reform efforts such as *NCLB* has been to standardize educational offerings to public school students (Kim & Sunderman, 2005). Hord (2004) described higher quality schools as "schools that are successfully redesigning themselves to become organizations that continually learn and invent new ways to increase the effectiveness of their work – schools that are focused on improving student learning" (p. 5).

Learner-centered theory for adults. Learner-centered theory proposes the most effective learning experiences are designed around a student's learning needs. While teachers have recognized the benefit of providing authentic, learner-centered instruction in their classrooms, "they are far less likely to see its worth – or use this approach – for themselves" (Kaagan & Headley, 2010, p. 85). The learner-centered theory applied to teachers assumes they are educated professionals with the ability to determine their own

learning needs. The learner-centered theory for adults proposes professional learning experiences for teachers should be self-directed, should build upon the teachers' existing knowledge, and should provide sufficient time for teachers, as inquirers, to acquire and practice new skills (Hanegan, Friden, & Nelson, 2009).

Professional development. Professional development refers to formal or informal activities in which members of a school's staff participate to strengthen existing skills and/or learn new skills and strategies. The purpose of professional development is to produce professional learning. Targeted or traditional professional development can be observed in schools as teachers work independently, in small groups, or in whole staff workshops to learn new knowledge intended to improve classroom practice. Professional development is recognized by educational experts and by school reform legislation as the key factor impacting the quality of a school and its students' educational achievement (King & Newmann, 2000).

Professional learning. Professional learning occurs as a result of formal or informal professional development activities. It may occur when staff members as inquirers experiment with new concepts or strategies either on their own or during structured professional development activities and change their ideas or professional practice (Dyer, 2009). It may also occur as staff members collaboratively discuss school or student-related issues and combine their individual perspectives into new knowledge that is then applied to the situations or issues (Nonaka, 1991). Regardless of how it occurs, to say that professional learning has occurred requires an observable change in

practice, change in thought or philosophy, or application of newly acquired knowledge (Dyer, 2009).

Professional learning community. Professional learning communities (PLCs) are groups of people who share common goals, share commitment to continuous improvement, are results-oriented, share leadership, enjoy supportive conditions for collaboration, and participate in collective learning and shared practice (DuFour et al., 2006; Hord, 2004; Jones et al., 2010). Corcoran and Silander (2009) indicated all PLCs "aim to increase teacher collaboration to build teachers' knowledge about students and about teaching and learning, to encourage teachers to share resources, and to create shared norms and views about teaching and learning practices" (p. 163).

School improvement model. School improvement models characterized by innovative and proven best practices may come pre-packaged or may be developed by the school or district to meet identified school needs. The school improvement model adopted by Southeast Elementary School and Midtown Elementary School is the International Baccalaureate Primary Years Program (IB PYP), a pre-packaged design that allows for some individual variation among schools. Fundamental principles established by IB Standards and Practices for program implementation support collaboration among staff members, targeted professional development, and commitment to continuous improvement.

Targeted professional development. Targeted professional development is defined as professional learning opportunities characterized by self-directed inquiry relevant to teachers' professional practice. In addition, targeted professional development

is goal-directed, learner-centered, collaborative, and supports the commitment of the learner to continuous improvement. Cudeiro et al. (2005) found successful schools provided targeted professional development to their staff members by offering "training…coupled with opportunities for regular practice, coaching and frequent building walk-through" (p. 19).

Significance of the Study

This investigation will contribute to the academic literature and the body of knowledge related to professional development during implementation of new school improvement models. Academic literature provides abundant resources providing advice regarding professional development. The most helpful studies provide examples of schools employing effective professional development practices. Professional development planners often do not have knowledge of how to plan for real teacher learning. Mizell (2010) confirmed, "An overwhelming majority of school systems know very little about what educators learn through professional development, how effectively they use what they learn, and to what extent students benefit" (p. 22). This study will provide an example of effective professional development within schools implementing a school improvement model. Information gained will add to the professional knowledge of the processes employed to achieve effective transfer of innovations from professional learning activities to the classroom.

In addition, the study will contribute offerings of options in practice for professional development planners, administrators, and school staff seeking to implement new programs. School leaders pursuing improved academic achievement in order to meet

legal standards and compete with other schools for students will be able to use the findings of this study to help them develop appropriate professional development plans for their schools. Those charged with providing professional development for schools are often daunted by the enormity of the responsibility for providing quality learning experiences for the staff (Bryk, 2010). This descriptive study of working PLCs will provide staff members with guidance to establish, alter, or refine professional development practice in their schools.

As the professional development coordinator for two partner schools, the researcher is involved in implementing a school improvement model similar to the one at Southeast and Midtown Elementary Schools, the foci of this study. The researcher will benefit from the investigation's review of literature, findings, and implications for practice. References regarding adult functional learning theory for adults (Gibb, 1960) and learner centered theory (Trotter, 2006) as well as findings regarding needs of adult learners (Fogarty & Pete, 2009) will help the researcher target professional learning to the needs of the staff members of the schools for which she provides professional development guidance.

Knowledge gained from this study's literature review will help the researcher understand the characteristics of PLCs as described by Hord (2004), DuFour et al. (2006), and Jones et al. (2010). Data collected through the case study observations, survey of public documents, and interviews will help the researcher understand how to use targeted professional development to help staff members of her schools become a community of inquirers who self-direct their professional learning experiences.

Summary

Local and national mandates for education reform and school improvement have pushed leaders in U.S. schools to adopt school improvement models. Effective professional development is necessary for implementation of school improvement. In an era of economic decline, school leaders must ensure professional development activities are improving education practices. Traditional professional development is ineffective in changing classroom practice and is a waste of financial resources. Adult learning theory proposes teachers need to see relevance of professional development activities to their work. Teacher-directed learning experiences aimed at addressing school, student, and teacher needs are targeted professional development. Adult learners need to collaborate with their colleagues in order to grow professionally and create new knowledge to address school issues. Targeted professional development and collaboration among a school's staff members facilitate the development of a PLC.

The focus of this study was to investigate the role targeted professional development has played in the formation of PLCs at suburban Southeast Elementary School and Urban Midtown Elementary School in the Midwestern United States during the implementation of a school improvement model. The study was limited in that it provided only a snapshot of current practices related to professional development. It was limited in scope and applicability as it only described perceptions of current staff members at two schools which may or may not be applicable to schools of different sizes and in larger cities or rural areas. The researcher believes, however, general principles of adult learning theory applied to professional development resulting in collaboration,

targeted professional development, and formation of PLCs described by this case study can be universally applied to schools seeking to improve education practices.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

From the publication of *A National at Risk* in 1983 to the present era of *No Child Left Behind* (*NCLB*) and *Race to the Top (RTTT),* public school systems have struggled to adapt to rapidly changing societal and governmental mandates for improved instruction in schools (Seed, 2008; Hord, 2004). School improvement plans mapping out school reform are required to meet both federal mandates and parental demand for high quality schools. As a result, leaders of low-performing schools have faced intense pressure to effectively implement improvement plans or face severe consequences including restructuring and school closure (Mathis, 2011). Leaders of academically successful schools have been pushed to pursue innovative improvement models to hold on to their students as open enrollment policies have unlocked school doors to transfers for parents seeking the best education for their children (Howe, Eisenhart, & Betebenner, 2002).

Although *NCLB* legislation with its stringent accountability measures is currently being restructured, it is unlikely the national demand for improved public education will ebb (McNeil & Klein, 2011). Corcoran and Silander (2009) explained, "There is growing public consensus both that schools should take on more responsibility for equalizing student outcomes and closing 'gaps' and that the outcomes for all students should be more ambitious, more 'world class,' more rigorous" (p. 173). Put into historical context, *NCLB* can be seen as another swell in the waves of national educational reform after

which other reform initiatives will follow driven by federal policy makers and public dissatisfaction (Desimone, 2002; McNeil & Klein, 2011).

RTTT was introduced by President Barak Obama's administration in 2009 "to circumvent the perceived failings of *No Child Left Behind (NCLB),* and in particular, the law's reliance on coercive federal mandates and the compliance culture that it fostered at the state level" (McGuinn, 2012, p. 138). While supporters promote the initiative as a relief from the rigid sanctions of *NCLB,* critics view *RTTT* as further compounding the struggle failing schools face as they are forced to compete for federal funding based on compliance with school reform initiatives.

Finding innovative program models to adopt is less challenging for leaders than facilitating change within their schools. Abundant research-based resources and programs are available. Complications arise in the implementation of school improvement initiatives (Chynoweth, Gruits, Holloway, & Hughes, 2008). Factors inhibiting successful implementation include ineffectual professional development and failure to secure staff ownership for new programs.

The most innovative programs are useless if their implementation is not supported with effective professional development that produces changes in classroom practice (Desimone, 2002). Changes in classroom practice only occur when staff members buy into the need for change and the new program that supports it. Bryk (2010) contended, "Embracing a coherent improvement plan challenges longstanding norms…Cultivating teacher buy-in and commitment becomes a central concern in promoting the deep cultural changes required for such an initiative to be successful" (p. 27).

School leaders who support the development of their schools as continuously improving organizations by providing effective and targeted professional development for teachers are more likely to see changes in classroom practice (Garet et al., 2001). Positive results in schools become evident when a culture of continuous improvement is supported through collaborative, relevant, goal-driven, and teacher-directed capacity-building activities (Gates & Watkins, 2010; Hord, 2004; Huffman & Hipp, 2003). Within this context, PLCs evolve, flourish, and support the implementation of school improving innovations. Huffman and Hipp (2003) advised the establishment of PLCs, "creates a structure helpful for sustaining other initiatives intended to foster school improvement. Consequently, professional learning communities are increasingly identified as critical to the success of school reform efforts" (p. 4).

The focus of this chapter is to provide a review of literature illustrating the connection between the legal and public mandate to improve schools and professional development in education. The chapter begins with a brief discussion of past and current legal imperatives for school reform including mandates for increased student achievement and school choice as the impetus for the adoption of school improvement models. Evidence from literature is also provided to illustrate the need for effective teacher professional development to support school improvement initiatives. Characteristics of effective and targeted professional development are described, and a detailed examination of how PLCs reflect those characteristics is provided.

Impetus for School Change

Public demand for higher quality schools in the U.S. has resulted in two change factors that have had significant impact on public schools: legislative mandates and school choice. In 1983, *A Nation at Risk* initiated public outcry for national school reform (Desimone, 2002; Hord, 2004). National political leaders responded by passing a series of legislative mandates intended to improve educational opportunities for all U.S. students (Hursh, 2005). With each new set of school reform laws, federal authority over local schools increased (Karen, 2005). The assumption of school reform as a federal, rather than state, responsibility is blatantly reflected in the latest educational initiative proffered by President Barak Obama's administration.

Related to the legislated reforms were open enrollment policies that allowed parents to choose better schools for their children based either on the schools' student achievement records or the availability of innovative educational programs. Proponents of open enrollment policies believed the competition created between schools would cause all schools to improve. Parents who were handed a market of educational programs have happily taken advantage of their new power of school choice (Manno, 2011). This section provides a brief over view of the results of legislative mandates for school reform and school choice policies that have served as impetus for change in U.S. schools and sent leaders scrambling to find and implement school improvement models in their schools.

Legislative Mandates

Federal school improvement policies have been continually evolving since the National Commission on Excellence in Education released *A Nation at Risk* in 1983. The report stirred national concern about the poor quality of public education in the United States and triggered what Desimone (2002) described as the "first wave" of federally mandated school reforms. Hord (2004) referred to *A Nation at Risk* as a "seminal report" that "helped spark an ongoing national reform movement in the United States" as it raised awareness of fundamental problems in public schools. As a result of the report national policy-makers called "for more uniform education policies, ultimately focusing on raising standards, implementing standardized tests, and holding students and teachers accountable" (Hursh, 2005, p. 606).

The U.S. Constitution allocates control of public schools to state governments, and until *A Nation at Risk* federal involvement in local school issues was intentionally lax. Karen (2005) explained, "Federal involvement in elementary and secondary education in the United States is relatively new and, until recently, has been laissez-faire" (p. 165). Infiltration of the federal government into local school concerns was unaccustomed and somewhat uncomfortable but not wholly effective during the first wave of reforms. Amplified societal and political scrutiny initiated by *A Nation at Risk* resulted in increased teacher salaries, longer school days, and the development of core requirements for schools, yet it did little to actually change school organization or teacher practice (Desimone, 2002).

National school improvement initiatives that followed the first wave of reforms continued to increase the role of federal government in local school practices. "Second-wave" federal school reforms supported a focus on building relationships between schools and families, responding to special education needs of students, improving teacher hiring and retention, improving pre-service education for teachers, and emphasizing the professional standing of teachers through restructuring their roles (Desimone, 2002, p. 433). Still, federal control over schools was loose and classroom practices changed little.

The late 1980's and 1990's witnessed a "third wave" of legislative effort to changes U.S. public schools with the adoption of Comprehensive School Reform and Goals 2000. These federal initiatives further required states to set standards for learning and regulate schools under their control (Desimone, 2002; Huffman & Hipp, 2003). Goals 2000 was a result of collaboration between then President George H. W. Bush and the nation's governors who in 1989 established a set of expectations for schools to meet by the year 2014. Those expectations included improving the graduation rate, increasing parental involvement, improving achievement in core subjects with increased emphasis on math and science, reducing occurrence of violence and use of drugs in schools, and providing professional development opportunities for teachers.

In 1997, Congress intervened in schools by funding the Comprehensive School Reform Demonstration. This new legislation required schools adopt research-based programs with proven results in order to receive federal funding (Huffman & Hipp, 2003). Although Comprehensive School Reform focused "specifically on trying to

change teaching practice, the one area of schooling that has proved the most resistant to change," it was criticized for not activating "the proper mechanisms to affect what teachers do in the classroom or how students learn" (Desimone, 2002, p. 434).

Thorough and sustainable success in reforming schools continued to elude U.S. policy makers as the 20th century came to a close. Congress and newly-elected President George W. Bush believed the only way to truly effect broad-based and comprehensive reform in schools was to take greater federal control through attaching significant inducement to student achievement (Kim & Sunderman, 2005). The Elementary and Secondary Education Act, the fundamental legislation driving national school reform since 1965, came up for reauthorization at the turn of the 21st Century and was reformed into the *No Child Left Behind* Act (*NCLB*).

When *NCLB* was signed into law in 2002, the federal government became fully entrenched in school practices by demanding improvement through the assignment of economic sanctions and restructuring for failing schools. The primary difference between *NCLB* and prior school reform initiatives "is that the *NCLB*'s requirements have more bite and explicitly tie the performance of schools and districts, measured by many more standardized tests, to the receipt of federal funds" (Karen, 2005, p. 166).

Provisions of *NCLB* were meant to eliminate the achievement gap between students by improving educational practices. Adequate yearly progress (AYP) requirements became "the central mechanism for improving performance and the academic achievement of different subgroups of students," and mandatory sanctions became part of the incentive package used to ensure improvement (Kim & Sunderman,

2005, p. 3). The expectation was set that 100% of public school students would be proficient in mathematics and communication arts by 2014. Schools were required to show each year that their students were making adequate yearly progress toward that goal.

The seriousness of the sanctions for failing to meet AYP, including school restructuring, the firing of staff, and possible school closure, sent school personnel scrambling to find new strategies and programs to improve the achievement of all students. In consideration of the grave penalties and detailed provisions associated with *NCLB* Linn, Baker, and Betebenner (2002) admonished, "The *NCLB* goals are laudable, but the requirements of the law pose substantial challenges for schools, districts, and states" (p. 15).

The intrusion of federal mandates into state-controlled schools was highly criticized by educators. Heavy reliance on standardized tests, lack of recognition for improvement when AYP was not met, and overcrowding due to school closure represented a few of the unintended negative consequences for high-poverty and high-minority schools advanced by critics as the law was enacted over time. Federal Title I funding was used as both incentive and punishment to ensure the accomplishment of AYP in schools.

While AYP requirements were applied to both Title I and non-Title I schools, "only schools that receive federal funds are subject to the mandatory sanctions" imposed on schools failing to meet AYP leaving personnel and families of Title I schools to experience the brunt of *NCLB*'s heavy consequences (Kim & Sunderman, 2005, p. 3).

Penalties faced by failing schools included decreased funding while at the same time laying on low-performing schools the financial burden of providing tutoring through private agencies and transportation for students to other schools (Hursh, 2005).

Although the law was set up to improve the educational experiences for all students, over time an unfortunate reality of *NCLB* became apparent. The increased focus on standardized tests required by the law appeared to give unfair advantage to low-minority, low-poverty schools that began with higher test scores than high-minority, high-poverty schools. Researchers Kim and Sunderman (2005) discovered a disturbing trend related to the student populations *NCLB* had been created to support. Results of their study of schools in six states indicated schools that consistently failed to meet AYP had high-poverty and high Black and Hispanic student populations.

On the other hand, schools achieving AYP were made up mostly of white and Asian students with higher socio-economic status. "These results suggest that mean proficiency measures are likely to identify many high poverty schools as in need of improvement even when they show evidence of improving reading and mathematics performance over time" (Kim & Sunderman, p. 8). These schools faced restructuring and closure even though they were showing progress with their students. For failing high-poverty, high-minority schools, *NCLB* seemed to be defeating the purpose for which it was enacted (Hursh, 2005). Mathis (2011) agreed, "As is well-known, the scores for students who are less affluent or who are of a race other than White or Asian/Pacific Islander end up as the lowest" (p. 3).

Political opposition fueled by academic researchers and teachers groups continued to escalate as the 2014 deadline for 100% student proficiency in mathematics and communication arts drew nearer. In 2005, Kim and Sunderman predicted, "The political opposition to…the *NCLB* accountability system is likely to persist as proficiency targets are raised and more schools that meet state accountability goals are identified as failing AYP and are consequently required to implement federal sanctions" (pp. 10, 12).

The *NCLB* legislation included a "safe harbor" exemption for schools that did not make AYP yet showed at least 10% improvement within a subgroup (Hardy, 2003). Even this goal proved to be extremely difficult to meet year after year, and more schools continued to fall into the failing category. McNeil and Klein (2011) described the compounding predicament faced by schools: "Each year, proficiency targets get higher, making it harder for schools to clear that achievement bar, especially when it comes to subgroups, such as English-language learners and students with disabilities" (p. 20).

President Barak Obama submitted his *RTTT* plan for educational reform to address the concern that increasing numbers of schools were being labeled as failing each year as AYP expectations continued to rise toward the 100% proficiency goal for all students. *RTTT* emerged from the American Recovery and Reinvestment Act (ARRA) of 2009. The plan was to "use a competitive grant process rather than a formula grant process to allocate money to states" (McGuinn, 2012, p. 139). *RTTT* set aside federal money that could be distributed based on states agreeing to four accountability expectations. The accountability expectations included developing common assessments based on common standards, improving teacher professional development, evaluation,

and retention practices, and adopting approved turnaround practices within their schools.

Common Core standards gleaned from international tests and based on knowledge it was deemed students would need to have to be successful in the 21st Century were developed as part of *RTTT*. Critics of *RTTT* pointed out that identifying a set of skills or concepts as meeting societal needs for the rest of the 21st Century was based on unsound reasoning "given the obsolescence of knowledge and the speed of technological change" (Mathis, 2011, p. 3).

The intent of *RTTT* was to change federal involvement in schools to a supportive rather than a punitive role. McGuinn (2012) stated, "*RTTT* is an attempt to circumvent the perceived failings of *No Child Left Behind (NCLB)*, and in particular, the law's reliance on coercive federal mandates and the compliance culture that it fostered at the state level" (p. 138). Offering incentives for compliance with school improvement initiatives proved to be a popular option for many states. Onosko (2012) reported that between 2009 and 2011, 48 states and the District of Columbia had committed to adopt the Core Standards. Unfortunately, money awarded during those two years went to only 12 of the 40 states that submitted applications. Critics of the *RTTT* pointed out the inequity of federal funding and dubbed the initiative "Race to the Trough" (Onosko, 2012, p. 1).

Although the *RTTT* initiative was put into place, schools continued to struggle with *NCLB* requirements and sanctions. Political opposition to the law continued to swell. In 2011, the deadline for reauthorization of *NCLB* as a version of the Elementary and Secondary Education Act drew near. Congress debated changes to the act, but seemed deadlocked regarding specific revisions to the law (McNeil & Klein, 2011). The fall of

2011 brought schools what some educators perceived as relief when President Obama announced a plan to allow states to apply for a waiver from *NCLB* requirements. McNeil and Klein (2011) reported, "U.S. Secretary of Education Arne Duncan has declared that the nearly 10-year-old *NCLB* law is 'broken' and warned that if nothing changed, 80 percent of schools this year would not make…AYP…and could be labeled as failing" (p. 20). Provisions of the waiver included welcomed "regulatory relief" from the 2014 100% student proficiency deadline. In addition, the waiver provided exemption from the requirements that failing schools fund mandated tutoring and transportation to other schools (McNeil & Klein, 2011).

While educators cautiously breathed a collective sigh of relief, members of Congress balked at the notion of the president taking the authority for reforming the law out of their hands. The authority of the secretary of education granting conditional waivers to a law was challenged openly during congressional sessions and concern was expressed that the waiver plan might negatively impact congressional reauthorization of the Elementary and Secondary Education Act (McNeil & Klein, 2011).

Nevertheless, the Obama administration moved forward with the waiver plan as another antidote to *NCLB* flaws. Schools applying for and receiving the waiver were exempt from sanctions that inhibited their ability to improve, but Obama administration officials pointed out the waiver did not relieve schools of their responsibility for continued improvement. The new plan established eligibility for the waiver dependent on state agreement to continue accountability requirements from the lowest performing schools and the continuation of state-mandated student achievement testing as outlined

by *NCLB*. Additionally, the waiver did not alleviate any standardized testing or accountability requirements. McNeil and Klein (2011) explained that the Obama administration's stance on the waivers was not to provide a "reprieve from accountability" but to allow states to "unleash innovation" as they remain committed to accountability. School personnel still "face the pressure of using the new flexibility to deliver improved student achievement" and the challenges of implementing innovative programs and practices in their schools (McNeil & Klein, p. 20).

School Choice and Competition

Educational reform legislation enacted over more than twenty-five years since national uproar regarding the quality of United States public education was ignited by *A Nation at Risk* has revised public expectations for schools. Mandatory neighborhood school attendance was challenged by parental demand for better schools and by *NCLB* requirements that failing schools offer students the option of transferring to higher-performing schools. School choice was an attractive option that spurred open enrollment policies in school districts for all students regardless of whether their home schools were failing. High-performing schools, as well as low-performing schools, have been impacted by open enrollment policies. School choice, accommodated through charter schools, vouchers for private schools, on-line course options, and inter-district and intra-district transfer policies, is intended to improve educational opportunities for children (Manno, 2011). Educators are split on the benefits of school choice, however.

Supporters of school choice view it as a way to ensure equity of educational opportunity and increased student achievement. "Choice proponents argue that market

forces and competition result in better schools (and by extension, better student outcomes) because they encourage heightened innovation, entrepreneurship, and increased efficiency" (Rabovsky, 2011, p. 87). Howe et al. (2002) added school choice supporters reason "competition gives parents the power to vote with their feet. Schools that perform poorly will lose students and be forced to go out of business or improve" (p. 20).

Opponents of school choice point out research does not provide evidence that competition generates improvements in educational quality or change in educator practice at schools from which students transfer (Rabovsky, 2011). In addition, some educators claim "competition pits school against school, destroying cooperation, dividing neighborhoods, and promoting inequity by increasing stratification by achievement, income, and ethnicity" (Howe et al., 2002, p. 20). Mathis (2011) pointed out competition among schools has not been shown to improve student achievement as much as proponents of the idea want to believe. "Restructuring of communities and schools to eliminate concentrated poverty" has been shown to raise student achievement more than competition among schools (Mathis, 2011, p. 2).

Studies show American parents have enthusiastically taken advantage of the option of transferring their children to other schools (Manno, 2011). Research, though, has indicated transfer decisions are not always driven by parents and students pursuing better academics. A study of Oklahoma schools denoted parents withdrew their children and transferred them to different schools for disciplinary, racial, and educational reasons (Rabovsky, 2011). Study results suggested elementary parents were more likely to

transfer their children for racial reasons, and higher level students were more likely to transfer for academic reasons. Often students transferred "for reasons primarily tied to disciplinary issues or personal conflicts with staff or other students" (Rabovsky, p. 89). Whatever the reason, student transfer from one school to another can have a significant impact on both schools.

Schools lose valuable resources when their best and brightest students transfer. This process, called "skimming," empties schools of their highest achieving students and can have devastating impact on program offerings (Howe et al., 2002). Studies have shown students of parents with higher education are more likely to use vouchers to opt out of their low-achieving neighborhood schools for private schools or transfer to magnet or charter schools (Bifulco, Ladd, & Ross, 2009). This results in a higher concentration of educationally disadvantaged students in neighborhood schools who lose their best students. It also drains the schools of more involved parents who could provide support for school improvement initiatives.

Considering evidence collected during their study of the impact of school choice on public schools in Durham, North Carolina, Bifulco et al. (2009) reasoned students who do not have parents who are willing or able to transfer them out of low-performing schools "are an especially vulnerable population" (p. 148). The researchers concluded, "The results of our analyses suggest that any benefits of expanded school choice that accrue to those able to take advantage of it might come at the expense of poorer learning environments for those left behind" (p. 148). Jimerson (2002) pointed out although parent surveys show higher satisfaction with school transfers, beneficial programs are cut in

schools losing students. This unfortunate finding is echoed in the studies of open enrollment outcomes for higher-achieving schools as well. Howe et al. (2002) studied the impact of school choice in a Colorado school district and found:

> In a district blessed by relatively high incomes, access to resources, and, until recently, a reputation for uniformly good schools, school choice has enabled some schools to achieve exceptionally high test scores and parent satisfaction, but only at the expense of other schools. The select few have garnered favorable press, but the others have lost many of their best students, their most involved parents, and their good reputations. (p. 24)

Whether school choice is seen as having a negative or a positive impact on public schools is very much a matter of perspective according to Howe et al. (2002). Student enrollment determines how many teachers and the variety of programs a school can support. For schools drawing in students through the transfer process, school choice brings more teachers and greater variety of programs. Schools losing students lose resources and teachers and are forced to limit the programs they can offer. These schools "find themselves with more students who are harder to teach and more parents who do not have access to extra resources" (Howe et al., 2002, p. 23).

Other negative consequences for schools whose best students transfer to other schools include lower test scores, negative press coverage, and declining teacher morale. Regarding their study of school choice in Colorado schools, Howe et al. observed, "In the short span of seven years, school choice has produced – or at least contributed mightily to

– a two-tiered system of advantaged and disadvantaged schools that did not previously exist in this district" (p. 23).

Arguing for or against school choice is an exercise in futility according to Manno (2009). Given the prevalence of school choice policies and obvious parental satisfaction with their options, school leaders are being pushed to adopt innovative programs that will help their schools stand out in a competitive school market. Rather than continue to debate whether school choice should be allowed, Manno advised educators "should turn their time and energies to initiating a new K-12 education discussion that debates fundamental questions on how schools are created, managed, funded, and overseen while being accountable for results in the new marketplace of school choice" (p. 26).

School Improvement through Professional Development

Leaders in U.S. public schools are impelled to find, develop, and implement innovative programs in order to be in a position to "compete" with other schools for students and to meet local, state, and federal demands for higher quality schools. Adopting programs to improve student achievement has not proven to be an easy task. Improving schools requires change. "Changing schools is highly challenging, complex, and messy work – and change is rarely welcomed" (Hord, 2004, p. 3). Chynoweth et al. (2008) warned, "Educators often get excited when they learn about successful programs…they might be able to replicate. The challenge, however, is to successfully implement those programs in their own schools" (p. 26). Huffman and Hipp (2003) supplied the formula for successful implementation of a school improvement program:

"Improvement of practice is based on change of practice, and change of practice is based on learning" (p. vii).

Research indicates a strong tie between professional learning for teachers and school improvement (Blackburn & Williamson, 2010). Reed (2010) pointed out, "Schools will not change or improve unless the performance capacity of everyone who works in the school improves" (p. 62). Hall and Hord (2006) agreed, "An organization does not change until the individuals within it change" (p. 7). Teachers' skills must be developed over time in order for real change to occur. Bullough (2007) proffered, "School reform involves teacher development, and that necessitates creating conditions supportive of teacher growth" (p. 174). One of the most important components to improving student achievement is increasing teacher skills and capacity through effective professional development activities (King & Newmann, 2000).

Financial stresses and reduced school budgets have increasingly demanded that schools be more accountable regarding use of resources for staff development. Dall'Alba and Sandberg (2006) counseled, "Socioeconomic changes have led to new and pressing demands on educational institutions…to become more efficient in promoting skill development" (p. 383). The desire to be fiscally responsible and to ensure improved student and teacher performance to meet local, state, and national requirements drives school leaders to appraise the cost of their professional development plans in light of desired outcomes. Effective professional development results changes in classroom practice that bring about improved student achievement.

Unfortunately, professional development as it has been traditionally executed often does not produce changes in classroom practices necessary for school improvement. Dyer (2009) warned against confusing activity with learning. "Even high levels of engagement do not necessarily signal that learning has occurred. The true test that learning has happened is in the application of new understandings" (p. 7). Desimone (2002) affirmed, "Previous research has indicated that traditional professional development is not enough to change teachers' practice" (p. 447). The key for school leaders is to understand why traditional professional development does not work and how to reform it to produce desired outcomes for teachers and students (Easton, 2005; Hanegan, Friden, & Nelson, 2009; Hirsch, 2009; Hunefeld, 2009; Joyce & Showers, 2002; King & Newmann, 2000).

Traditional Professional Development

Royce (2010) suggested, "Most professional development for educators has barely changed since the late 1950s and 1960s" (p. 6). Teacher training sessions that are disconnected from the learning needs of teachers, the school, and the students have represented the status quo for professional development "throughout the past several decades" (Royce, p. 6). Kaagan and Headley (2010) explained one reason professional development has resisted change is that educators do not connect authentic learning they value for their students to their own learning. Consequently, "Most professional development opportunities are still 'sit and gits,' where an outside expert expounds on the value of a new approach to education; teachers sit, listen, take notes, and ask questions" but go back to teaching as they had before (p. 85). Hunefeld (2009) labeled this format

for professional development as “old PD” and rejected it as ineffective and a waste of time and resources. “Teachers don’t improve by listening to someone tell them how to do something newer or better in their classrooms. They learn by working together to address problems they themselves identify in their schools and classrooms” (Hunefeld, p. 24).

Traditional professional development practices have shown to be ineffective in improving classroom instruction for three main reasons: (a) Goals are inappropriate or unclear and disconnect professional development from teacher practice leading teachers to believe it is a waste of their time (Benton & Benton, 2008; Hirsch, 2009; Hord, 2004; Schmoker, 2004) ; (b) teachers have no input into professional development decisions and, therefore, feel no commitment to implement skills or practices presented during workshops (Bryck, 2010; Desimone, 2002; Lee, 2010; Mizell, 2010); and (c) most professional development activities do not provide time for practice of new skills or follow-up and coaching to ensure innovations are translated into classroom practice (Joyce & Showers, 2002; King & Newmann, 2000; Lassonde & Israel, 2010).

Much of the problem with traditional professional development lies in the proliferation of inappropriate goals or the lack of targeted learning expectations for teachers. Blackburn and Williamson (2010) instructed, “Professional development should have a clear purpose that is linked to research, student data, goals and needs” (p. 85). Professional development is often mandated simply to “consume the requisite number of professional learning hours” (Mizell, 2010, p. 22). School personnel entrusted to provide professional development for teachers often jump into planning activities without clear targets.

Hirsh (2009) explained while they may realize the important connection between professional development and improved student achievement, those charged with providing learning activities for teachers can be intimidated by the assignment. "They feel the need to find gimmicks to engage learners, but what they really need is to determine how they will leverage their new responsibility to support learning for educators and students" (Hirsh, 2009, p. 71). As a member of a professional development planning committee Schmoker (2004) admitted, "In selecting the professional…development activities that filled our plans, novelty and surface appeal overwhelmingly trumped evidence of school success – or any direct connection to improvements in teaching. Clarity and coherence suffered" as a result (p. 426).

Another reason professional development has failed to impact classroom practice is teachers traditionally have had no voice in planning their learning activities. Poor transfer of new initiatives presented through professional development activities can be directly related to lack of teacher participation in professional development planning (Mizell, 2010). Lee (2010) argued, "Teachers value PD when it provides meaningful learning opportunities that have direct applicability to their teaching" (p. 29). The reality of traditional professional development is that teachers are rarely asked for their input. Mizell (2010) pointed out when teachers have no voice in their professional development they have no commitment to implementing practices presented during staff development activities. This results "in little or no meaningful impact for them or their students" (p. 22).

According to Bryk (2010), “Embracing a coherent improvement plan challenges longstanding norms about teacher autonomy in the classroom and a laissez-faire orientation toward professional development and innovative practice” (p. 27). Teachers often have the mistaken impression that professional development takes them away from their work as educators. Hord (2004) admonished, “Many in the public, and in the profession, believe that the only legitimate use of a teacher’s time is standing in front of the class, working directly with students” (p. 14). Traditional professional development practices have compounded this perception of wasted time by failing to create learning activities relevant to teacher needs. Hirsh (2009) confirmed, “Educators will complain about professional development when they do not see the connection between what they are learning and what they need to do in their schools and classrooms” (p. 71). When they feel their time is being wasted with irrelevant professional development activities teachers feel no ownership, or buy-in, for what is presented and are unlikely to transfer anything from the workshop into their classrooms.

Buy-in from school staff members is essential to the success of school improvement programs (Desimone, 2002). King and Newmann (2000) indicated, “Teacher learning is most likely when teachers have influence over the substance and process of professional development…Influence…increases teachers’ opportunity to connect it to specific conditions of their schools and facilitates a sense of ownership” (p. 577). On the other hand, research has shown when professional development is mandated without teacher input teachers show either overt hostility or feigned compliance (Kragler et al., 2008). Under either condition, practices supporting new policies and programs are

not implemented. Blackburn and Williamson (2010) advised, "If you want to increase the effectiveness of your professional development…create ways for teachers to be involved in decision making about professional development and its use in classrooms" (p. 68).

A third impediment to effective transfer of learning to classroom practice is the lack of follow-up, coaching, and feedback. "Most professional development plans and strategies simply offer high-quality training or activities that teachers then decide how (or if at all) to implement in their classrooms" (Nelson & Cudeiro, 2009, p. 32). Experimentation with new skills during one-day teacher workshops will have little effect on changing teacher practice according to Lassonde and Israel (2010). "The reasons for this are that potential effects are frequently weakened by the lack of follow-up and inconsistent implementation" (p. 6). King and Newmann (2000) pointed out teachers need "sustained opportunities to study, to experiment with, and to receive helpful feedback on specific innovations" in order to truly learn new practices. Most professional development activities, though, "make no provision for follow-up and long-term feedback" (p. 576).

Hirsh (2009) cautioned, "It is professional development malpractice when educators are exposed to a new idea briefly and then expected to incorporate the idea into their practice immediately" (p. 71). Change in behavior indicates true learning has occurred (Dyer, 2009). However, Brickmore (2010) reported, "Research indicates that learning theory, observing demonstrations, and even practicing skills in a training session resulted in, at best, a 5% transfer of skills to the classroom" (p. 46). Even when teachers are engaged with the presentation, practice the skill in the workshop, and try it out in their

classrooms, without follow-up and coaching they will most likely go back to their former practices (Hanegan et al., 2009; Nelson & Cudeiro, 2009).

When professional development is not designed for follow-up to see if initiatives are implemented in the classroom, it is doomed to produce little or no lasting impact. Corcoran, Fuhrman, and Belcher (2011) studied three district-sponsored professional development initiatives and found "district leaders seldom asked whether participation in the activities that the trainers and consultants planned and conducted led to changes in practice or improvements in student performance" (p. 82). Since there was little follow-up on practices, the professional development designers had no way of knowing the effectiveness of the training. Joyce and Showers (2002) concluded, "The failure to monitor implementation of curriculums, instructional strategies, and other innovations has cost school improvement efforts dearly in the past, resulting in both inability to interpret student learning outcomes and spurious conclusions regarding the impact of change programs" (p. 95).

Targeted Professional Development

Legal requirements and societal demand for improved schools, as well as fiscal accountability during stressful economic times, point to the need for effective and targeted professional development for teachers. According to Cudeiro et al. (2005), a common factor among schools that have successfully implemented improvement plans and significantly raised student achievement is that they rejected the traditional professional development model characterized as "an 'edutainment' session with slick PowerPoint presentations and stale sticky buns" (p. 19). These schools ensured

professional development was targeted for all staff members, and opportunities for practice, follow-up coaching, and monitoring through classroom walkthroughs became the norm for professional learning.

Targeted professional development is defined as goal-directed, relevant to teachers' professional practices, learner-centered, self-directed, and collaborative. Collaborative practices include shared decision making regarding the setting of goals for the school and professional development that addresses those goals. Another essential construct of targeted professional development is commitment to providing a continuous cycle of improvement consistent with the view of teachers as a professional practitioners of education (Nelson & Cudeiro, 2009). The pursuit of continuous improvement within a context of collaboration and experimentation supports the implementation of school improvement plans and creation of new knowledge.

Goal-directed. Targeted professional development depends on setting goals to maximize the benefits of professional learning time for teachers, students, and the school. The most helpful and satisfying professional development activities for teachers according to Desimone (2002) have clear goals and "are designed to fit individual schools, the particular population of students, and teachers' experiences" (p. 442). Fenstermacher (1987) asserted, "Where knowledge, skill, and understanding are presented with the primary purpose of changing action…successful acquisition is closely tied to the [alignment] of goals and aspirations learners have for their own work" (p. 7). Ingvarson, Meiers, and Beavis (2005) indicated the best way to help teachers set goals for their professional development was to engage them in identifying what they need to learn

to facilitate student learning. Once teacher learning goals have been aligned with student learning needs teachers plan their professional development experiences to meet those goals (Easton, 2008).

Relevant. In addition to aligning teacher and student learning needs, targeted professional development requires that teacher learning "be transferred consistently and appropriately into classroom practice" (Joyce & Showers, 2002, p. 72). For effective transfer to happen, teachers must see new skills as relevant practices that are directly applicable to their job situations (Hirsh, 2009). Tate (2009) warned, "The human brain has only one purpose – survival in the real world" (p. 44). Adult learners have to see the connection between professional development activities and their real-world professional responsibilities (Fogarty & Pete, 2010). If teachers do not see a relevant connection between what they do every day and what they are learning, the learning experience has little or no value to them (Tate, 2009). Relevance is ensured when opportunities for teachers to apply new practices directly in the classroom become a part of officially recognized professional learning. Easton (2004) explained, "Powerful professional learning arises from, and returns benefits to, the real world of teaching and learning" (p. 757).

Learner-centered. Targeted professional development provides learner-centered experiences that honor "the professionalism, expertise, experiences, and skills of staff members" (Easton, 2004, p. 71). Learner-centered professional development recognizes teachers are capable of determining their own learning needs in line with providing high-quality educational experiences to their students. The teachers' current knowledge level is

used as the base upon which effective learner-centered professional development builds. The focus is to improve teaching through inquiry supported by coaching, collaborative study groups, and job-embedded action research (Hanegan et al., 2009). Effective learner-centered experiences provide teachers with the option to "choose which questions they want to answer based on what is meaningful for them to know" (Lassonde & Israel, 2010, p. 9). Supports for learning through teacher inquiry include providing time for teachers to conduct in-depth investigations, work collaboratively, and reflect on what they have learned in connection with other professional development activities (Hanegan et al., 2009).

Self-directed. An essential component of learner-centered professional development is self-direction. Effective targeted professional development offers learners the ability to be self-developing (Easton, 2008). Hunefeld (2009) surmised, "Rather than hiring external presenters, schools can see much better results by putting the responsibility for, and the control of, professional growth in the hands of their own teachers" (p. 24). Trotter (2006) described "self-directedness" as a preference of adult learners, and Gibb (1960) stressed that optimally effective learning goals must be set and organized by the learner pursuing them. When teachers self-direct their learning, professional development "becomes much more authentic, as teacher-learners choose their own topics to emphasize and proceed at a pace that is appropriate to them and their students' needs" (Hunefeld, p. 24). As self-directed learners, teachers actively engage in analyzing and improving their current practice to align with "professional standards of good practice" (Ingvarson et al., 2005, p. 8).

Collaborative. Collaboration is another essential element of targeted professional development that supports the implementation of school improvement practices. Lee (2010) contended, "The most successful PD projects are collaboratively planned and driven by local educational needs" (p. 29). Lassonde and Israel (2010) agreed that highly effective collaborative learning is "the most powerful kind of professional development" (p. 7). Effective collaboration happens when staff members set priorities and then collectively develop strategies to address their mutual goals (Glanz, 2006). Activities that afford teachers the opportunity to work together with their professional peers and "gain further expertise through access to external researchers and program developers" provide the best learning experiences for teachers (King & Newmann, 2000, p. 576).

It has been argued that collaboration is essential to teacher learning (Hunefeld, 2009). Easton (2004) agreed that powerful professional learning happens when "educators learn from one another, enriching their own professional lives and the culture of the school" (p. 757). This argument is supported by Bruffee's (1999) successful collaboration with colleagues on issues related to improving instruction. Goal-driven dialogue among Bruffee and his colleagues resulted in development of new and effective strategies and provided rich professional learning for all of them. "Although we learned a lot from what we read, we learned a lot more from what we said to one another about what we read…the most powerful force changing us was our influence on one another" (Bruffee, p. 9).

Providing opportunities for staff members to collaborate is a best practice in education supported by research. Collaboration has been cited in studies as "the most

important factor in instituting change" and bringing about improvement in schools (Lassonde & Israel, 2010, p. 7). Garet et al. (2001) reported, "Our data provide empirical support that the collective participation of groups of teachers…is related to improvements in teacher knowledge and skill and changes in classroom practice" (p. 936). Cudeiro et al. (2005) found collaboration played a significant common role in the success of six high-poverty schools with high numbers of English language learners and minority students. Each of the schools made it a priority to support teacher collaboration regarding teaching and learning and established common time for teachers to work together and discuss teaching practices that led to school improvement.

As a result of their three-year study concerning professional development for teachers seeking to improve learning of English-language learners, Musanti and Pence (2010) reported similar results. They concluded, "Professional development needs to be conceived as a collaborative enterprise, where a space for learning through mutual exchange, dialogue, and constant challenge is created" (p. 87).

Shared decision making. Shared decision making is an important piece of collaboration that supports improved educational practices (King & Newmann, 2000). Allowing teachers to determine the focus of their professional development by asking them what they need to do to improve their professional practice is the main motivating factor in teacher learning (Bolman & Deal, 2008). Burbach and Duke (2007) suggested, "One of the best ways to get teachers to share their craft knowledge is to entrust them with the responsibility for their own professional development" (p. 36).

When teachers share in decision making regarding the selection and implementation of a new program, they are more likely to translate new practices into their classrooms (Bush, 2003). Allowing for shared decision making regarding professional development fosters staff ownership, or buy-in, for new programs and policies (Bush, 2003; Seed, 2008). Yukl maintained that when teachers have input in a school decision they "tend to identify with it and perceive it to be their decision" (p. 83). Ownership of a decision fulfills an individual's ego-esteem and self-actualization needs and increases teacher commitment to implement the decision (Jago, 1982).

Shared decision making grants dignity to teachers as professionals and builds their capacity to improve educational practice. Yukl (2002) reasoned, "People are more likely to perceive that they are being treated with dignity and respect when they have an opportunity to express opinions and preferences about a decision that will affect them" (p. 84). Teachers view themselves as professionals and expect to use their knowledge, skills, experience, and judgment to hone their craft and find the best way for students to learn (Bolman & Deal, 2008).

The leadership capacity of staff members is developed as they share in the decision making (Hord et al., 2010; Hunefeld, 2009). Developing leadership capacity within teachers "increases teachers' assessment of their value and contributes to their professionalism" (Hord et al., 2010, p. 19). Odell (1997) observed, "If the workplace as a whole is professionalized and better organized for teaching, teacher leaders will emerge as a matter of course…along with a communitarian social system for schools" (p. 124).

The school's teaching staff represents a valuable, educated, and professional human resource. Jago (1982) argued shared decision making "provides a vehicle for allowing information, expertise, and creativity to be brought to bear on problems for which the leader's own information and knowledge may be insufficient" (p. 321). Senge, (1990) agreed, "In an increasingly dynamic, interdependent, and unpredictable world, it is simply no longer possible for anyone to 'figure it all out at the top'" (p. 7). Those who work closest to students have the most relevant knowledge of student needs and can contribute best to innovative solutions (Leithwood, Jantzi, & Steinbach, 1999). Teachers are educated professionals with talents, skills, and knowledge that need to be shared. Burbach and Duke (2007) referred to teachers as "an enormous storehouse of untapped tacit knowledge that has the potential to greatly enrich the knowledge base upon which principals draw when making decisions and solving problems" (p. 35).

Committed to continuous improvement. Authentic professional learning occurs in a collaborative environment where leadership is shared among school staff and there is a commitment to continuous improvement of educational practice. The expectation in this environment is that new ideas, skills, and practices are presented to staff members and then honed in the classroom. Quality learning includes explaining and modeling new practices and supporting teachers with "opportunities for safe practice" to allow teachers to gain confidence with the new skills (Nelson & Cudeiro, 2009, p. 32). Joyce and Showers (2002) found staff development programs linked to improved student achievement were created when "goals for student learning were set, training in new

content was provided, time and structure for collaborative work were embedded in the schedule, and student data were collected and analyzed in a continuous cycle" (p. 12).

Bullough (2007) advised, "Powerful teacher education is more than a matter of learning about and practicing promising techniques; it involves engagement in exploring, with others, pressing…professional problems and issues" (p. 178). To facilitate real-world application of newly learned skills a teacher sets up a cycle in which the new practices are implemented in his or her classroom. An experimental process is established to collect data and feedback from students and colleagues, reflect on learning, and engage in collaborative discussions about the process. A continuous cycle of learning emerges as the teacher modifies practices based on results of initial experimentation and begins again collecting data and feedback. This cyclical process of continuous improvement is "powerful professional learning [that] leads directly to application in the classroom" (Easton, 2004, p. 757). Hunefeld (2009) agreed that given this context, "Experimentation with new teaching methods happens in a classroom-as-laboratory setting, so the implementation is virtually automatic" (p. 24).

Knowledge creation. Collaboration and shared decision making taps into the wealth of teacher knowledge and provides the opportunity for teachers to build their capacity as learners. Professional learning opportunities that allow teachers to share in decision making regarding difficult school issues also encourages knowledge creation leading to school improvement. Affording teachers opportunity to make decisions impacting their work validates their status as educated professionals. It also places on them the burden of creative tension as they struggle with the gap between current school

conditions and the vision of what the school should be (Senge, 1990). When teachers grapple with tough issues, they grow in their capacity to problem solve and create new knowledge essential to school improvement (Yukl, 2002).

Nonaka (1991) contended knowledge creation in organizations always begins with the individual. If the knowledge is stifled within the individual, however, the organization does not learn. The individual's personal knowledge must be shared to become organizational knowledge. As school staff members collaborate and individuals' ideas are heard and affirmed, they develop a sense of belonging to a group (Preskill & Brookfield, 2009). As the group forms the vision of where the organization should be and then evaluates the current condition of the organization a "creative tension" is formed (Senge, 1990). The creative tension leads group members to share innovative ideas on how to close the gap between what should be and what is. Group members engage in constant dialogue that allows them to create new points of view, pool their information to create new perspectives, and integrate their "diverse individual perspectives into new collective perspective" (Nonaka, p. 104).

Preskill and Brookfield (2009) explained as group members grow in confidence they "respond creatively to the challenge to think more deeply and act more boldly" (p. 22). A culture of collaborative inquiry is established as "teachers form a learning community that establishes its own goals, manages its own resources, shares shortcomings, respects each member, and constructively criticizes practice" (Seed, 2008, p. 587). Fogarty and Pete (2010) confirmed, "Adult learners want to work with

colleagues. This preference for collaborative work…fully supports the establishment of professional learning communities" (p. 33).

Professional Learning Communities

When targeted professional development (characterized by collaborative, goal-directed, relevant, learner-centered, and self-directed activities) is supported, a school's staff naturally evolves into a professional learning community (PLC). Easton (2004) proffered that professional development is most powerful when it allows school staff members to "build a shared vision of a school…work on what matters, and help one another make changes" as a PLC (p. 757). The natural evolution of staff members into a community of professional learners occurs because the staff members are meeting together regularly, reflecting on and evaluating the effectiveness of their practices, studying areas they determine need attention, and making decisions about what they need to learn to improve their skills (Huffman & Hipp, 2003). Research has shown the development of PLCs within schools as a primary factor in establishing and sustaining school reform efforts (Hall & Hord, 2006; Huffman & Hipp, 2003).

Many different variations of PLCs exist in schools. They have been called teacher communities, communities of practice, knowledge communities, and communities of learners. Definitions also vary, but, according to Corcoran and Silander (2009), "all aim to increase teacher collaboration to build teachers' knowledge about students and about teaching and learning, to encourage teachers to share resources, and to create shared norms and views about teaching and learning practices" (p. 163).

Hord (2004) organized the characteristics of PLCs into five major categories, or themes. PLCs are made up of groups of educational professionals who work within a context of (a) supportive and shared leadership; (b) shared values and vision; (c) collective learning and application of learning; (d) supportive conditions (both physical and social); and, (e) shared practice (Hord, 2004). DuFour et al. (2006) and Jones et al. (2010) added results orientation and commitment to continuous improvement to the list of vital factors that define PLCs.

PLCs and school reform. There is a strong connection between PLCs and school reform indicated in professional literature. "The desire to transform schools through professional learning communities…arises in part from research that describes teacher collaboration as improving student performance" (Gates & Watkins, 2010, pp. 272-273). From her study of schools that had successfully implemented school improvement models Hord (2004) concluded, "Research provides strong evidence that low-performing schools can overcome barriers and challenges that accompany reform efforts and increase student achievement when the staff and school are organized as a professional learning community" (p. 12).

Hall and Hord (2006) declared, "The professional learning community has become widely heralded as the way for professional staff of schools to work for student benefits" (p. 26). Studies of practices in improving schools indicated benefits of a school staff functioning as a PLC included increased student engagement in higher-level learning tasks; higher student achievement in math, science, history, and reading; and reduction in the achievement gap between students of demographically diverse

backgrounds (Hall & Hord, p. 12). Other benefits included higher staff and student commitment to school mission, greater collective responsibility for the success of all students, higher staff morale and job satisfaction, higher student satisfaction, lower student and staff absenteeism, less truancy, and lower drop-out rate.

Supportive and shared leadership. Traditional leadership styles within schools set up a single leader to make decisions and take responsibility for the results of those decisions. Within a PLC, traditional leadership is set aside in favor of democratically shared leadership. Hord (2004) stressed, "Supportive and shared leadership requires the collegial and facilitative participation of the principal who shares leadership – and thus, power and authority – by inviting staff input and action in decision-making" (p. 7). Members of PLCs share in the examination of school issues and make decisions collectively.

Shared leadership, as described by Hord et al. (2010), encourages PLC members to study issues "in order to be sure that decisions are sound and in the best interests of…students" (p. 19). Huffman and Hipp (2003) explained, "Successful communities of learners share important concerns and relationships in their efforts to achieve results for students. This requires…administrators and teachers [to] take responsibility for leadership and decision making" (p. 7). Within a PLC, all staff members are able to contributed "ideas for change, and everyone contributes to the interventions or strategies needed for high-quality implementation" (Hall & Hord, 2006, p. 31).

A PLC's school principal is not replaced through the process of shared leadership. In fact, it is essential that the principal remain the "point person" who supports and

organizes collaboration and collective learning among and the continued development of leadership capacity within staff members (Hall & Hord, 2006, p. 31). Hall and Hord clarified, "Ultimate responsibility must not be abandoned, and the positional leader…assumes and maintains this responsibility – but operationally in a less visible and more democratic way" (p. 31). Some areas of responsibility must remain solely the principal's "purview," but "the principal actively nurtures the entire staff's development as a community [and] finds opportunities for the staff to perform in leadership roles" (Hall & Hord, p. 55).

The school principal's role changes through the sharing of responsibility for analyzing school practices and making important school decisions. In addition, principals join with teachers as professional learners who question, investigate, and seek new approaches that will improve student outcomes (Hall & Hord, 2006; Preskill & Brookfield, 2009). As the principal actively supports and participates in the processes of the PLC within the school "the rate of success for implementing new initiatives increases phenomenally" (Fogarty and Pete, 2010, p. 33). Preskill and Brookfield (2009) summarized, "Leadership is at its best when leader and led feel inspired and energized to do great things together, to scale new heights of collective accomplishment, and to share roles of responsibility" (p. 7).

Hord's (2004) studies found shared leadership was an "essential critical component of successful professional learning communities" (p. 2). Developing the capacity of staff to take on leadership roles is as important as the principal being willing to share authority. According to Hord, the level of shared leadership discovered as

schools with PLCs depended on how much the principal was willing to share authority and motivate teachers to accept leadership roles. In order to transform a school into a learning community, the leader needs to encourage and welcome input from staff members in school decisions, recognize when staff members are ready to take on leadership roles, and sanction and actively nurture the staff members development as leaders (Hord, 2004; Preskill & Brookfield, 2009).

It takes time, consistency, and trust to develop shared leadership authority within the learning community. Preskill and Brookfield (2009) counseled, "In an idyllic world it makes sense to include everyone in decision-making. However, the reality of carrying out this practice is quite challenging as the participants learn how to do it" (p. 34). It is the leader's job in a learning organization to ensure the environment is conducive to developing the capabilities of the staff to share leadership effectively (Senge, 1990). A key to the maturity of the PLC is to begin with shared values and vision that will help direct the pursuit of goals through targeted decision making.

Shared values and vision. A collective goal is necessary to effectively implement school improvement initiatives. Huffman and Hipp (2003) argued, "It is impossible to develop effective policies, procedures, and strategies targeted toward a future goal and aligned to provide consistent implementation of programs" (p. 7). Members of a PLC work together to specify priorities, clarify values, and create a shared vision for what they want their school to become.

Setting goals and creating the shared vision for a school requires trust both on the part of the school's principal and the teachers. Yukl (2002) explained, "Cooperating and

sharing knowledge will depend on the extent to which the participants trust the leader and view the process as legitimate and beneficial" (p. 83). The personal visions of the PLC members are shared and coalesced into a collective vision that all members can identify with and embrace as their own (Huffman & Hipp, 2003). Hord et al. (2010) elucidated, "Sharing a vision is not just agreeing with a good idea; it is a particular mental image of what is important to an individual and to an organization" (p. 7).

Shared vision that emerges from the collaborative efforts of a PLC is "a preferred image of the future that compels staff to work toward that image" (Hord, 2004, p. 9). Senge's (1999) principle of "creative tension" affords an effective tool with which staff members can craft a school vision and carve out goals intended to achieve the vision. "Creative tension comes from seeing clearly where we want to be, our 'vision,' and telling the truth about where we are, our 'current reality'" (p. 9). Staff members consider their ideal future school to develop their shared vision and then consider steps to take to achieve the vision through the process of goal setting.

Consensus-building dialogue amongst PLC members facilitates the generation of a set of principles that guide all future decisions made by the school community (Glanz, 2006; Jones et al., 2010). These guiding principles "include an unwavering commitment to student learning that is consistently articulated and referenced in the staff's work" (Hord, 2004, p. 7). School vision is articulated into goals for professional learning which the PLC members collectively pursue.

Collective learning and application of learning. As teachers form learning goals based on the shared vision of the school, structures are established to encourage informal

collaboration for sharing of ideas and problem solving (Fullan, 2001). Learning occurs through socialization and informal peer interaction (Eraut, 2004; Nonaka, 1991). "Teachers…share their practices, study together, focus instructional strategies on student needs, and use data to make decisions about their teaching" (Huffman & Hipp, 2003, p. 10). When teachers operating with a common purpose interact and share experiences they learn new practices, gain new perspectives, and become aware of different kinds of knowledge and expertise (Eraut, 2004).

Knowledge creation and learning among staff members happens as both the result of deliberate, formal activities and emergent, informal activities (Von Krogh, Ichijo, & Nonaka, 2000). Learning is the target of a PLC whether it occurs during formally established collaboration sessions or informal interaction (Hord et al., 2010). Staff members collectively and deliberately engage in study of academic research and experiment with innovative practices. This collaboration allows them to build their content knowledge and increase the range of instructional strategies they have available to help their students (Hall & Hord, 2006).

Hord (2004) denoted, "Staff spend time assessing whether they have been effective and decide what they need to learn to become more effective in their efforts to help students become successful learners" (p. 9). Given these conditions, "The staff is intellectually challenged by their peers and their work, and develop higher intellectual learning tasks for students" (Hall & Hord, 2006, p. 31).

Effective leaders within a PLC make knowledge sharing a priority and create a collaborative culture where knowledge creation can flourish (Fullan, 2001). Within a

learning community, analysis of current practices and experimentation with new methods become the norm (DuFour et al., 2006). Easton (2008) posited, "In a culture in which learning rather than development is the focus, attitudes, conversations, and behaviors change" (p. 759). Innovative school improvement models are more likely to be implemented in the collective learning environment because implementation is the focus of their collaboration. Through their discussion, research, and application of new learning, staff members break down the challenges to implementation and support each other's efforts to change their practices (Nelson & Cudeiro, 2009).

Supportive conditions. To facilitate collective learning, Nonaka (1991) advised leaders eliminate to the creation of groups or teams and create supports for effective collaboration. "Teams…provide a shared context where individuals can interact with each other and engage in the constant dialogue on which effective reflection depends" (Nonaka, p. 104). Supportive conditions for effective collaboration within a PLC include both physical conditions and human capacities of leaders (Hord, 2004). Physical conditions that facilitate shared professional learning include the arrangement of time and schedules and sufficient meeting space that allow collaborative staff activity (Hord et al., 2010; Jones et al. 2010). Human and material resources, district and state policies, and parent and community support for teacher professional learning also contribute to the success of a PLC's efforts to improve educational opportunities for students (Hord et al., 2010).

Common planning and collaborative study time provide essential support for collective learning that results in real change. Time is a significant element that fosters

learning and growth among members of a PLC, according to Egan, Cob, and Anastasia (2009). They signified the need for district commitment to "protecting that time against encroachment by other school demands, and structuring the time so that meaningful examination of practice will regularly occur" (p. 41). Additionally, Ingvarson et al. (2005) found time is required for teachers to "test out" their new knowledge "and to receive follow-up support and coaching in their classrooms" as they deal with the challenges of implementing new practices (pp. 15-16). Hanegan et al. (2009) concurred that time is necessary for teachers to complete field work with new practices and receive guidance from their professional development coordinators or professional learning coaches.

Sufficient space is also necessary to support collaboration among colleagues. Having enough space to work together and being in close proximity to each other are essential to support collaborative learning (Glanz, 2006). Von Krogh et al. (2000) indicated, "Effective knowledge creation depends on enabling context…a shared space that fosters emerging relationships" (p. 7). Placing collaborative teams in close proximity to each other allows informal collaboration to occur naturally and facilitates formal collaborative activities.

Access to human, intellectual, and financial resources also physically supports the PLC of a school. Human resources include experts and coaches who can provide information and feedback as teachers investigate new teaching methods (Ingvarson et al., 2005). Providing teachers with intellectual resources through electronic or print media and access to experts encourages acquisition of new knowledge that can be

collaboratively studied and used to improve classroom practice. In addition, Easton (2008) pointed out, "Educators need financial support for the days they are learning and also for the days when they follow up on their learning, collect and share data, analyze results, solve problems, and coach, mentor, and observe one another" (p. 759).

Besides physical supports of time, space, and access to resources, the building of human capacity for collaborative learning is supported within a successful PLC. Respect and trust are human capacity issues that are developed as PLCs mature. "Good relationships purge a knowledge-creation process of distrust, fear, and dissatisfaction, and allow…members to feel safe enough to explore…unknown territories" (Von Krogh et al., 2000, p. 45). Hord (2004) directed trust and respect at the school and district level, support of school leaders, and a "relatively intensive socialization process" is necessary to set up the right conditions for effective collaboration (p. 11). Jones et al. (2010) concurred, "Clearly defined expectations must be in place so that all members of a professional learning community feel like trusted, respected and valuable contributors" (p. 1).

PLC members actively engage in giving and receiving of feedback regarding their work. Willingness of staff members to accept feedback and use it to improve is a quality of productive PLCs that have established trust and respect as a conditional norm (Hord, 2004). Von Krogh et al. (2000) emphasized, "People must be courageous when allowing fellow group members or even themselves to experiment…It takes courage to voice your opinion or give feedback as part of a process that helps others grow" (p. 54). Feedback can have a negative or disruptive effect on an individual and is difficult to give and

receive. Supportive conditions that facilitate its constructive use include relational conditions addressing conflict resolution and team-building interpersonal communication (Hord et al., 2010).

Shared practice. Teachers learn by working together and sharing their experiences with other teachers (Hunefeld, 2009). Shared practice means teachers watch and review each other's behavior through scheduled and unscheduled observations. They provide each other with feedback, ask questions, and actively support each other as they experiment with and implement new strategies (Hord, 2004). PLC members see being in one another's classrooms as normal and productive (Easton, 2008; Hord, 2004). Teachers observe their peers' teaching, take notes, and provide feedback of their observations. Discussion is healthy and productive when teachers view themselves and their teaching colleagues as experts and give and receive feedback respectfully and professionally (Desimone, 2002).

Teacher capacity for learning and applying innovative initiatives increases through shared practices of a PLC. Establishment of trust is essential to the success of shared practice within a PLC. Hord et al. (2010) warned that shared professional practice is probably the last characteristic of a PLC to evolve because its success depends so highly on cultivation of trust and respect among staff members. As staff members collaborate and learn to trust one another, they are more likely "to take risks and learn from successes and failures, and to try again with help and support from colleagues" (Egan et al., 2009, p. 41).

When teachers productively share their practice they feel less isolated and more empowered to make changes. Lee (2010) explained, "Teachers, especially novices, who are isolated and unsupported by their peers are more likely to flounder [and] become discouraged" (p. 28). Fogarty and Pete (2010) encouraged that teachers' efforts become "more deliberate and focused" when they know they are supported through a network of colleagues with whom they can talk and receive "immediate and consistent help"(p. 33). This support is powerful in helping teachers improve.

Nelson and Cudeiro (2009) pointed out that teachers often learn best by seeing a new practice modeled successfully by a colleague. This learning is reinforced when the teacher then uses the new practice while being observed by a colleague and then engages in reflective dialogue regarding the observation. "Observation by a…peer teacher, paired with structured feedback that reinforces teachers' positive actions and suggests specific improvements, is an effective, research-based tool for building mastery" (Nelson & Cudeiro, 2009, p. 34).

Three options for effective shared practice that results in real learning for individuals were offered by Von Krogh et al. (2000). The first direct observation occurs when learners observe a master complete a task and then evaluate the effectiveness of the actions in completing the task. Hord et al. (2010) demonstrated how this process is carried out in a PLC within a school when teachers identify colleagues ("positive deviants") whose students show above-average academic achievement (p. 87). The teachers as learners observe those colleagues and collect evidence of strategies that are

successful in improving student achievement. They then emulate the strategies in their own classrooms and encourage the implementation of the strategies through the school.

Experimentation and comparison is the second option for shared practice (Von Krogh et al., 2000). Once again, when paired with a master teacher the novice practices a skill and then observes the master execute the same skill. The success of this strategy depends on the interaction between the master teacher and the novice. The master teacher becomes a coach who provides the model of effective implementation and also helps the learner form a reasonable comparison to the learner's implementation of the strategy or skill. Reflective dialogue between the two provides the basis for successful coaching. Insight gained from observation, practice, and coached reflection facilitates growth and improvement for the learner.

Through their study, Joyce and Showers (2002) found teachers who were coached tended to practice new skills more often, more appropriately, and with greater skill than uncoached teachers. "The frequent peer discussions regarding appropriate use of strategies…seemed to enable coached teachers to 'think' with the new strategies in ways that the uncoached teachers never exhibited" (p. 87).

Finally, Von Krogh et al. (2000) offered the practice of "joint execution" as an effective tool for learning from shared practice (p. 83). "Community members jointly try to solve the task, and the more experienced offer small hints and ideas about how to improve the performance of the less experienced" (Von Krogh et al., 2000, p. 83). This concept relates to Hunefeld's (2009) "laboratory as classroom" (p. 24). Within this action research model, teachers identify a goal for improving student achievement through

analyzing data. They then select a strategy to address the goal and experiment with the new strategy evaluating their results against their original goal (Hunefeld, 2009). Through experimentation and reflective dialogue, members of a PLC continually improve the educational opportunities for students (Bullough, 2007; Hord, 2004).

Results orientation and continuous improvement. DuFour et al. (2006) explained that PLCs are committed to a focus on learning for students and staff and collective inquiry regarding current reality and best practices. Members of PLCs analyze and take action based on their findings. They know their efforts must be judged based on the results they achieve rather than their good intentions (DuFour et al., 2006). Jones et al. (2010) agreed, "The focus of an effective professional learning community is not intentions, but results…the use of feedback is imperative in determining and maintaining the effectiveness of school improvement projects" (p. 1).

Data collection and analysis play an essential role in continuous improvement within a PLC. Hirsh (2009) indicated, "Effective team learning is organized to support a cycle of improvement that begins with a thorough examination of school- and classroom-level data" (p. 71). The cycle of continuous improvement includes identifying issues to be addressed, finding strategies that address the issues, implementing the strategies, modifying strategies based on evaluation of results, and beginning the process again. Determining actions are producing desired results depends on making sure methods for collecting and analyzing data showing effective change are in place as well as creating the context for applying the findings. Teachers who use data effectively to make changes

that impact student achievement confidently commit to a cycle of continuous improvement (Jones et al., 2010).

Hord et al. (2010) reported when teachers of a learning community believe they can as a group "organize and execute actions required to have a positive effect on students…a strong sense of collective efficacy flourished" (p. 37). This sense of efficacy inspires confidence in the faculty that they can make a difference with their students and that their students can and will learn as a result of their actions (Hall & Hord, 2006). In the most successful schools studied by Hord (2004), the staff functioned as PLCs and accepted "collective…responsibility for student learning" (p. 13). The teachers of the successful schools took deliberate steps to learn new skills and strategies they determined would improve student achievement. They applied the skills and strategies in their classrooms and evaluated the results of their use in light of the goals for learning they had set. Their deliberate attention to results brought about higher student achievement and encouraged a culture of continuous improvement.

Summary

The educational climate in U.S. public schools has been impacted significantly by federal efforts to reform local school practices over the past thirty years. The report *A Nation at Risk* ushered in the first wave of reform legislation. Although the report successfully illuminated school failings, subsequent school reform legislation initially did little to effect change in classroom practices (Desimone, 2002; Huffman & Hipp, 2003). When the *No Child Left Behind* Act (*NCLB*) was signed into law in 2002, it gave the federal government more extensive control over schools by tying student achievement to

federal funding (Karen, 2005). Schools were required, through *NCLB* provisions, to achieve adequate yearly progress (AYP) toward the goal that 100% of U.S. public school students be proficient or be labeled as failing and face financial and restructuring sanctions by 2014 (Hall & Hord, 2006).

From the onset of its enactment, educators and researchers opposed the *NCLB*'s stringent penalties which seemed to work against the goals of *NCLB* to support improved educational opportunities for students in low-performing and often high-poverty, high-minority schools (Kim & Sunderman, 2005). In 2009 President Barak Obama's administration unveiled the *Race to the Top (RTT)* initiative designed to provide incentives for the development of innovative state education reforms and compliance with federal reform policies. *RTTT* awarded grant money to 12 states between 2009 and 2011, but the program has been criticized for continuing accountability measures that have not shown huge success.

As political opposition to *NCLB* increased, it became obvious most public schools in the U.S. would be labeled as failing by the 2014 deadline for all students to be 100% proficient in mathematics and communication arts (McNeil & Klein, 2011). When Congress could not come to agreement on essential components of the law during reauthorization debates, President Obama stepped in to allow states to apply for waivers from *NCLB* sanctions (McNeil & Klein). While the waiver plan was greeted with relief by educators, accountability standards associated with the plan continue to challenge schools to become continuously improving organizations.

Open enrollment policies and school choice for parents have impacted successful schools as well as failing schools over the past three decades (Howe, Eisenhart, & Betebenner, 2002). Increased demand for improved schools and the opening of school doors to student transfers has raised concern among educators. School choice has put schools in a position to compete with each other for the best students (Hursh, 2005). Proponents of school choice have argued that competition improves schools. On the other hand, opponents have pointed out the negative impacts emptying schools of their best students (Howe, Eisenhart, & Betebenner, 2002). Rather than argue for or against school choice, researchers have encouraged school leaders to focus on improving their educational practices and address issues that have made school choice an attractive option for parents (Manno, 2011).

Legislative mandates and school choice policies have impelled school leaders to pursue innovative school improvement initiatives aimed at changing teacher practice and boosting student achievement (Huffman & Hipp, 2003). Ample research-based resources are available to schools, yet leaders struggle with the effective implementation of school improvement models (Chynoweth et al., 2008). Literature related to school improvement clearly links successful implementation of improvement models to effective professional development practices (Garet et al., 2001; Hanegan et al., 2009; Reed, 2010). Traditional professional development practices have failed to incorporate the characteristics that ensure effective transfer of teacher learning into the classroom (Easton, 2008; Hirsh, 2009; Hunefeld, 2009; Joyce & Showers, 2002; Kaagan & Headley, 2010; Lassonde & Israel, 2010). In order to provide learning activities that result in changed classroom

practice, school leaders must understand how to help teachers see the need for change and plan and support appropriate learning experiences for teachers (Hall & Hord, 2006; Hirsh, 2009; Hord, 2004; King & Newmann, 2000).

Professional development for teachers is expensive in dollars and time (Hunefeld, 2009). Without clear goals for learning, relevant content, and teacher participation in selection of learning activities, teacher buy-in for implementation of new programs is highly unlikely (Bryck, 2010). When teachers do not see the connection of new learning to their professional obligations, even the most innovative educational approaches aimed at school improvement stand a very slim chance of being implemented (Fenstermacher, 1987; Hanegan et al. 2009; King & Newmann, 2000). Effective professional development allows teachers to indicate their own professional development needs in alignment with student needs, set their own learning goals, and plan learning experiences that facilitate the achievement of their goals (King & Newmann, 2000).

For changes in behavior to occur and be sustained, there must also be time set aside for follow-up and coaching (Cudeiro et al. 2005; Nelson & Cudeiro, 2009). Even high-quality professional development activities will fail to produce long-term change in classroom practice if there is no plan to support learning over time through providing on-going follow-up training and feedback (Joyce & Showers, 2002). Through follow-up and coaching, new practices become the norm rather than a novelty, and a culture of continuous improvement is established for the school. Setting appropriate goals, providing support for relevant learning experiences, and facilitating collaboration among teachers are the foundational principles of targeted professional development.

Targeted professional development is goal-directed, relevant, self-directed, collaborative, and promotes continuous improvement within a school (Cudeiro et al., 2005). Collaborative practices of targeted professional development include shared decision making that supports staff buy-in for school decisions and innovative practices. Sharing authority between teachers and administrators encourages capacity-building for teacher leadership and reinforces the teachers' professional role within the school (Yukl, 2002). It also taps into the wealth of teacher knowledge available to address the most complex issues related to school operations, educational methods, and student learning (Burbach & Duke, 2007).

As schools pursue targeted professional development for teachers, staff members evolve into a PLC. Characteristics of a PLC as indicated by Hord (2004) include supportive and shared leadership, shared values and vision, collective learning, supportive physical and interpersonal relationship conditions, and shared professional practice. DuFour et al. (2006) and Jones et al. (2010) added results orientation and commitment to continuous improvement to the list of learning community components. PLCs have been identified in research as effective in improving student achievement in schools because of their commitment to learning and encouragement of experimentation with new practices (Hord, 2004).

The following chapters provide research design and methodology, research findings, discussion of findings, and conclusions for this study of the evolution of PLCs within two schools implementing the same school improvement model. Chapter Three begins with a brief background and a description of the study's problem. The design of

the study including a detailed description of the study's participants, steps taken to ensure protection of human subjects, and methods used to collect and analyze data are presented. Chapter Four presents the findings of the study, and Chapter Five provides discussion of the findings along with conclusions and implications for further research. Copies of informed consent forms provided to research participants and instruments used to focus the study on the research questions are included at the end of the study as appendices.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

Introduction

National and local mandates for school improvement, along with accountability for wise use of resources during a tight budget era, have led school leaders to seek out school improvement models that can be implemented efficiently through professional development (Benton & Benton, 2008). "With the passage of the federal '*No Child Left Behind*" Act (*NCLB*), every state is now required to develop standards, standardized tests and accountability systems " aimed at improving achievement in U. S. public schools (Hursh, 2005, p. 605). Schools that do not meet expectations for improved student achievement are labeled as failing and face sanctions including replacement of staff, reorganization, being converted into a charter school, or being turned over to the state or private agency (Hursh, 2005; Kim & Sunderman, 2005; Mathis, 2011).

The *Race to the Top (RTTT)* initiative was delivered by President Barak Obama's administration in 2009. *RTTT* attempted to turn federal educational reform from coercive to incentive-based by offering federal grants to states committed to Common Core Standards for learning and common assessments; improved teacher training, evaluation, and retention; improving data systems; and adopting turnaround strategies (McGuinn, 2012). An underlying premise for *RTTT* was that competition drives school improvement. While critics disagreed, the *RTTT* plan had immediate impact on schools through the United States.

School reform legislation has impacted all U.S. public schools, not just the lowest achieving ones. Leaders of failing schools must offer their students the option of transferring to other schools. Open enrollment policies for all schools adopted by most states as part of education reform legislation afford families the option of transferring to other schools whether or not their home schools are failing (Jimerson, 2002). School leaders must satisfy parental demand for high-quality education or risk losing students to other, higher-quality schools (Howe et al., 2002). This has stimulated school leaders to search for school improvement models that will help their schools meet the state and national requirements and parental expectations for student academic growth.

Effective professional development for teachers is essential if schools are to meet school improvement standards established by law (Benton & Benton, 2008). All public schools are required by law to provide professional development activities that are "high quality, sustained, intensive, and classroom-focused in order to have a positive and lasting impact on classroom instruction and the teacher's performance in the classroom" (Overview: Title IX – General Provisions, 2004, p. 107). Traditional professional development activities do not meet the standards prescribed by *NCLB* and are ineffectual in changing behavior in the classroom (Desimone, 2002; Easton, 2008; Fenstermacher, 1987; Hunefeld, 2009).

Targeted professional development is reflective of functional theory for adult learning and learner-centered theory for adults. It offers teachers choices regarding what they learn and engages them as learners in hands-on, interactive learning through effective, relevant, and transferrable activities (Fogarty & Pete, 2009; Gibb, 1960;

Trotter, 2006). Targeted professional development supports components of PLCs including shared decision making regarding the design of the activities, collaboration and collective learning, shared practice, and commitment to continuous improvement (DuFour, 2004; Hord, 2004; Jones et al. 2010).

This paper presents the design for an in-depth instrumental case study of suburban Southeast Elementary School and urban Midtown Elementary School in the Midwestern United States beginning with research questions used to guide the study. Rationale for design approach and methods used are identified following the research questions. Details regarding study participants and the method employed in their selection are explained and justified. Data collection procedures including strategies used for human subjects' protection and other ethical considerations are also described. Methods used for data analysis are detailed, and the role of the researcher including researcher bias is addressed. Finally, strategies used to ensure qualitative trustworthiness of the study's findings are offered.

Southeast Elementary School began the process of implementing a school improvement model in 2006 to satisfy parental demand for an innovative, high-quality educational program. For some time prior to the adoption of the school improvement model, Southeast Elementary School had experienced declining enrollment. As the population surrounding the neighborhood school aged, fewer elementary-aged students were available to attend the traditionally high-performing school. State reports from 2002 to 2005 indicated enrollment at Southeast had steadily declined 24% from 368 to 279

students over the four-year period (Missouri Department of Elementary and Secondary Education).

Although Southeast Elementary School maintained its status as a high-performing school within the district, declining enrollment partnered with tightening budgets spurred the school board to consider closing the school. Parents protested closing the neighborhood school. Their opposition brought about the adoption of the school improvement model and the marketing of Southeast as a "choice" school within the district open to transfers from other schools.

A similar trend was developing at Midtown Elementary School in the center of the small Midwestern city. Enrollment in the K-5 school dwindled from 165 to 141 students from 2002 to 2005. A decrease just under 15% over four years with an evidential continuing steady decline prompted school leaders to introduce the same school improvement model as the one adopted by Southeast Elementary School in an effort to improve performance in the lower-performing school.

The school improvement model adopted by both schools requires the school set aside time for collaborative planning and reflection by teachers and sets the expectation that the "pedagogical leadership within the school is a shared responsibility" (IB Standards and Practices, 2010, p. 7). Initial observation by the researcher indicated that, due to the collaborative nature of the school improvement model that encourages shared leadership, the staff members of both schools function as PLCs. The intent of this study was to describe the role targeted professional development played in the evolution of the

PLC at Southeast and Midtown Elementary Schools from the perspective of the teaching staff members.

Chapter Three begins with the listing of detailed research questions which guided the study of the two elementary schools. Information sought through the research questions included the perspective of the teachers regarding the extent to which their professional development is targeted to their needs and the needs of their students, the relevance of their professional development, and the degree to which the staff members have buy-in for the school improvement model. The questions were designed to help the researcher determine the staff members' perceptions of their role in decision making for their schools and to identify other characteristics that indicate the schools' staffs have evolved into PLCs as defined by Hord (2004), Jones et al. (2010), and DuFour et al. (2006).

The design that was intended to guide the study is presented in Chapter Three. It includes an intended description of study participants, data collection procedures and instruments, and the process by which human subjects were intended to be protected throughout the research project. In addition, the plan for data analysis procedures, including the relevance of the data to the research questions, are tendered. Finally, the plan for methods to be used to ensure the quality of the study are summarized in Chapter Three.

Research Questions

The following central question guided this study: At suburban Southeast Elementary School and urban Midtown Elementary School in the Midwestern United

States, what has been the role of targeted professional development in creating professional learning communities during the implementation of the schools' improvement model as perceived by the teaching staff members of the schools? The following sub questions helped frame the investigation:

1. How does the functioning of the professional learning community support the teachers' needs as adult learners?
2. To what extent do teachers feel their professional development is targeted to impact their classroom practices?
3. What characteristics of a professional learning community as defined by Hord (2004) DuFour et al. (2006), and Jones et al. (2010) are evident at the school?

Design for the Study

This study was developed as a qualitative instrumental case study intended to provide an in-depth examination of the formation of a PLC during the implementation of a school improvement model (Mertens, 2005). The double case study was set in suburban Southeast Elementary School and urban Midtown Elementary School in a small Midwestern city. The qualitative approach was chosen because the study design reflected fundamental characteristics of qualitative research as outlined in Creswell (2007). The researcher was the instrument of data collection, and data collection guided the emergent design of the study.

Qualitative research reflects the constructivist paradigm that assumes "reality is not absolute, but is defined through community consensus" (Mertens, 2005, p. 231). This study presented multiple realities in the contexts as reported through the perspectives of

the participants and the researcher as the data were collected, analyzed, and interpreted. Perceptions of the teaching staff at Southeast Elementary School and Midtown Elementary School and interpretation of the researcher helped define the extent to which the staff members reflected a PLC at each school.

Case study was the methodology chosen for the emerging design because the examination was bounded by time and activity (Creswell, 2007; Mertens, 2005). The researcher explored the professional interactions of the Southeast and Midtown Elementary Schools' staff members over bounded period of one month, "through detailed, in-depth data collection involving multiple sources of information" (Creswell, 2007, p. 73). This was an instrumental case study because the case served as an instrument for studying particular issues related to professional development. The activity boundary of the study was professional development. The study represented a snapshot of current practices from the perspective of the current teaching staff and observations of their interactions.

Participants

Mertens (2005) advised it is essential "to determine the dimensions of diversity that are important to the study" when selecting a study sample from a population (p. 315). In other words, once the purpose of the research is established, parameters for selecting population and sample from the population must be set. The purpose of this study was to describe the role targeted professional development played in the creation of a PLC during the implementation of a school improvement model. To satisfy the purpose of this study, faculty members from Southeast Elementary School and Midtown Elementary

School were purposively selected as the main study participants to be interviewed and observed.

Identification of participants

Since professional learning of teachers was the focus of the study, their perceptions best helped the researcher understand and describe the process that has resulted in the creation of PLCs at Southeast and Midtown Elementary Schools (Creswell, 2009). The target population from which participants were recruited included core subject teachers from each grade level, kindergarten through grade five, and related arts teachers. Core subjects are mathematics, science, social studies, and communication arts. Related arts teachers for the schools include visual arts, music, physical education, and Spanish teachers. The librarian and counselor for each school were also included as prospective participants in the study. Targeted professional development within a PLC relies on administrative support. For that reason, it was the intent of the research to collect perceptions from each of the schools' principals and the school improvement model program coordinator who serves both schools.

Staff survey participants. All teachers at each school were purposefully selected as participants to complete the Adult Learning Theory Faculty Perception Survey. The purpose of the survey was to collect teaching staff members' perceptions of their common professional development experiences in relationship to adult learning theory. Although variations in job descriptions exist among teachers due to grade level assignments, all teachers are adult learners. All teachers are also required to participate in collaborative site professional development activities that show impact on their classroom

practices and support the school improvement model. For these reasons, it was appropriate to include all the teachers in the survey participant group.

Focus group participants. At each school, the plan was to form a focus group of five staff members following the suggestion of Krueger and Casey (2009) regarding the ideal focus group size. The researcher's intention was to provide the broadest perspective of the schools' professional development practices and staff members with various professional roles were purposefully selected as participants for the focus groups. At each school, teachers from lower grades and upper grades were invited to provide their perspectives. Related arts teacher were invited as participants to provide the perspective of a teaching staff member who is in the building only part-time. The counselor and the librarian from each school were also invited to participate in the focus group to provide the perspective of professional staff members whose main jobs are providing student and teacher support.

Individual interview participants. The intention of the interviews was to collect information regarding targeted professional development, evidence of PLC characteristics, knowledge-creation through collaboration, and the level of staff buy-in for the school improvement model within the schools from distinctly different perspectives. The plan was that for each school, one teacher who was on staff prior to the adoption of the school improvement model and one teacher who was hired after the adoption of the school improvement model were interviewed. Individual interviews with the building administrator from each school as well as the school improvement model program coordinator who serves at both schools were also planned.

This qualitative study was an emerging design. As Creswell (2007) explained, "The initial plan for research cannot be tightly prescribed…all phases of the process may change or shift after the researchers enter the field and begin to collect data" (p. 39). As was reasonably expected, data collection through interviews, focus groups, and observations led the researcher to include interview participants outside the boundaries of the initial study design. While the initial plan was followed I the recruitment of interview participants, the opportunity arose to interview one additional teacher at Midtown Elementary School.

Participant journals. The original plan was to invite one teacher from each school, conveniently selected from the pool of teachers not chosen as focus group members or interview participants, to keep a participant journal as suggested by Creswell (2009). The purpose of the participant journals was for the staff members to record perceptions of collaborative professional development opportunities during the study. No effort was to be employed to match the two staff members to each other or differentiate the staff members from each other. The only stipulations for selection was that the participant was willing to keep the journal, had not participated in a focus group, and had not been interviewed.

Design for acquisition of data. The plan for acquisition of data indicated a week was to be set aside for the researcher to visit the site and collect data through observation, focus groups, and interviews. Initial contact with participants to describe the study and invite their participation was planned to be via emailed one month prior to the site visit. In addition, open-ended surveys would be mailed to participants from both schools one

month prior to the researcher's site visit according to the initial plan. The plan was also to send emails to staff members selected to participate in focus groups and interviews three weeks prior to the site visit to establish dates and times for interviews and focus group sessions. Follow-up phone calls prior to the researcher visiting the site were to be made to participants as a reminder of the visit and confirmation of the scheduled meetings. Guidance was to be provided to staff members selected to keep participant journals during a face-to-face meeting one week prior to the month set aside for the study.

Evidence and Sources

Data for this study were collected from a variety of sources (Creswell, 2007; Fraenkel & Wallen, 2009). The researcher planned to collect perceptual data from staff members utilizing an open-ended survey; structured and unstructured open-ended interviews; focus groups; and participant journals (Creswell, 2007, p. 136). The plan also called for observation data to be collected during formal and informal staff collaboration. Data would also be collected from public documents including the schools' recent school improvement program evaluation self-studies and the Missouri State Improvement Plan (MSIP) Faculty Survey.

Open-ended survey, interview, and focus group strategies were selected as the best way to create an "in-depth picture" from teacher perceptions of their professional learning and its impact on their classroom practice (Creswell, 2007, p 132). The observation and document analysis strategies were chosen to provide opportunities to triangulate data provided by staff member and focus group interviews and participant journals (Creswell, 2009).

The following sections describe procedures followed to protect the human subjects of this study. The specific data collection procedures for interviews, focus groups, participant journals, observation of staff interaction, and evaluation of public documents is also presented. In addition, data analysis procedures are offered which relate the analysis of the data to the research questions of the study. A discussion of the procedures used to protect the quality of the study concludes the data analysis procedures section.

Human Subjects Protection

Several steps were taken to protect the rights of participants during this study. Two months prior to the study, an application for Institutional Review Board (IRB) approval to conduct the study was submitted to the researcher's university. While awaiting university IRB approval, the research proposal was presented to the researcher's doctoral committee for approval, and approval was granted by the committee. Upon receipt of IRB approval from the university approval from the school district was sought. A district required application for research was completed and forwarded to the district administrator who is the IRB "gatekeeper" with a letter requesting approval for the study (Creswell, 2009; Mertens, 2005). Permission was granted by the school district, and the study was begun.

Permission to study Southeast Elementary School and Midtown Elementary School was obtained from the schools' principals prior to the University IRB and school district approval. During face-to-face meetings with the principals, the researcher provided a letter requesting permission to complete the study. The research proposal was

included with the request letter. The researcher requested and received an official letter granting permission to conduct the study from the principal of each school. Letters describing the purpose and scope of the study as well as the procedures taken to protect their confidentiality and anonymity were given to all participants before the study began. A copy of the initial contact emails used to request the principals' permission, introduce the study, and recruit participation of staff members from both schools is included as Appendix A of the study.

Informed consent forms were signed by participants and returned to the researcher prior to data collection (Creswell, 2009). The confidentiality of the data and anonymity of the participants were protected through coding practices. Survey responses, interview and focus group transcripts, and observation field notes were coded. Codes were "linked to unique identifying information" regarding participant responses and kept in a separate file from the responses (Mertens, 2005, p. 337). All data were kept in a locked file cabinet. Seven years after its analysis, data will be destroyed in accordance with University of Missouri IRB guidelines.

Data Collection Procedures

One month was set aside for data collection. The researcher scheduled time during that month to visit each site, conduct interviews and focus groups, and observe staff members' interactions. The open-ended Adult Learning Theory Faculty Perception Survey based on the study's theoretical framework of adult learning theory and targeted professional development was placed in all teachers school mailboxes at both schools. The plan was to have the survey field tested by staff members in the researcher's home

school buildings prior to being forwarded to the Southeast and Midtown Elementary Schools' staff members (Mertens, 2005).

Staff survey protocol. The best conditions for adult learning occur when professional development is self-directed and designed to be collaborative, relevant to the learner's professional responsibilities, hands-on, and goal-oriented (Fogarty & Pete, 2009). Adults also need to feel their experimentation with new techniques is supported with constructive feedback and follow-up coaching in order for them to learn and change their methods (Lassonde & Israel, 2010).

Goals of this study were to determine how the professional development of staff members at Southeast and Midtown Elementary Schools supported the teachers' needs as adult learners, how teachers perceived their professional development impacted their classroom practices, and what characteristics of a PLC were evident within the schools. For this study a survey was developed to collect data indicating the self-directive, collaborative, relevant, hands-on, and goal-oriented nature of the professional development activities at the two schools.

The Adult Learning Theory Faculty Perception Survey was developed as an open-ended data collection instrument. Data from this survey addressed the study's first research question. The survey was placed in the school mailboxes of all Southeast Elementary and Midtown Elementary teachers prior to the researcher's site visit to the schools. A description of the study and its purpose were provided by a cover letter. Two copies of the letter were provided to each teacher. One of the letters was to be signed and returned to the researcher as an indication of informed consent to use the teacher's

responses in the study, and the other copy of the letter was intended to be retained by the teacher for informational purposes. Copies of the letter inviting study participation and describing the study along with the open-ended survey have been included as Appendix B of this study.

Individual interview protocol. Research has indicated school improvement models have little chance of being implemented if school staff members feel no sense of ownership for them (Kragler et al. 2008). Bush (2003) advised that allowing staff members to participate in decisions regarding their professional development improves staff buy-in for new programs. Targeted professional development allows teachers to self-direct their professional development and participate in collaborative learning groups. The result of collaborative learning groups is often the creation of new knowledge (Nonaka, 1991). Given supportive conditions, a goal-oriented staff committed to continuous improvement through shared decision making, shared values and mission, collective learning, and shared professional practice functions as a PLC (Hord, 2004; DuFour et al., 2006; Jones et al., 2010).

Conducting individual interviews was used to help determine the extent to which targeted professional development played a role in the development of PLCs during the implementation of a school improvement model at two Midwestern elementary schools. Following the directions provided by Fink (2009), semi-structured open-ended interviews were conducted with one teacher hired before and one teacher hired after adoption of the school improvement model at each school. The building principal for each school and the

school improvement model program coordinator who serves both schools were also interviewed.

In addition to the planned interviews, one additional interview at Midtown Elementary School was conducted as the opportunity was afforded. Interviews lasted approximately 30 to 40 minutes. Interviews were audio recorded. Transcripts of the recordings were prepared for analysis. When it was not possible to interview a staff member face-to-face due to absence or other inhibiting factors, the researcher conducted the interview via email to ensure an accurate transcript of the interview.

An interview protocol was used to guide semi-structured, open-ended interviews with staff members (Creswell, 2007). The protocol included coded identifying information. The codes for the teachers hired prior to the adoption of the school improvement model were T1S for Southeast Elementary School and T1M for Midtown Elementary School. Codes for the teachers hired after the adoption of the school improvement model at each school were T2S for Southeast Elementary School and T2M and T3M for Midtown Elementary School. Administrators for each school were coded as AS for Southeast and AM for Midtown, and the school improvement model's program coordinator was coded as PC.

Interview items were related to targeted professional development, evidence of characteristics of a PLC, knowledge-creation, and level of staff buy-in for the school improvement model. Follow-up questions were added to the interview protocol as needed for clarity. Data collected during interviews were used to address the all three research questions. An email listing the topics to be discussed during the interview along with a

description of the study were sent to participating staff members prior to the scheduled interviews to help them prepare their responses. An informed consent form was collected from each participating staff member prior to interviews. Two copies of the informed consent form were provided to each interview participant. One form was to be signed and returned to the researcher as an indication of informed consent to use the staff member's responses in the study, and the other form was intended to be retained by the staff member for informational purposes. Copies of the emails sent to staff members inviting their participation as interviewees, the script for a follow-up phone call to remind staff members of the interview date and time, and the informed consent form have been included as Appendix C of this study. A copy of the interview protocol used to collect data is included as Appendix D.

Focus group protocol. Hord (2004) warned that change does not come easily within schools and is often not welcomed. Pulling together as a PLC presents challenges as staff members learn how to effectively collaborate and learn from each other through peer observation and feedback. Focus group sessions were established to determine the extent to which Southeast and Midtown Elementary Schools' staff members reflect the characteristics of PLCs. In addition, questions for the focus groups helped provide data regarding the staff members' perceptions of their buy-in for the school improvement model and evidence of knowledge creation as the result of targeted professional development within the schools.

Teachers from different grade levels, the counselor, and the librarian were invited to serve on a focus group at each school to keep from creating groups from pre-

established groups (Krueger & Casey, 2009). Focus groups did not include staff members who participated in individual interviews. Focus group meetings lasted approximately one hour and were audio recorded. Transcripts of the recordings were prepared for analysis following the focus group sessions.

The aim of the focus groups was to determine the extent to which staff members at each school functioned as a PLC. The focus group protocol was composed of items based on the "Professional Learning Community Assessment" instrument developed by Huffman and Hipp (2003) to help determine the extent to which the schools' staff members reflected characteristics of a PLC. Follow-up questions were added to the focus group protocol as necessary to provide clarity during the focus group sessions. Data collected during focus group sessions were used to address the first research question.

An email was sent to staff members who had agreed to participate in the focus group sessions prior to the scheduled meetings. The email listed PLC characteristics to be discussed during the focus group sessions to help participants prepare their responses. Two copies of an informed consent form were provided to each focus group participant. One form was to be signed and returned to the researcher as an indication of informed consent to use the staff member's responses in the study, and the other form was intended to be retained by the staff member for informational purposes. Copies of the recruitment email for focus group participation, the script for a phone call made to remind participants of the focus group session date and time, and the informed consent form have been included as Appendix E of this study. The focus group protocol has been included as Appendix F.

Formal and informal observation protocol. Field observations were made of one small collaborative teacher group at Midtown Elementary School and one large staff professional development activity at Southeast Elementary School. Time length for observations was determined by the event observed. Ethnographic field notes were taken during observations (Emerson, Fretz, & Shaw, 1995).

Observation field notes were focused on staff interactions that addressed the adult learning theory framework of the study and characteristics of a PLC. As suggested by Krueger and Casey (2009), the study's research questions served as the lens through which observations were viewed. Foci during observations included evidence of characteristics of PLCs, evidence of support for new initiatives and buy-in for the school improvement model, and evidence of knowledge creation as a result of collaborative professional development activities. The first and third research questions were addressed through the collection of data during observations of professional learning activities. A copy of the observation protocol has been included as Appendix G of this study.

Examination of public documents and document analysis guide. Data were collected from two public documents detailing information about Southeast and Midtown Elementary Schools. Survey data from the 2010 Missouri School Improvement Plan (MSIP) annual faculty survey and the International Baccalaureate Primary Years Program (IB PYP) Evaluation Self-Study, completed by staff members at each school in 2012, were examined. Access to the MSIP faculty survey was gained through the Missouri Department of Elementary and Secondary Education's web site. The 2010 MSIP Faculty Survey was the most recent survey published on this site. Particular attention was given

to MSIP questions regarding evidence of the schools' functioning as professional learning communities and the impact of the staff members' professional development activities on their classroom practice. Data collected from the IB PYP Evaluation Self-Studies were also narrowed to professional development evaluation items. Access to the self-study report was gained through the IB PYP coordinator who serves both schools.

The guide designed for analysis of the MSIP Faculty Survey and the IB PYP Evaluation Self-Study focused the researcher to look for evidence related to the staff members' perception of the connection between professional development at their schools and their classroom practices. The document analysis guide also provided evidence of professional learning community characteristics including commitment to collaboration, evidence of shared leadership, evidence of shared mission and vision, results orientation, and commitment to continuous improvement at each school. The document analysis guide has been included as Appendix H of this study.

Data Analysis

Several forms of data were analyzed as a result of the research conducted at Southeast Elementary School and Midtown Elementary School. Information gleaned from the Adult Learning Theory Faculty Perception Survey, individual interviews, focus group sessions, observations, and public documents, was examined. The researcher used content analysis, coding, and categorical analysis guided by the study's research questions to interpret and analyze the data.

Data collected from the Adult Learning Theory Faculty Perception Survey all data sources were interpreted through the lens of the study's first research question. The open-

ended survey items were designed to identify evidence that teachers' professional learning activities addressed their needs as adult learners. The survey items also provided staff perceptions of the extent to which their professional development impacted their classroom practice.

Research question two was addressed by analyzing data regarding the staff members' perceptions of the extent to which their professional learning was targeted to impact their classroom practices. The open-ended survey, interviews, document analysis, and participant journals data were intended to be studied to determine the teachers' perceptions of the impact their professional development has on their classroom practices.

Data from all data collection instruments were used to address research question three which was focused on collecting evidence of the extent to which the schools' staff members resembled PLCs. Interview and focus group protocols were purposefully created to determine the extent to which the staff members reflected characteristics of professional learning communities. Interview and focus group discussion items evaluated the existence of supportive conditions for collaboration, shared and supportive leadership, collective learning, commitment to continuous improvement, results orientation, shared practice, and shared mission and vision among the staff members within the schools. Data collected during formal and informal observations were also scrutinized to provide evidence of PLC characteristics such as collective learning and shared practice.

Evidence from the IB PYP Evaluation Self-Study and the MSIP Faculty Survey

were also examined to ascertain evidence of PLC characteristics including commitment to collaboration, evidence of shared and supportive leadership, results orientation, and evidence of shared mission and vision. Participant journals were intended to also provide evidence of PLC characteristics from the staff members' recorded perceptions of their professional interactions.

Data Analysis Procedures

The data analysis plan was for data to be organized and prepared by transcribing interviews and focus group discussions; typing up field notes from observations; collating responses from open-ended surveys; and gleaning relevant information regarding professional development from participant journals, MSIP survey data, and school improvement program self-study documents (Creswell, 2009). Content analysis of the data relevant to the study's research questions was conducted once it was organized.

Data were first read to "obtain a general sense of the information and to reflect on its overall meaning" (Creswell, 2009, p. 185). Notes were taken in the margins of the data regarding the researcher's perception and interpretation of the ideas presented. Next, the data were analyzed carefully to identify words, phrases, and ideas that repeated as patterns (Fink, 2009). Patterns that emerged were analyzed in light of the study's purpose, theoretical and conceptual framework, and research questions. Coding of the emerging ideas was conducted to identify repeated themes (Mertens, 2005).

Categorical analysis was conducted to group similar themes together. Through axial coding the researcher looked for connections between the categories. Next, codes were used to generate a description of the school staff and the professional development

process of the school. The description was connected through narrative to address the research questions. Finally, the researcher interpreted, or made meaning, of the data in light of the study's purpose to determine the extent to which the staff members of Southeast and Midtown Elementary Schools represented PLCs and what role targeted professional development played in the development of the PLCs.

Role of the Researcher

The researcher was the key instrument for data collection in this qualitative case study (Creswell, 2007). The role of the researcher for this study was mainly one of external observer. It was impossible, however, for the researcher's perceptions to be eliminated from the investigation (Creswell, 2007). Creation of research questions and protocols along with analysis and interpretation of data were filtered through the researcher's prior experiences with the school. Current relationships with staff members, knowledge of the school improvement model, and beliefs regarding professional development positioned the researcher within the study (Creswell, 2007). The history, personal experiences, and assumptions of the researcher contributed a certain amount of bias to the recording and interpretation of study data.

The researcher taught at Southeast Elementary School for three years and is still an employee of the school district to which Southeast and Midtown Elementary Schools belong. Midtown Elementary School is within the "feeder" pattern of the middle school and high school where the researcher works as a program coordinator. The researcher is familiar with the Southeast and Midtown Elementary Schools' staff and works closely with the schools' improvement model program coordinator.

The school improvement model adopted by the two schools is the elementary version of the model the researcher is implementing at a middle school and a high school. The researcher's familiarity with the school improvement model has led her to assume its adoption at Southeast and Midtown Elementary Schools necessitated targeted professional development, collaboration among teachers, and the development of a PLC within each school.

Personal experience with implementing a school improvement model has led the researcher to believe targeted professional development allows for more direct translation of teacher learning into the classroom. Although the researcher could not completely absent her voice from the study, strategies were employed by the researcher to objectively and reliably represent the views, ideas, and perspectives of the participants and to ensure the trustworthiness of the study.

Trustworthiness

The researcher used several techniques to ensure trustworthiness of this qualitative case study. Accuracy of the data was ensured by checking interview and group transcripts for errors, employing the aid of a disinterested reader to check for inconsistencies in data, and continual cross-checking of codes during data analysis to maintain consistency in interpretation. Credibility was ensured through making sure perceptual data collected from staff members were accurate through peer debriefing, member checking, and triangulation of data from all sources (Creswell, 2009; Mertens, 2005).

Qualitative research falls within the constructivist paradigm. The constructivist lens suggested an emerging design for this case study. Minor changes occurred in the design as the research was conducted. Dependability of the research was ensured through a dependability audit in the form of a protocol for the case study that was used to track any changes in the study design during the research process (Mertens, 2005). Confirmability was established through the use of an external auditor who reviewed the study for inconsistencies in interpretation of data. The external auditor checked for accuracy in the transcription of audio recorded data, judged the relationship between the data and the research questions, and looked for inconsistencies in interpretation of the data by the researcher (Creswell, 2009).

Transferability of the study to other schools was accomplished through thick, rich description of Southeast Elementary School, the participants in the study, and the professional collaboration experienced by staff members (Mertens, 2005). The narrative clearly painted a picture of the context of the study and presented the perceptions of the staff members regarding their collaborative relationships and professional development experiences. This will help readers relate to the school and the process the staff has gone through during the school improvement model implementation.

Summary

This chapter detailed the original design for a study of professional development practices at Southeast Elementary School and Midtown Elementary School in the Midwest United States. Recent school reform legislation aimed at improving student achievement and providing parents with the ability to choose which public school their

children attend has served as impetus for school leaders to seek out school improvement models. An essential ingredient for implementing a school improvement model is effective professional development of teachers.

Traditional professional development has been shown not to be effective in changing teacher practice. Targeted professional development that is goal-driven, relevant to teachers' professional practices, learner-centered, self-directed, collaborative, and supportive of a commitment to continuous improvement supports adult learning theory and the development of a PLC.

Southeast and Midtown Elementary Schools are in the process of implementing the same school improvement model, and this process provided the context for the study of the development of PLCs within the schools. Research questions developed for this study related to the role of targeted professional development in the evolution of the PLCs. The research design included details and justification for the purposive selection study participants. Procedures for data collection included individual interviews, focus groups sessions, observation of staff interactions, analysis of public documents, and the keeping of participant journals. Protection of participant rights were ensured through school district and university IRB approval and collection of signed informed consent forms from the participants.

Data analysis procedures included organizing the data, coding the emerging themes, and interpreting the themes in light of the research purpose and theoretical framework. The role of the researcher as an outside observer was discussed, and it was acknowledged that the researcher's perspectives are interwoven in the study due to her

history and personal experiences. Researcher bias was controlled through strategies for ensuring trustworthiness of the study processes and data interpretation.

The researcher ensured credibility of the study through member checking, peer debriefing, and triangulation of data. Dependability was maintained through the development of a case study protocol that was used to track any changes in the emerging design of the study. Confirmability of the research was established through using an external auditor to check the accuracy of the data and its interpretation. Finally, thick, rich description of the context, culture, time, and place of the study ensured transferability of the research to other schools seeking to implement targeted professional development through PLCs.

The following chapters present the findings and analysis of data collected during this study. Results and discussion of findings are provided in Chapter Four. Conclusions and implications for further study are offered in Chapter Five. Appendices include research tools used to collect data significant to the study including survey, interview protocol, focus group protocol, and document analysis guide instruments used to determine the extent to which the school staff members collectively resembled PLCs.

CHAPTER FOUR

PRESENTATION OF FINDINGS

Introduction

Reform initiatives characterized by increasing national control of public education over the past 30 years have worked to standardize expectations for U.S. public schools. Legislative acts, ranging from Goals 2000 to the *No Child Left Behind Act (NCLB)* of 2002 and President Obama's current *Race to the Top (RTTT)* educational initiative, have demanded comprehensive changes in public schools. Corcoran and Silander (2009) emphasized, "Standards-based reforms are asking…schools to do something they have never before been required to do – to succeed at some significant level with substantially all students" (p. 157). Present era economic and restructuring sanctions established by *NCLB* and rewards for compliance with reform initiatives set up by *RTTT* have challenged school leaders to seek out school improvement models that significantly impact student achievement.

Another impetus for the adoption of school improvement models has arisen from the growing public demand for school choice. Opening school boundaries to allow parents choices regarding the schools their children attend was intended by policy makers to promote competition among schools (Hursh, 2005). Competition is seen as healthy and an impetus for school improvement by school-choice proponents (Manno, 2011; Rabovsky, 2011). In reality, research has shown that open enrollment policies have produced devastating effects in loss of resources for schools when parents choose to take their children elsewhere (Bifulco et al., 2009; Howe et al., 2002).

Government-mandated school reform and school choice policies have greatly impacted U.S. public education. Linn et al. (2002) argued that school reform initiatives "motivated by a widely shared desire to improve the education of the nation's youth" are based on good intentions but have produced mixed results (p. 15). Schools embracing change and initiating innovative school programs have gained students and resources. On the other hand, schools remaining entrenched in status quo practices continue to face loss of federal funding, restructuring or closure, and loss of teachers, programs, and students (Howe et al., 2002; Huffman & Hipp, 2003; Kim & Sunderman, 2005).

Research clearly indicates the change necessary to implement innovative improvement programs designed to produce higher student achievement can only occur through effective professional development of teachers (Bryk, 2010; Hord, 2004). Traditional professional development practices, typified by large group workshops, which lack follow-up, feedback, and coaching, have shown very low effectiveness in changing classroom practice or facilitating true teacher learning (Brickmore, 2010; Kaagan & Headley, 2010; Lassonde & Israel, 2010). In order to be effective, professional learning experiences for teachers must be reformed. Joyce and Showers (2002) reasoned, "A curricular/instructional change, mediated through well-designed staff development, can have a major and rapid effect on student learning" (p. 7).

Many reform models are available to schools, but employment of these initiatives remains a challenge (Chynoweth et al., 2008). The key to implementation of these models is targeting professional learning of new strategies and innovative practices to the needs of teachers as adult learners (Fogarty & Pete, 2010; Gibb, 1960; Trotter, 2006). Targeted

professional development that meets the needs of adult learners is self-directed, goal-driven, relevant to teachers' professional practices, learner-centered, collaborative, and supportive of a commitment to continuous improvement (Cudeiro et al., 2005).

Hord (2004) reported that the most effective teacher learning is accomplished through the development of PLCs. The components of effective and targeted professional development mirror the characteristics of PLCs. By implementing the practices of targeted professional development, school leaders develop PLCs of staff members committed to a focus on learning, a collaborative culture, collective inquiry comparing best practice to current practice, and continuous improvement (DuFour et al., 2006).

The purpose of this qualitative instrumental case study was to describe the transformation of two elementary school staffs into PLCs and the role targeted professional development played in these transformations. Southeast Elementary School and Midtown Elementary School located in socioeconomically different neighborhoods of a Midwestern city adopted the International Baccalaureate Primary Years Program (IB PYP) as a school improvement model in 2006. A guiding principle of the IB PYP is collaborative professional development targeted to school and student needs. The researcher's intent was to determine the extent to which professional development at the two schools addressed the staff members' needs as adult learners and was targeted to meet the needs of the teachers, the students, and the school. In addition, the researcher investigated the extent to which the schools' staffs reflected characteristics of PLCs as identified by Hord (2004) DuFour et al. (2006), and Jones et al. (2010).

The following central question guided the collection and analysis of data for this study: At suburban Southeast Elementary School and urban Midtown Elementary School in the Midwestern United States, what has been the role of targeted professional development in creating professional learning communities during the implementation of the schools' improvement model as perceived by the teaching staff members of the schools? The following sub questions helped frame the investigation:

1. How does the functioning of the professional learning community support the teachers' needs as adult learners?
2. To what extent do teachers feel their professional development is targeted to impact their classroom practices?
3. What characteristics of a professional learning community as defined by Hord (2004), DuFour et al. (2006), and Jones et al. (2010) are evident at the school?

The remaining sections of Chapter Four are organized to provide information regarding the study's data collection and analysis and afford a summary of the chapter's main points. The Data Collection section describes the setting of the study, the participants recruited to provide data, and the protocol used to collect data. Following Data Collection is a section on Data Analysis in which the research questions are addressed through the presentation of evidence provided by the data. Finally, a summary is provided to encapsulate the ideas presented in Chapter Four.

Data Collection

Two Midwestern U.S. elementary schools were chosen as the setting for collection of data to support this qualitative instrumental case study. Staff members

within the schools were purposefully selected as participants. The staff members' perceptions regarding professional development practices at the schools were collected through a variety of data collection instruments including an open-ended survey, semi-structured open-ended interviews, and focus groups. Observation data were collected during formal and informal staff collaboration. Data were also collected from public documents including the schools' recent International Baccalaureate Primary Years Program (IB PYP) Evaluation Self-Study and the Missouri State Improvement Plan (MSIP) Faculty Survey.

The following sections briefly describe the setting of the study, the IB PYP as a school improvement model, and the study's participants. Protocols followed to protect of human subjects and guide the conduct of the researcher in completing the study are also discussed. Following the discussion of protocols, a brief description of the data collection instruments and their use in addressing the study's research questions is provided.

Setting

Two elementary schools located in a small Midwestern U.S. city were chosen as the setting for this qualitative instrumental case study. One is a high-performing, low-poverty, suburban school, and the other is a lower-performing, high-poverty, urban school. Both schools adopted the International Baccalaureate Primary Years Program (IB PYP), an internationally-based curriculum model, in 2006. The IB PYP was adopted in order to improve student learning through the implementation of the model's curriculum framework based on constructivist learning theory and best teaching practices.

Southeast Elementary School. Southeast Elementary School is a suburban neighborhood K-5 school built in 1959 that serves 424 students. The student population is made up mostly of white (96%), middle class children. Student achievement scores at Southeast are currently above the district and state averages. Although the school was historically one of the higher performing schools in its district, declining enrollment due to an aging neighborhood population threatened to bring about closure of the school. Public outcry against closing Southeast Elementary School prompted school leaders to investigate innovative program models for the school to implement. The IB PYP was adopted, and Southeast was promoted as a choice school within the district.

Over the six years since the IB PYP's initial implementation, enrollment at Southeast has grown by 43%. Transfer into Southeast is highly coveted by parents living outside the school's attendance zone as evidenced by an increasingly high number of students on the transfer waiting list. During the 2011-2012 academic year, 75 transfer students were enrolled in kindergarten through fifth grade. The school's waiting list for the same year contained the names of 85 students. The IB PYP Self-Study report completed in 2011 by the school staff reported most of the homes in the area were built in the 1950's or 1960's. Property values in the Southeast attendance zone have increased since the implementation of the IB PYP, and when houses are put up for sale, they sell quickly.

Midtown Elementary School. Midtown Elementary School is an ethnically diverse school, serving approximately 260 students. The school has a high minority (30%) student population, is situated in a high-poverty/high crime neighborhood, and

qualifies as an urban school within the context of the small Midwestern city. Midtown was opened as one of the first public schools in the city in 1905, and most of the homes in the area are 80 to 100 years old. Student achievement scores were significantly lower at Midtown Elementary School than Southeast Elementary School prior to the adoption of the school improvement model. As was the case for Southeast, prior to the model's initial implementation in 2006, Midtown had experienced several years of steadily declining enrollment. The decrease in student numbers was attributed to low student achievement and the movement of young families to less blighted, suburban areas of the city.

When the IB PYP was adopted, Midtown was also promoted as a choice school within the district. Enrollment at Midtown increased by 46% since the initial adoption of the school improvement model in 2006. Midtown also maintains a waiting list for transfer students. During the 2011-2012 academic year, the transfer waiting list was populated with 30 names. Midtown remains a high-poverty Title 1 school with 80% of its students qualifying for free and reduced cost lunch benefits. Typically, 10% to 15% of Midtown's students reside at a homeless shelter located just three city blocks from the school. Despite the challenges presented by the high-poverty backgrounds of the students, Midtown has experienced an increase in student achievement as determined by state standardized tests over the six years since initial employment of the IB PYP.

School improvement model. Both Southeast Elementary School and Midtown Elementary School adopted the IB PYP, an internationally-based instructional model, in 2006. Initially, during the application phase of the IB PYP adoption, the two schools were partnered as the staff was trained in the PYP's inquiry-based practices and

constructivist theory. Upon authorization of the schools to officially offer the PYP as IB World Schools, the International Baccalaureate Organization (IBO) advised the schools to develop their programs separately.

At the present time, the two school staffs collaborate with each other and share a single program coordinator, but they maintain their autonomy. During the 2011-2012 academic year, the schools each completed a self-study mandated by the IB evaluation process. The self-study was centered on the IB Standards and Practices that serve to regulate the educational experience for students in the IB PYP schools around the world. The IB Standards and Practices require staff collaboration, shared leadership, shared mission and vision, commitment to continuous improvement, and staff development that is inquiry-based and targeted to the implementation of the program.

Participants

Staff members currently employed at Southeast and Midtown Elementary Schools were purposively selected as the main study participants to be surveyed, interviewed, and observed. Participants were recruited from a pool of 25 staff members at Southeast and 21 staff members at Midtown. Participant recruitment criteria was established to provide the broadest range of perspectives available. Teachers who were employed at the schools prior to the adoption of the school improvement model and teachers who were employed after the school improvement model adoption were surveyed, interviewed, and observed. In addition, the perspectives of the building administrator, the IB PYP coordinator, and support staff including counselors and librarians were sought to enrich the data.

Of the total 40 teachers from both schools invited to complete the open-ended Adult Learning Theory Faculty Perception Survey, eight responded. In all, 20 staff members at Southeast and Midtown Elementary Schools were contacted and invited to participate in semi-structured interviews or focus group discussions. Thirteen of those staff members agreed to participate. Interview and focus group participants included two administrators, one program coordinator, one librarian, one counselor, and eight teachers. Selection of interview and focus group participants was determined by their willingness to participate and their availability. Two of the interviewees and focus group members were male and eleven were female. The study participants' professional experience ranged from less than one full year to thirty years.

At Southeast Elementary School two teachers were interviewed. To protect their privacy, they were coded as T1S and T2S. The Southeast principal was interviewed, and she was coded as AS. For Midtown Elementary School, three teachers were interviewed and were coded as T1M, T2M, and T3M. The Midtown principal was interviewed and coded as AM. An interview was also conducted with the staff member who serves as International Baccalaureate Primary Years Program (IB PYP) coordinator for both schools. During her interview, she provided separate information on each question for each school. She was coded as PC in the interview transcripts and in the findings section of this chapter. Interviews ranged in time from 16 minutes to one hour.

Four of the seven Southeast Elementary School staff members invited to participate in the focus group agreed to meet with the researcher. One of the staff members who agreed to participate in the focus group discussion was absent from school

on the day scheduled for the meeting. Two of the staff members were teachers, and one was the school counselor. The staff members were coded as SET1, SET2, and SEC. Of the eight staff members from Midtown Elementary School who were invited to participate in the focus group discussion, only two were able to meet with the researcher. One of the Midtown focus group participants was a teacher, and the other participant was a librarian. The staff members were coded as MTT and MTL. The Southeast focus group was 37 minutes in length, and the Midtown focus group was 49 minutes long.

Protocol

Initial contact with Southeast Elementary School and Midtown Elementary School was made with the building principals six weeks prior to data collection. An email was sent to each principal outlining the purpose of the study and asking their permission to study the professional learning practices at their schools. Because the study included interviewing, surveying, and observing human subjects, Institutional Review Board (IRB) approval from the University of Missouri was sought and obtained once the building principals approved the research at their sites. Once IRB approval was obtained from the university, school district approval to conduct the research within the district's two schools was sought and obtained.

An introductory email was sent to all staff members of Southeast and Midtown Elementary Schools upon the receipt of school district approval to conduct the research at the two schools. The email provided the study's description and the rationale for the research as well as an invitation to participate as survey, interview, or focus group participants. Staff members who participated in interviews did not participate in focus

group discussions, and staff members who participated in focus group discussions did not participate in semi-structured interviews. A copy of the initial contact emails used to request the principals' permission, introduce the study, and recruit participation of staff members from both schools is included as Appendix A of the study.

Surveys. Following the introductory email, surveys were placed in the mailboxes of all teachers at each school. Attached to the surveys were informed consent letters again explaining the purpose of the study and requesting a signed copy of the informed consent form be signed and returned with the completed survey. A self-addressed envelope was provided to facilitate the return of the survey to the researcher. The survey consisted of six open-ended questions intended to collect data indicating the self-directive, collaborative, relevant, hands-on, and goal-oriented nature of the professional development activities at the two schools. Copies of the letter inviting study participation and describing the study along with the open-ended survey have been included as Appendix B of this study.

Interviews. Contacts with interview and focus group participants were also initially made through email. Follow-up phone calls and emails were used to establish the schedule for interviews and focus groups. Interviews with administrators and the IB PYP coordinator were conducted in their offices, and interviews with teachers were conducted in the teachers' classrooms to ensure privacy and convenience for the participants. The purpose of the interviews was to supplement survey responses and to provide a deeper understanding of professional development practices at the two schools than could be gleaned from survey responses. Interview questions were aimed at obtaining data

regarding the participants' perceptions of the extent to which the schools' staffs reflected characteristics of PLCs.

Copies of the emails sent to staff members inviting their participation as interviewees, the script for a follow-up phone call to remind staff members of the interview date and time, and the informed consent form have been included as Appendix C of this study. A copy of the interview protocol used to collect data is included as Appendix D.

Focus groups. The Southeast Elementary School focus group discussion was conducted in the classroom of one of the focus group participants to provide for convenience and privacy. The Midtown Elementary School focus group discussion was conducted in the IB PYP coordinator's office at Midtown. The purpose of the focus group interviews was to provide an opportunity for staff members to interact as they provided data regarding the existence of supportive conditions, shared and supportive leadership, commitment to continuous improvement, shared practice, and shared vision among the staff members within the schools.

Copies of the recruitment email for focus group participation, the script for a phone call made to remind participants of the focus group session date and time, and the informed consent form have been included as Appendix D of this study. The focus group protocol has been included as Appendix E.

Observations. Staff members of Southeast and Midtown Elementary Schools were informed of the observations that would be made of their professional development activities in the introductory email. One whole-staff professional development activity

was observed at Southeast, and one small, collaborative planning activity was observed at Midtown during the study. An observation protocol was used to focus the observation field notes on staff interactions that addressed the adult learning theory framework of the study and characteristics of a PLC. A copy of the observation protocol has been included as Appendix G of this study.

Document analysis. The IB PYP Evaluation Self-Study documents for Southeast and Midtown Elementary Schools were obtained from the program coordinator, and the Missouri School Improvement Plan (MSIP) faculty survey from each school was obtained through the Missouri Department of Elementary and Secondary Education's public website. Data collection from both public documents was focused on items that reflected the extent to which the schools' staff members collectively resembled PLCs. The document analysis guide has been included as Appendix H of this study.

Participant journals. Due to time constraints and the impending IB Evaluation visiting team's arrival at the two schools during the month set aside for this study, it was not possible to recruit participants to keep journals of their collaborative experiences as was originally planned. The researcher was confident the other data collection instruments had successfully captured the evidence that would have been provided by participant journals.

Data Analysis

Data collected through a variety of instruments were reflected upon in light of the research questions as the data were collected. Formal data analysis began with transcription of the semi-structure interview and focus group discussion audio recordings.

Transcripts were read, and repeated words, phrases, and ideas were noted in the margins. In like manner, patterns were identified in Adult Learner Faculty Perceptions Survey responses, MSIP faculty survey results, and program model self-study documents. Observational field notes were also examined for evidence of repeating patterns.

Research Questions

The study's research questions were derived from the following central question: At suburban Southeast Elementary School and urban Midtown Elementary School in the Midwestern United States, what has been the role of targeted professional development in creating professional learning communities during the implementation of the schools' improvement model as perceived by the teaching staff members of the schools? This guiding question expresses the relationship between the study's conceptual framework of adult learning theory and learner centered theory for adults and two major ideas investigated by the researcher: targeted professional development and professional learning communities.

The assumption was made that adult learning needs of teachers would be met though developing targeted professional development experiences that are self-directed, goal-driven, relevant to teachers' professional practices, learner-centered, collaborative, and supportive of a commitment to continuous improvement. Through the review of literature, a strong connection was discovered between targeted professional development and the creation of PLCs.

The purpose of the study was to illustrate the interconnectedness of adult learning theory, targeted professional development, and PLCs by collecting evidence to support it

from two schools implementing the International Baccalaureate Primary Years Program (IB PYP). The IB PYP sets standards that require school personnel to share in decision making, share common goals, practice collaborative learning, and set high expectations for continuous improvement. Professional learning in a PYP school, as a result, is intentionally collaborative, relevant to teacher practice, and focused on continual reflection and evaluation of practice. The research questions, then, were focused on collecting evidence of teachers' perceptions of the extent to which their professional development is targeted to impact their professional practice, meets their needs as adult learners, and has formed them into PLCs.

Figure 1 illustrates the interrelationships between adult learning theory and targeted professional development that creates PLCs. This figure shows when that adult learning needs guide targeted professional development, PLCs are created.

The sections following *Figure 1* present the findings from the data that address each research question. These findings provide perceptual evidence of the extent to which staff members of Southeast and Midtown Elementary Schools perceive their professional learning addresses their needs as adult learners, is targeted to impact their classroom practice, and reflects the characteristics of professional learning communities.

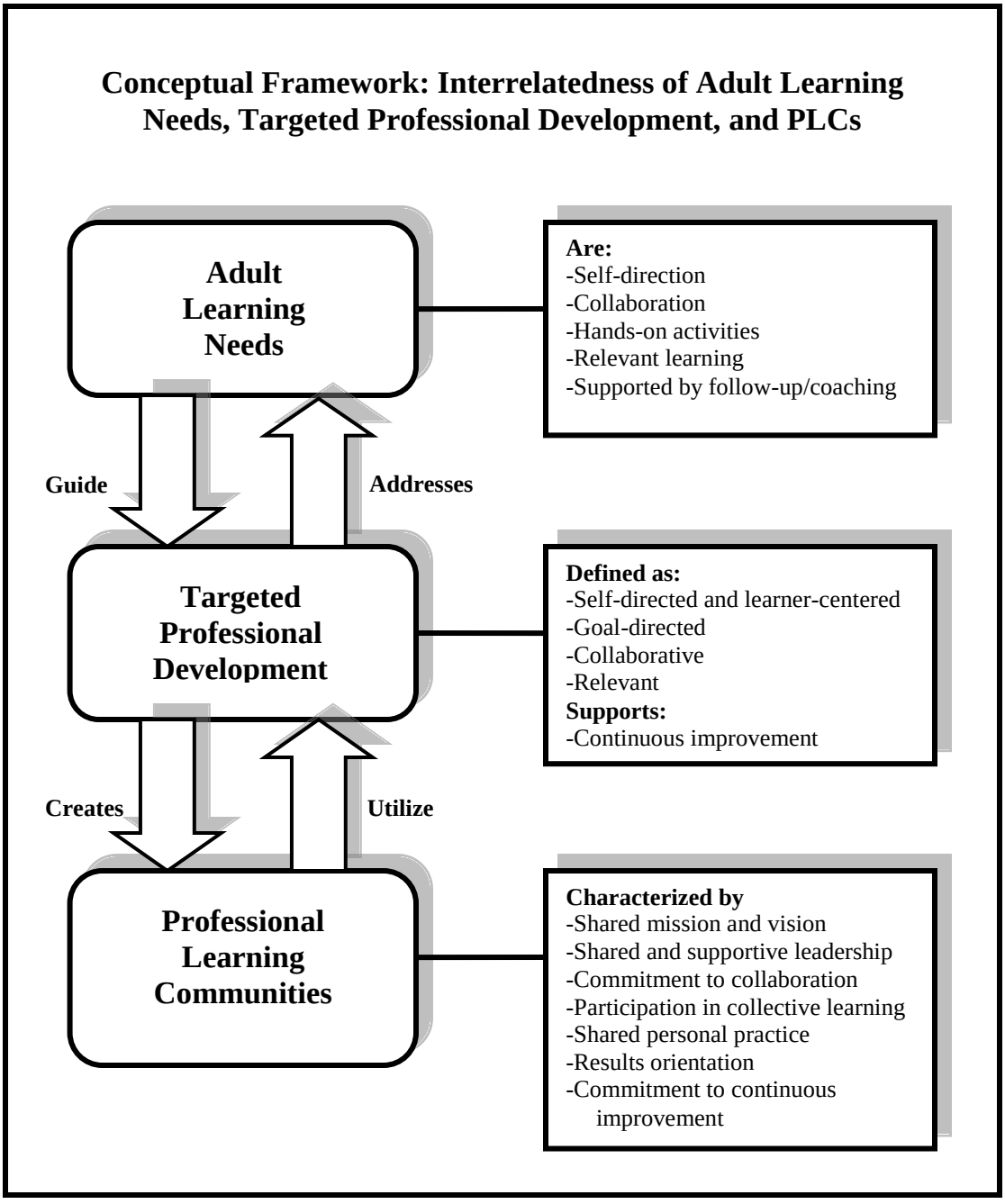


Figure 1. As adult learning needs are met through targeted professional development, professional learning communities are created.

Research Question One

How does the functioning of the professional learning community support the teachers' needs as adult learners? This question assumes the staff members of Southeast Elementary School and Midtown Elementary School function as PLCs. According to Fogarty and Pete (2009), teachers, as adult learners, need professional learning experiences that are self-directed, collaborative, hands-on, relevant to their professional practice, and supported with follow-up and coaching. The Adult Learning Theory Faculty Perception Survey was designed for this study to collect evidence on whether teachers perceived their professional learning experiences of the schools supported these needs.

Examination of the data seemed to indicate teachers' needs as adult learners were being met. Some needs were met to a greater extent and some to a less extent depending on the school and, in some cases, the level of professional experience of the teachers. *Figure 2* indicates, on a continuum of low to high, support the level to which faculty indicated their professional learning opportunities addressed their needs as adult learners. Data findings presented in the sections following *Figure 2* have been organized in order from the strongest to the weakest support for adult learning needs according to the respondents' perceptions.

Research Findings: Support for Adult Learning Needs				
Southeast Elementary School				
Adult Learning Needs	**Low**			**High**
Professional learning opportunities are supported by follow-up and coaching				**X**
Professional learning opportunities are collaborative.				**X**
Professional learning opportunities are self-directed.				**X**
Professional learning opportunities are relevant to classroom practices.			**X**	
Professional learning opportunities are hands-on.		**X**		
Midtown Elementary School				
Adult Learning Needs	**Low**			**High**
Professional learning opportunities are supported by follow-up and coaching				**X**
Professional learning opportunities are collaborative.			**X**	
Professional learning opportunities are self-directed.			**X**	
Professional learning opportunities are relevant to classroom practices.			**X**	
Professional learning opportunities are hands-on.		**X**		

Figure 2. Research findings indicated at Southeast and Midtown Elementary Schools adult learning needs were supported during professional learning opportunities.

Follow-up and coaching support. The first survey question addressed the issue of follow-up and coaching support: "How are you supported when you try new strategies in your classroom?" All teachers, from both schools, voiced affirmation and enthusiasm for

the support they received to try new strategies in their classrooms. When it came to follow-up and coaching support, though, the survey data revealed a more consistent approach at Southeast Elementary School than at Midtown Elementary School.

All four Southeast teachers, who responded to the survey, expressed a positive response to the feedback and coaching they received from their peer teachers who encouraged their experimentation with new strategies. Two mentioned they received support from the principal in addition to colleagues, one mentioned the literacy leader, and one identified the IB PYP coordinator as active supporters of innovation in addition to peers. One Southeast teacher shared:

> As a member of an astounding community of life-long learners, who are eager to be risk takers, my peers and I are supported by our administrator, support staff, and each other. Modeling, coaching, observation, assistance (literacy leader) anything to support student learning is attainable.

Another teacher expressed, "The *most* support comes from colleagues willing to lend an ear to my perceptions about how the new strategy is working out."

Two teachers, who identified themselves as veterans at Midtown, spoke of having "autonomy" to select and try new strategies, but they did not mention whether they received feedback or coaching on new strategies. Two self-described new teachers from Midtown described their appreciation for feedback and coaching they received from their peers and the principal. One first-year teacher stated, "Since I am a new teacher, everything is new to me. I am *always* trying to build up my techniques and try new things. My principal and my mentor are very supportive and comforting when things

fail." The other agreed, "[The principal] is frequently in and out, and I often bounce ideas off him. My [grade level] partner is my hero, and has been my role model *each step* of this 1st year for me."

Collaboration. Question two on the survey was designed to glean perceptual data in reference to meeting the teachers' need to collaborate: "In what ways do staff members within your school help each other learn new strategies?" A repeating theme emerged from survey data that the Southeast and Midtown Elementary Schools' staff members had come to depend on their colleagues and highly value their opportunities to collaborate. Teachers from both schools noted they derived benefits from informal hallway conversations and formal whole faculty study group collaboration. Southeast teachers, though, seemed to feel more comfortable giving and receiving support to each other than did the Midtown teachers.

At Southeast, staff members seemed to feel collaboration was natural and expected. All four of the responding Southeast teachers mentioned the sharing of new ideas in whole staff sessions. Three of those respondents also signified the importance of small group collaboration to learning new strategies. One teacher summarized, "Support across the board is available." Another staff member agreed, "Everyone has an interest in collaboration and learning."

Ease of collaboration at Midtown seemed to be tied to length of service. Two Midtown teachers who had described themselves as new enjoyed being able to observe other teachers and solicit feedback and coaching from their peers. One of those teachers enthused, "I like to observe and discuss new strategies and successful implemented

strategies with my mentor and aid. I feel it would be very beneficial to see it in action during a peer-coaching and modeling session." The other new teacher articulated an appreciation of peer visits and feedback, modeling of strategies by colleagues, researching together via the Internet, sharing resources, and contributing to online staff-created web pages.

Another self-describe veteran Midtown teacher expressed being at ease with seeking help from other veteran teachers or the literacy coach. This teacher, however, indicated hesitancy to offer help to new teachers:

> I can…help out other, newer teachers with classroom management, writing, or math teaching. I find that waiting for someone to ask works best. I have visited our new teachers and offered to help, but they weren't in a space where they could hear anything new.

This sentiment could be interpreted as echoed by the other veteran teacher who simply offered, "All staff members are happy and willing to share new strategies if asked."

The difference in ease with collaboration at the two schools was addressed by the IB PYP coordinator during her interview. She indicated the expectation had been set at Southeast for regular staff collaboration by a former administrator several years before the IB PYP was introduced at the school. Southeast is a larger school than Midtown, and the staff has consisted of at least two teachers per grade level for several years. Less staff turnover has occurred at Southeast than at Midtown, and the staff members have known and collaborated with each other for a long time. As a Southeast teacher who has been at the school for 16 years, TS2 confirmed that the staff had long ago overcome the

awkwardness of collaboration and set standards that had become natural expectations. She stated, “We have good relationships because we know each other well.”

Collaboration is a fairly new concept for Midtown staff, some of whom still do not have grade-level colleagues with which to collaborate. In addition, when the IB PYP was first introduced, Midtown did not have as many teachers who were on board with the new program. The PYP coordinator explained, “There was not…someone on every grade level that was pushing towards the program…They were not used to collaborating as much.” The writing of essential agreements for professional behavior including collaboration has helped. In fact, the only staff member who mentioned the essential agreements was T1M, a teacher at Midtown. He expressed the belief that the essential agreements would, over time, become natural expectations as staff members held each other accountable to them.

Effective collaboration is challenging when it is first introduced. Southeast teachers experienced that discomfort with collaboration prior to the adoption of the IB PYP. Midtown staff members are still working through collaboration issues. Staff members indicated a growing reliance on working together at Midtown, particularly among the newer teachers. Over time, the expectation was expressed that collaboration would become a more natural part of working at Midtown and would continue to be an essential ingredient to the perceived success of staff performance at Southeast.

Hands-on learning experiences. Survey question three asked, “How often are professional activities in your school designed to be hands-on experiences?” Responses to this question by teachers from both schools varied widely.

At Southeast, only two teachers mentioned hands-on district training in the use of the same technology. One teacher responded cryptically, “As often as they are obtained.” Another teacher stated, “Probably not as frequently as possible.” There were no other matching answers from Southeast teachers.

Midtown teacher responses also varied widely. One teacher reported, “The professional activities almost always require our participation and/or input.” Conversely, another teacher responded, “Not often enough.” Two other teachers answered, “Monthly, at least” and “About every few months.” The variance in responses may have resulted due to lack of survey question clarity.

The first research question intended to collect faculty perceptions on how the functioning of their PLCs supported their needs as adult learners. At both schools, evidence was collected that teachers’ learning needs to self-direct their learning, collaborate with others, participate in hands-on and relevant experiences, and receive supportive follow-up and coaching when trying new strategies were addressed. In fact, staff members have grown to rely on this approach to professional development. Furthermore, they expressed frustration with experiences designed for them that did not meet their learning needs. Without exception, teachers indicated through their survey responses that they believed the buy-in for the IB PYP at their schools was high because of the way their professional learning met their needs as adult learners.

Self-directed learning. The fourth survey question asked teachers to express their views on the extent to which they self-direct their learning by asking, “How are you included in decisions regarding your professional development?” Responses to this

question varied between the two schools. Still, teachers at both Southeast and Midtown Elementary Schools indicated they self-directed most of their professional learning.

Teachers at Southeast Elementary School all expressed a sense they felt some control over their professional development which one respondent articulated was an intended result of leadership team planning. The teacher explained:

> The leadership team looked at our areas for improvement and created WFSG [whole faculty study group] categories from which teachers could choose...We hoped that teachers would have more buy-in if they chose what WFSG they wanted to join and if it authentically applied to what we already agreed we needed to work on.

Two of the Southeast teachers mentioned they had choice in off-site conference location and topic. Additionally, two of the teachers indicated they had been given the choice of WFSG topic to study. One of the Southeast teachers mentioned, "I feel as though I *mostly* have control *except* for the district trainings which *most* of the time do not apply to the IB schools."

At Midtown Elementary School response to this question was mixed. One teacher from Midtown also seemed to interpret this question as a district-related issue as did one teacher from Southeast. The Midtown teacher expressed,

> I'm not [included in professional development decisions]. By choice. I don't care and find it to be a waste of time. District professional development is a colossal waste of time. So I show up and shut up and consider input useless.

Two of the other teachers from Midtown indicated they were included in the planning of their professional development. One mentioned being able to choose from several WFSG topics, as did teachers at Southeast. Another Midtown teacher reported decisions for professional development were made by the principal and the Core Team, "but staff is involved in the actual P.D. discussions and meetings." This appeared to indicate the teacher felt some control for professional learning within the framework established by the leadership of the school.

Relevance to professional practice. The fifth survey question inquired into whether teachers perceived their professional development was relevant to their professional practice. The question asked, "How does your professional development impact your classroom instruction?" Once again, answers varied between the two schools. Southeast Elementary School teachers tended to see their professional development as more consistently and directly related to their teaching than did Midtown Elementary School teachers. Staff members at both schools, though, indicated they felt some of their professional development had no impact on their classrooms.

Teachers from Southeast generally responded that their professional development related to their inquiry-based, IB PYP instructional model directly impacted their classroom practice. One teacher specifically indicated off-site IB training, district technology training, and Visual Thinking Strategies (VTS) training received at another off-site workshop as having great impact on the teacher's classroom practice. One teacher acknowledged, "Those [professional learning experiences] that are positively received and easily integrated across the PYP curriculum are practiced." This teacher also

indicated newly learned strategies that were "developmentally appropriate," supported student engagement, and increased student learning would directly impact classroom practice. Similarly, another teacher stated, "The *only* PD that impacts my instruction is the type directly applicable to my craft." Generally, Southeast teachers agreed their professional development impacted their classroom teaching even though they provided different examples demonstrating application of learning.

Interestingly, Midtown teachers' answers varied, it seemed, according to the teachers' length of service. A self-described veteran teacher stated, "When I began teaching, [professional development] transformed my classroom. Now it only makes a slight change." Another veteran teacher responded, "Mostly [professional development] helps me be better aware and informed of new strategies." Self-described new teachers' answered in a way that showed a slightly different interpretation of the question. One teacher simply stated, "Some more indirectly (K-5 placemat). This answer seemed to indicate the teacher was referring to Missouri Assessment Plan (MAP) documents that indicated grade level expectations. The other new teacher's answer did not provide insight into whether or not the teacher's professional development impacted the teacher's practice in the classroom.

Research Question Two

To what extent do teachers feel their professional development is targeted to impact their classroom practices? Findings from data collected were fairly consistent indicating staff members of both schools believe most of their professional development

is targeted to align their classroom practice with the IB PYP Standards and Practices and has directly impacted teaching at their schools.

Classroom impact. Data from the Adult Learning Theory Survey responses, interviews, and focus groups were triangulated with document analysis of the Missouri School Improvement Plan (MSIP) and IB PYP evaluation self-study documents to provide the most coherent picture of application of learning. Survey, interview, and focus group participants indicated an expectation that professional development/learning experiences produce classroom results at both schools.

One survey respondent from Southeast stated, "What we learn drives our daily practice. Because we are encouraged to be active learners we then can bring something new to our classrooms." Interview participant T1S agreed, "Most everything that we do in some way affects the students." The Southeast principal also agreed that site-based professional learning had a significant impact on classroom practice. Her perception was supported by her observation of teachers. The principal shared:

> I think a majority of what we do at the site level…[is] being carried over into the classroom on all sorts of levels. I think evidence of that is…when I sit and listen to teachers and their reflections about what they are doing in their classroom, and they talk about and reference things that have come out of professional development opportunities.

The Missouri School Improvement Plan (MSIP) Faculty Survey asked teachers to respond to two statements designed to gauge the effect of their professional development on their teaching. The two MSIP items chosen to gauge the effect of teachers'

professional development on their teaching were: (47) Our professional development improves student achievement; and (62) My professional development has improved the way I teach. Of the 22 Southeast staff members who responded to MSIP Faculty Survey item 47, 90.9% indicated they agreed or strongly agreed with the statement. Twenty-one teachers from Southeast responded to item 62, and 95.2% agreed or strongly agreed with the statement. Document analysis of the MSIP Faculty Survey corroborated Southeast teachers' perception that their professional development impacted their classroom instruction as indicated by interview responses.

Staff member interview and Adult Learning Theory Survey responses at Midtown showed mixed results regarding whether professional development impacted classroom instruction. T1M pointed out the IB PYP requires that most of the professional development of the school translate into classroom practice. On the other hand, a survey respondent indicated professional development did little to impact her teaching.

The Midtown principal agreed professional development is targeted to improving classroom practice. His opinion, however, was less positive about how much change has occurred in the classroom at this point in the PYP implementation at Midtown. He explained, "The concept is, 'Does the philosophy that we're adopting change our practice?'…It's changed our practice in the big picture, but I'm not sure it's changed our practice as much in the little picture yet." He expressed the perception that while teachers understood the philosophy behind the IB PYP, they were struggling with the day-to-day application of PYP practices. He was not sure philosophical understanding of the PYP was translating into how reading or math lessons were taught at Midtown. He admitted,

"I think…some teachers are ahead of others…Some of them are really making those shifts, and some of them are just starting."

Of the 10 Midtown staff members who responded to MSIP item 47 (Our professional development improves student achievement), 98% agreed or strongly agreed with the statement. Of 16 Midtown staff members who responded to MSIP item 62 (My professional development has improved the way I teach), 100% agreed or strongly agreed with the statement. MSIP data seemed to be somewhat contradictory to Midtown Adult Learning Theory Survey and staff interview responses regarding the impact of staff members' professional development on teaching the building.

Levels of impact. Most teachers at both schools divided their professional development experiences into four categories: on-site, small collaborative group learning; off-site learning training and workshops; required district-provided professional development; and on-site professional development in program philosophy and evaluation.

Of the four types of professional development activities, most of the staff members at both schools agreed the greatest impact on classroom practice was experienced as a result of the on-site, small collaborative group learning. Less impact was experienced as a result of off-site training and workshops. An even smaller impact on classroom practice was attributed to district provided professional development. A separate category of professional development staff members felt produced very little or no change in classroom practice was identified as whole staff professional development

that revolved around work associated with the PYP evaluation and the basic understanding of the program.

On-site small group learning. Most teachers at both schools expressed a belief through interview and focus group responses that their greatest learning experiences occurred in smaller whole faculty study group (WFSG) collaborations and other small collaborative groups. They also indicated these experiences had the most direct impact on their classrooms. Teachers at both schools are given choice of WFSG topics based on school needs identified through the PYP evaluation self-study.

Southeast interview participant T2S contended, "When we're meeting…in…our whole faculty study group, we directly come in [the classroom] and use it." Another interview participant from Southeast, T1S, agreed that new learning from WFSG activities directly impacted her classroom teaching. During the focus group discussion at Southeast, SEC enthused, "I think the whole faculty study group that we had this year was one of the best…I've ever participated in…We actually got to think about where inquiry affects us, how we implement it in our planner, in our classroom."

As a new teacher at Midtown, T2M explained how she valued her WFSG experiences: "We talk among our peers [about] how we can implement different things that we're researching into our classroom…It's kind of a priority for me, because I am new." Midtown's building principal signified WFSG learning extended beyond the four to six members of the group: "Several of the groups have set up their own Wikis and places that…they've invited the whole staff to visit and explore."

Staff members at both schools also indicated they experienced significant learning that translated into improved classroom practice as they worked on grade-level teams to complete required reflections on their PYP required unit planners. T1S described the rich conversations she has experienced that aided her professional learning and directly impacted her classroom practice:

> Sometimes we'll pull student work and kind of look at, "Okay, this is where we're at. Where are you? Where do we need to be? Well, how come my kids did this, and your kids did that?" And we'll kind of reflect on, "Well, I had an anchor chart" or "I did cooperative learning groups."

The focus for grade-level group reflection for teachers at both schools was indicated to be student-centered. Teachers looked at student learning to determine the success of their teaching strategies. New teaching strategies learned and developed in small group sessions were more likely to be translated immediately into classroom practice than information provided at whole staff meetings by staff members who attended off-site training and workshops.

Off-site training and workshops. Survey, interview, and focus group responses from both schools indicate teachers bring a certain amount of knowledge back to their classrooms from most of their professional development experiences. At Southeast and Midtown Elementary Schools, it is expected that teachers who attend official, out-of-state IB trainings or other off-site workshops return to their schools and "share out" at staff meetings, providing other teachers with information on new strategies and skills they can use in their classrooms. Interview participant T2S described a recent example in which

she was able to bring new learning from an off-site professional development experience to the staff members of the Southeast:

> [My grade level team members] and I went up to Sedalia to the Doms… Museum…We went through this whole thing on visual training, and we brought it back…As soon as we brought it back, teachers were using it left and right because it's total inquiry.

Support for evidence of the "share out" practice at Southeast which resulted in changed classroom practice was documented by staff members in the school's IB PYP Evaluation Self-Study document: "As a result of school visits to other IB schools, teachers have integrated new information into their units of inquiry." One Southeast teacher, though, indicated the application of information shared out at staff meetings was only applied if it was truly new knowledge. A veteran teacher of 30 years, T2S, admitted, "I may bring that back and use something in the classroom. Sometimes, it's the newer teachers. I won't bring it back because I already know that, or we've already used that."

Midtown teachers also obtain new knowledge they can use in their classrooms through share out practices at staff meetings by teachers who have been to off-site training or workshops. T3M described the learning experiences brought back in this way to Midtown staff meetings as ranging from simple quick verbal summaries to mini lessons addressing new learning. One Midtown Adult Learning Theory Survey respondent did not find share out sessions or other professional learning activities particularly helpful. This respondent stated, "During the year, [my] professional

development changes perhaps one classroom practice." This same respondent labeled district professional development the least valuable of all professional learning activities.

Required district-produced professional development: A certain amount of annoyance was expressed by staff members at both schools when they discussed district required professional development. IB PYP program coordinator explained the staff members' frustration:

> Not everything the district does aligns with our philosophy of how children learn...Not every teacher presenting believes in inquiry-based learning. So they're forced to go to district presentations that are provided by teachers who are not inquiry-based teachers...Even if they wanted to implement some of the stuff they hear, there wouldn't be huge opportunities for them to get to do that unless it fit our program.

As an inquiry-based program, the IB PYP requires teachers to write their own curriculum based on student questions that fall within the topic being studied. For that reason, teachers use little of the district provided textbooks, and they do not follow the district provided curriculum guides. Teachers become frustrated at being required to attend district-required, curriculum workshops because activities are geared toward textbook adoptions, and standardized curriculum guidelines for each grade. T1S revealed, "We go, and I can't say that I dislike it…It's just a really hard spot…It's all about their curriculum that they've bought, and we don't necessarily use much of it and so it's kind of a waste of time."

The Southeast principal had mixed feelings regarding the value of required,

district-produced professional development. She observed the classroom impact of district technology trainings, the district-sponsored literacy leader training, and the district learning model. She admitted, however, district curriculum activity days were not helpful to her IB PYP staff and stated, "When [the PYP teachers] have written their own curriculum, it's really hard for them to sit in a professional development on a curriculum that they're not…going to be utilizing."

Most of the teachers at both schools expressed they dreaded required district-provided professional development activities. Others indicated a tolerance and willingness to try to find something in the district workshops they could bring back to their classrooms. T2S acknowledged, "I always try to pick the [district workshop] where there's a literature [emphasis], you know, like an author, or something like that, that I can go in and learn from, and, so, I bring it back." The translation of district-provided professional development into improved classroom practice, however, was the least effective of all forms of professional development teachers experienced according to the study participants.

Program-specific philosophical/fundamentals training. A fourth type of professional development immerged from the interview data that staff members perceived had little or no impact on classroom practice. Staff members agreed that learning the basics of the IB PYP was important in understanding philosophy of the program. They also saw the evaluation self-study as a valuable learning experience that helped them better understand how to better implement the program at their schools. Two teachers, one at each school, noted that training in the basic fundamentals of the IB PYP

philosophy did not impact their classroom practice. One newer teacher at Southeast and one newer teacher at Midtown mentioned that learning the basics of the program implementation did not translate into their classrooms. T1S revealed:

> Towards…my first and second year…when I was going to all that professional development about the IB PYP…it was more about learning the ins and outs of the program. I wasn't learning anything specifically to come back with a lesson…that would impact my students.

Midtown teacher, T2M, also voiced the perception that "necessary things" related to school policies discussed at staff meetings did not impact her teaching. She explained, A lot of the [discussion items] are…what we have to talk about, like what needs to be up in your classroom…kind of just the formalities, not really teaching practices."

These teachers did not see a direct relationship between classroom practice and learning the basics of the IB PYP. They did consider these meetings to be necessary to setting up foundational elements of program philosophy within the schools that made implementing the PYP possible.

Figure 3 represents the different levels of impact Southeast and Midtown Elementary Schools' professional development experiences had on classroom practice according to the staff members' perceptions. Small group experiences had the most impact and are represented by the largest box in the figure. Off-site PD and district-provided PD had less impact and are represented as smaller boxes. Since teachers indicated basic training in fundamental program elements did not impact their classroom teaching, that professional development practice is not represented in *Figure 3.*

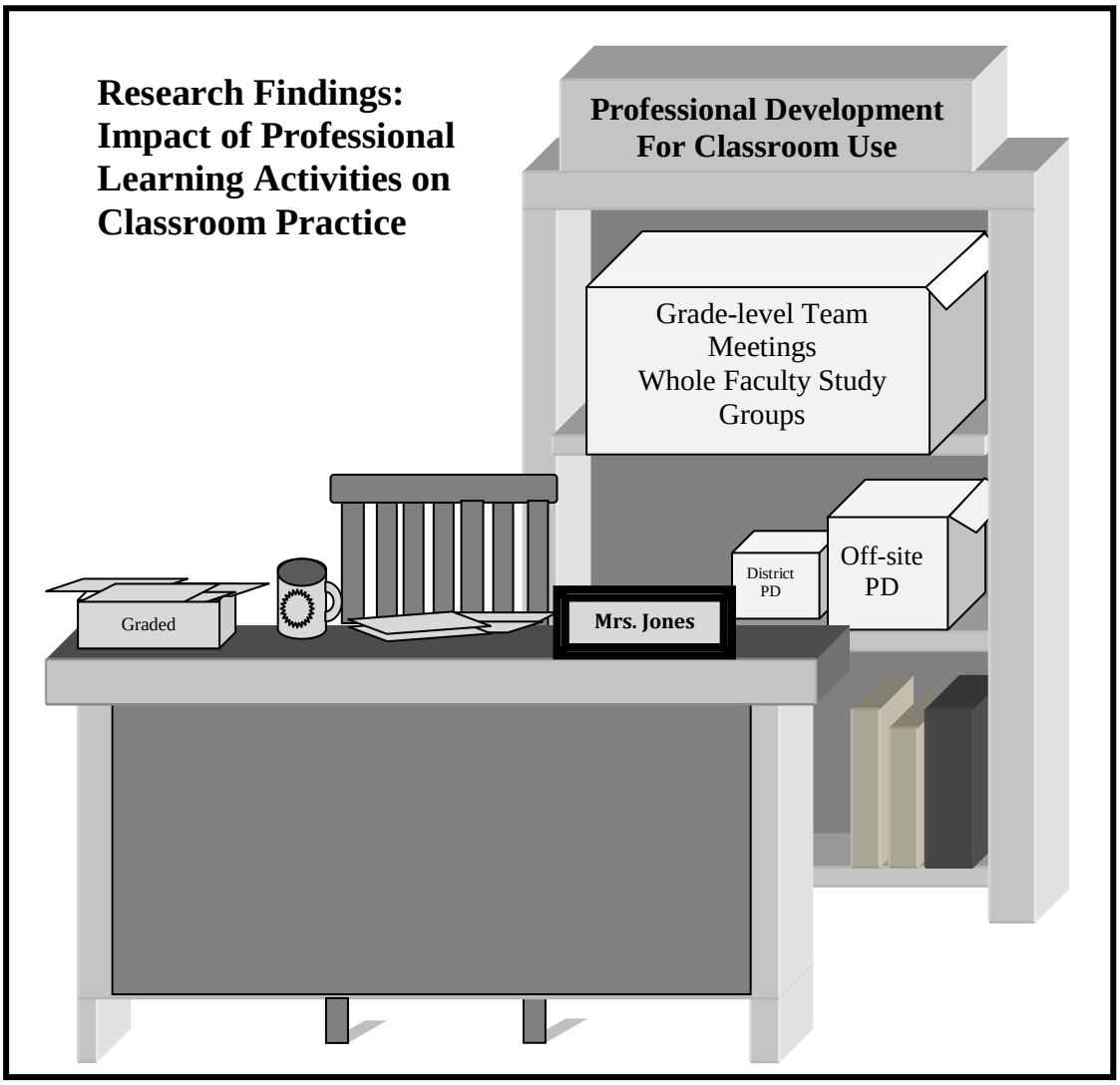


Figure 3. Research findings: Southeast and Midtown Elementary School staff members perceived small group PD had the most impact, off-site PD had less impact, and district-provided PD had the least impact on classroom practice.

Research question two focused data collection on gathering staff members' perceptions regarding the extent to which professional development is targeted to impact

classroom practice at Southeast and Midtown Elementary Schools. Missouri School Improvement Program (MSIP) Faculty Survey data, the IB PYP Evaluation Self-Study, and semi-structured interviews and focus group sessions with staff members from both schools indicated professional learning was being targeted to school, student, and teacher needs. Interestingly, teachers seemed to draw a distinction between the terms professional development and professional learning. They seemed to view professional development as more formal, large group meetings such as required district-provided workshops and large faculty meetings. They seemed to perceive professional learning as what occurred among staff members working in small whole faculty study groups and grade-level teams.

Staff members showed they felt their small group learning experiences were more valuable than the large group meetings. Teachers also expressed they received useful new knowledge from presentations made by teachers who return from out-of-state official IB training and other off-site workshops and conferences. Most of the staff members expressed frustration with district-provided professional development. They signaled the district professional development did not meet their needs as inquiry-based teachers.

Research Question Three

The final research question of this study was: What characteristics of a professional learning community as defined by Hord (2004), DuFour et al. (2006), and Jones et al. (2010) are evident at the school? The seven characteristics of a PLC are shared mission and vision, shared and supportive leadership, supportive conditions for collaboration, participation in collective learning, shared practice, results orientation, and

commitment to continuous improvement (DuFour et al., 2006; Hord, 2004; Jones et al., 2010).

Responses derived from semi-structured interview and focus groups transcripts and observations of staff collaborative interaction were analyzed to gather evidence of PLC characteristics at each school. Document analysis of the Missouri School Improvement Plan (MSIP) Faculty Survey and the IB Primary Years (IB PYP) Program Evaluation Self-Study for each school was also completed to determine the extent to which the schools' staffs resemble PLCs. Evidence collected was grouped according to the seven characteristics of PLCs. Of the seven characteristics, shared and supportive leadership was the most evident, and shared practice was the least evident as indicated by all data collection instruments.

Figure 4 indicates the frequency of staff responses and occurrences in document analysis of each characteristic of PLCs for each school. Coding is used to signify interviewees (PC, AS, T1S, T2S, AM, T1M, T2M, T3M), focus group members (SET1, SET2, SEC, MTT, MTL), MSIP Faculty Survey (MSIP), and IB PYP Evaluation Self Study (PYPSS).

Data Analysis: Occurrence of Seven Characteristics of PLCs

Characteristic	Southeast Elementary School		Midtown Elementary School	
Shared and Supportive Leadership	**Shared**	**Supportive**	**Shared**	**Supportive**
	PC, AS, T2S, SET1, SET2, SEC, MSIP, PYPSS	PC, AS, T1S, T2S, SET1, SET2, SEC, MSIP, PYPSS	PC, AM, T1M, T2M, T3M, MTT, MTL, MSIP, PYPSS	PC, AM, T1M, T2M, T3M, MTT, MSIP, PYPSS
Commitment to Collaboration	**Physical**	**Relational**	**Physical**	**Relational**
	PC, AS, T1S, T2S, SET1, MSIP, PYPSS	PC, T1S, T2S, SET1, SET2, SEC, MSIP, PYPSS	PC, AM, T1M, T2M, T3M, MTT, MSIP, PYPSS	PC, T1M, T2M, T3M, MTT, MSIP, PYPSS
Shared Mission and Vision	**Related to Mission Statement**	**Related to Practice**	**Related to Mission Statement**	**Related to Practice**
	PC, AS, T1S, T2S, SET1, MSIP	PS, AS, T1S, T2S, SEC, SET1, MSIP, PYPSS	AM, T3M, MSIP	PC, AM, T1M, T3M, MTT, MSIP, PYPSS
Commitment to Continuous Improvement	**Reflection-Driven Cycle of Continuous Improvement**		**Reflection-Driven Cycle of Continuous Improvement**	
	PC, AS, T1S, T2S, SET1, SET2, SEC, PYPSS		T1M, T2M, T3M, MTT, PYPSS	
Participation in Collective Learning	**On-Site, Small Group**	**Off-Site Workshop**	**On-Site Small Group**	**Off-Site Workshop**
	PC, AS, T1S, T2S, SET1, SEC	PC, AS, T1S, T2S, SEC	PC, AM, T1M, T2M, T3M, MTT, LB	T1M, T2M, T3M
	District PD	**Other**	**District PD**	**Other**
	PC, AS, T1S, T2S	PC	T2M	PC, AM, T3M, MTT
	Use of Data/Expectations		**Use of Data/Expectations**	
Results Orientation	PC, SET1, SEC, AS, T2S, MSIP, PYPSS		PC, MSIP, T1M, T2M, MSIP, PYPSS	
	Peer Observation/Feedback		**Peer Observation/Feedback**	
Shared Personal Practice	PC, AS, T1S, T2S, SET1		PC, AM, T1M, T2M, MTT	

Figure 4. Codes depict mention of Seven PLC Characteristics at Southeast and Midtown Elementary Schools revealed by analysis of data.

Shared and supportive leadership. Most staff members at both schools indicated the leadership of their schools is shared among the principals, Core Team members, the program coordinator, and other staff members. Most staff members also indicated their schools' leadership was supportive of their collaboration, learning through research and experimentation with new strategies, and commitment to continuous improvement. Document analysis of MSIP Faculty Survey Data and IB PYP evaluation self-study data supports interview participant and focus group responses for both Southeast and Midtown Elementary Schools.

MSIP Faculty Survey Data indicated Southeast showed strong indication of shared and supportive leadership. Three survey items were analyzed to gauge the extent to which staff shared leadership responsibilities. The MSIP items were: (16) Teachers in my school are routinely involved in formulating school-wide decisions and policies; (31) In our school, teachers are encouraged to be instructional leaders; and (113) My principal collaborates with faculty in the decision-making process. Of the staff members who responded to the three survey items chosen to provide evidence of shared leadership at the school 95.5% agreed or strongly agreed with the item 16, and 100% agreed or strongly agreed with items 31 and 113.

Two MSIP items intended to gauge supportive leadership were: (108) The principal at my school values teachers' professional growth through ongoing professional development; and (111) When I have concerns, my principal responds in a professional manner. Of the 22 Southeast staff members who responded to these two MSIP items,

100% agreed or strongly agreed with both items indicating a strong sense that teachers are supported by the leadership of the school

In addition to this strong evidence of shared and supportive leadership at Southeast, focus group participants indicated faculty members have the ability to affect change through their whole faculty study groups, leadership cadre, and the school's core team. They provided examples of the encouragement they receive to take leadership roles. Focus group participant, SEC, revealed,

> Leadership Academy this summer…many of us were encouraged to attend and took advantage of that…Also, cognitive coaching is another type of leadership, uh, opportunity that's available to many of the staff in our building, and will be available to many more next year.

Interview participants also indicated Southeast staff members showed a strong commitment to shared and supportive leadership. The Southeast principal sets the expectation that teachers take leadership roles. During her interview, she stated, "I just wholeheartedly believe in shared leadership." The IB PYP coordinator echoed this commitment when she revealed her "main goal" was to empower teachers.

Two of the Southeast teachers interviewed confirmed that the principal and the coordinator supported collaboration and innovation and provided feedback and coaching on teacher practices. In addition, one interview participant and one focus group participant from Southeast reported on the principal's commitment to peer observation, reflection, and feedback. T1S shared, "I think

[the principal] is trying to make that bridge of, 'I'd like to get everybody into other people's classrooms and taking a look at what you're doing because, as a learning experience, it's great.'"

It is highly evident from the MSIP Faculty Survey results that leadership at Midtown Elementary School is also a shared responsibility among the staff. For all three of the MSIP items designed to gauge the school's commitment to shared leadership, 100% of the staff agreed or strongly agreed with the items. Supportive leadership is also evident through the results of the MSIP Faculty Survey. Of the 16 staff members who responded to MSIP item 108, 100% agreed or strongly agreed with the item. Of 16 staff members responding to MSIP item 111, a slightly lower 93.8 percent agreed or strongly agreed, and 6.3% disagreed with the item.

Midtown's self-study document, interviews, and focus group responses supported the findings of the MSIP survey. Evidence of teacher leadership is provided by the description of the CORE team at Midtown in the school's self-study as a "pedagogical leadership team [that] has been an invaluable and strong force in leading the school through its journey with PYP." Policy and procedures of the school are developed through collaborative efforts of the administrator and the faculty as evidenced by the self-study report. Midtown focus group participant, MTL, concurred, "I think everybody is expected to be a leader in their area, you know, whether it's in the classroom, or in the library, or wherever. I think that's just expected." Another focus group participant, MTT, added that both the IB PYP coordinator and the Midtown principal show supportive leadership as they provided modeling of effective practices, supported teacher action, and

encouraged innovation. Two interview participants, T1M and T2M, agreed the principal and coordinator support experimentation with the practices and continuous improvement.

Generally, staff members from both schools articulated a strong perception of supportive leadership that facilitated the development of the IB PYP at their schools. It is clear from the data that this supportive leadership comes from teacher leaders as well as the principal and PYP coordinator.

Supportive conditions for collaboration. Two conditional supports were examined through this study: physical conditions (time and space) and relational conditions (trust and respect). Staff members of both schools expressed appreciation that time was built into their work schedules to collaborate with their colleagues. Most staff members at both schools indicated not enough time was available for the level of collaboration expected to be done by IB PYP teachers.

Physical supports - time and space. In addition to two and one-half hours per week of grade-level team time, teachers are able to use district- provided, site-directed professional development days to collaborate on unit planning and developing the PYP curriculum. IB PYP teachers also have three early release days built into the academic calendars for their schools. The self-study documents for both schools give a high rating to the statement, "The school provides dedicated time for teachers' collaborative planning and reflection." Time, however, was indicated as the most challenging physical support for collaboration by six of the 13 interview and focus group participants. These six expressed that their collaboration time extended well beyond the formally scheduled time. T1S revealed,

> We have our own walkie-talkie that we kept because two of us are on duty and…one's inside…We pretty much collaborate non-stop, all day long…[One of my teaching partners] will be on duty with me and [my other teaching partner]'s in here, we're collaborating…Lunch, we're constantly talking. We just don't have enough time to get things done, enough physical time.

Since both schools are fairly small, space to collaborate is usually their classrooms. The IB PYP coordinator indicated Southeast does not have a staff lounge large enough for small group collaboration. Midtown does not have a staff lounge at all. In fact, the coordinator stated, "[Midtown's] building presents problems for PYP on all sorts of levels." Proximity is only a problem at Midtown where two teachers who would normally collaborate are located on separate floors. Two Midtown teachers who collaborate with each other are located in a trailer behind the building and separated from the rest of the staff. These proximity issues did not seem to trouble the staff as much as they did the coordinator and the Midtown principal.

Relational support – trust and respect. Relational supports of trust and respect were found to be strong among staff members at both schools. It appeared from interview data that Southeast staff members had been collaborating for a longer period of time and were more comfortable with collaboration than Midtown staff members, however. Document analysis of the MSIP Faculty Survey and the IB PYP Evaluation Self-Study documents as well as interview and focus group responses provided evidence of relational supports of trust and respect among staff members.

The MSIP item that gauged the trust and respect among the schools' staff members was: (15) Norms for conduct that foster collegiality and professionalism among professional staff and administrators are clear and routinely followed. When responding to the MSIP Survey statement, 100% of the staff members at both schools agreed or strongly agreed. The self-study documents for both schools reflected high achievement on the practice, "The school promotes open communication based on understanding and respect." Structure for relational issues of collaboration has been set by the creation of essential agreements written to and regulated by staff members.

The PYP Program coordinator and one Southeast teacher indicated two reasons for high trust and respect among Southeast staff members was that they had long-standing relationships and a strong sense of common purpose. Focus group member, SET1, expressed a slightly different reason for the closeness of the staff at Southeast: "Everybody feels like they're an equal part of what's going on…In that you, you know…there comes a trust relationship, you know. There's empowerment with responsibility." SEC agreed, "Everyone has such a high regard for one another. If we have something to share that we're not certain about…we know that everyone around us is open-minded and will support us if we try to express what we think."

Two Southeast teachers expressed they had come to rely on their collaboration. T2S admitted, "We need [collaboration], and we rely on each other in order to get where we are, in order to know what we're teaching, and in order to learn more about what we're doing." T1S agreed, "My first couple of years, I relied…heavily on my…teaching partners, and I think they relied heavily on me. I…brought a fresh perspective on things."

Of the 16 Midtown staff members who responded to the MSIP Faculty Survey item 16, 100% agreed or strongly agreed with the item. Collaboration for Midtown teachers, however, has been more of a challenge, according to the IB PYP coordinator and the Midtown principal. Because the school is very small, for several years there was only one teacher per grade level. Teachers have not been collaborating as long at Midtown as they have at Southeast. Still four of the Midtown teachers indicated they have come to rely on collaboration with their peers. T1M explained, "I can't expect myself, by myself to do this entire thing. I need [my colleagues'] thoughts. I need their support. I need their ideas." He also indicated that Midtown teachers had become used to collaborating vertically since there was not always a grade-level partner to consult.

The coordinator and T1M stated the small school size has created a "tight-knit" community of teachers. Adult Learning Theory Surveys showed that tight community might be difficult for new teachers to penetrate. While the two new teachers responded to the survey indicating their desire to learn from veteran teachers, one veteran teacher indicated a reluctance to offer advice to new teachers. The PYP coordinator also revealed the Midtown teachers struggled somewhat in learning to collaborate with her, as a former Southeast teacher. Still, T1M, stated:

> We have essential agreements [for professional behavior] that are set up for our whole faculty, and…by our faculty…Every year, they're revisited, and they're talked about. If there's a area of concern, or if there's something that is not right or something we'd like to tweak or change,

> we're all willing to come together and talk about it knowing that these are our agreements. When we agree to them, we have to do them.

Essential agreements set out formal expectations for relationship building at the schools, but staff members shared other reasons trusting relationships have been built and sustained over the years. T1M shared,

> I think because of [Midtown] being the size that it is, about 260 kids, about twelve, eleven teachers, that tightness has to be there…I think it has allowed me, and allowed all the other teachers to really become meshed together and be a tight faculty.

The IB PYP has increased reliance Midtown staff members feel for collaboration. Yet, collaboration remains a challenge due to the layout of the school and the lack, in some cases, of a collaborating grade-level partner.

Shared mission and vision. The mission and vision of both Southeast and Midtown Elementary Schools are focused on implementing the IB PYP and aligned with the IB mission statement. Document analysis of the MSIP Faculty Survey and IB PYP evaluation self-studies indicated a shared mission and vision at both schools. Interview responses confirmed document analysis data of shared mission and vision at Southeast but was not supported by interview responses at Midtown.

Document analysis of the MSIP Faculty Survey indicated at both schools staff members who responded perceive the mission and vision of the schools to be shared. The three MSIP survey items chosen to provide evidence of shared mission and vision were: (32) My school's principal fosters shared beliefs and a sense of community and

cooperation; (53) The mission of this school is clearly defined; and, (122) Teachers are recognize in meaningful ways when they contribute to the school mission and goals. At both schools, 100% of the staff members responding agreed or strongly agreed with the first items 32 and 53. Item 122 received less enthusiastic response from staff members of both schools. Results for Midtown indicated 80% of the staff who responded agreed or strongly agreed with the item. For Southeast, 85.7% of the respondents agreed or strongly agreed with the item.

Additional evidence that staff members at Southeast demonstrate shared mission was provided by the IB PYP Self-Study and interview transcripts. The Southeast self-study proclaimed, "Teachers, administrators, and students share a common language of knowledge, attitudes, key concepts, transdiscipinary skills, and action that comprise the programme, and they recognize that these foster the development of the whole child." Southeast staff members indicated the shared mission and vision extended beyond the school building. T1S communicated, "I think [the mission and vision] shared by our staff and our community of parents and everything."

The Southeast principal contended the staff members demonstrate they share the mission and vision of the school through their commitment to the IB PYP. She explained,

> I think that is evident in their capacity for change…in their willingness to…meet…and go above, and really above and beyond, what they might be required to do if they were at a non-IB PYP school. When they were going through evaluation, they did a couple of late nights and brought in

> pizza and people showed up. No one complained…they weren't getting paid extra. They…did it because…it was important to them.

T1S agreed commitment to the philosophy and practices of the IB PYP was the best indication of shared mission and vision. She stated, "We might have an aide here or there that doesn't really get it. But as far as our teachers, yeah I feel really strongly that they're all on board."

Midtown's evaluation self-study reflected a growing commitment to the IB PYP, the foundation of the school's mission and vision. The self-study document stated, "[Midtown] Elementary's educational beliefs and values reflect IB philosophy. In its journey as a PYP school, the commitment to the IB philosophy continues to deepen and be transformed into action." Two staff members who were interviewed indicated the shared mission and vision are demonstrated by a commitment to the program. When asked whether the mission and vision of the school are shared, T1M responded, "I would say yes only because of the fact that with…this type of teaching and learning style…not just student buy-in, but teacher buy-in, and community buy-in is necessary." The Midtown principal provided evidence of the shared mission at the school as well:

> It hasn't been about, "I've got the mission memorized." It's been about, "What do I do with kids? What do I do with my peers? What do I do with my community? How do I represent the learner profile in my own life?"…Your level of buy-in with the mission, has to be with your level of growth as a learner.

The PYP coordinator and one other staff member expressed reservations regarding whether the Midtown staff shared the mission and vision of the school. While the PYP coordinator felt most of the staff showed commitment to the mission of the school through their participation in the program, she expressed an opinion that about one fourth of the staff was not fully supportive of the IB PYP. Another interview participant, T2M, confided she did not believe the whole staff shares the mission. She indicated staff members who share the mission and vision of the school show they do by speaking up at meetings, coming up with new ideas, and putting in the work and extra time needed to successfully implement the IB PYP.

Southeast and Midtown Elementary Schools share similar missions as IB PYP World Schools. Data indicated staff members at Southeast definitely share the mission of their school. Staff members from Midtown, however indicated there were still some teachers who do not share the school's mission. The demands of implementing the PYP have pushed teachers who were not completely committed to the program out of both the schools. The sharing of mission and vision is aligned closely with staff buy-in for new programs. Though the two ideas are connected, for this study findings on data for the two concepts were addressed separately.

Program buy-in. The final Adult Learning Theory Faculty Perception Survey item was designed to measure the perceived buy-in for the IB PYP by the staff member of the two schools. This item was designed to determine the sense of self-efficacy and

confidence staff members felt existed in their schools and stated, “Please complete this sentence: Staff buy-in for the IB PYP at this school is _____ because _____.” Survey data indicated staff members at both schools reflected a high level of buy-in for the IB PYP.

Six survey respondents from both schools rated the buy-in for the IB PYP as high “high,” “strong,” and “huge.” One staff member from Southeast indicated buy-in at that school was “solidifying,” and one of the teachers from Midtown did not answer the question. It seemed from these responses most of the teachers perceived buy-in as great in their schools. On the other hand, reasons given for the strong buy-in varied among the teachers.

Each of the Southeast teachers provided a different impetus for the strong buy-in for the IB PYP at their school. One teacher viewed it as a result of strong leadership at the inception of the program. Another teacher indicated, “It’s too much work to not be wholly vested in the process.” This teacher also related the high buy-in to student results: “We’ve seen how powerful inquiry and PYP is in our students’ learning and lives.” A third teacher commented, “We all have a commitment to inquiry and believe in international mindedness.” Two of the teachers credited student response to the PYP as the reason for high buy-in at Southeast. One stated, “We’ve seen how powerful inquiry and PYP is in our students’ learning and lives.” The other agreed that changes in students increased buy-in and also resulted in higher job satisfaction for teachers. This teacher revealed:

> Staff buy-in for the IB PYP at this school is extremely high because we are constantly learning, growing, and evolving. Our work is challenging and rewarding because we have to stretch ourselves to think creatively and help kids construct meaning…We see how much our kids truly enjoy school because they are learning how to think and acquiring the skills they need to be life-long learners.

Only one teacher from Southeast distinguished buy-in as a leadership-generated product and stated buy-in at Southeast was strong because "our leadership demanded it early on in the conception of the program."

Reasons given by two of the teachers from Midtown who rated buy-in as high and strong also centered on results teachers observed in student learning. One of the Midtown teachers explained, "[The IB PYP] transforms how students learn, see themselves, and see the world." Another reason proffered by a Midtown teacher for "huge" buy-in was "contagious passion" for the program. This teacher stated, "Most of the [Midtown] staff was here at the inception, and their passion continues to be fresh and is [a] driving force for *all* PD."

If the study had depended on Adult Learner Theory Faculty Perception Survey data alone, it would have appeared buy-in for the IB PYP at Southeast and Midtown Elementary Schools was equally high. Triangulation of survey, interview, and focus group data confirmed the Southeast staff members' commitment to the PYP. On the other hand, triangulation of data revealed a marked difference in the level of staff ownership for the IB PYP at Midtown from what survey data indicated.

Southeast Elementary School survey data showing a high level of staff buy-in for the IB PYP was supported by the interview responses. All interview and focus group participants from Southeast indicated teachers were on board and enthusiastic about the program. The Southeast principal affirmed, "If feel like everyone that's here wants to be here and is willing to give all that they need to [to implement the PYP]." Southeast focus group participant SEC agreed, "Everyone is on board. It is clearly evident."

While three of the four survey respondents from Midtown described the staff buy-in for the IB PYP as high, interview data did not fully support there was 100% buy-in for the program at Midtown. The program coordinator suggested that although teachers were participating in all aspects of the program, "there's still a level of buy-in that about a fourth of them probably don't have." She indicated that, as a staff, the teachers were probably at a compliance level of buy-in. The school principal also showed a reluctance to agree staff buy-in for the program was high. He explained, "I'm not sure [the IB PYP] has changed our practice as much in the little picture yet, but it's forcing us to do that…some of [the teachers] are really making those shifts, and some of them are just starting.

The idea that all staff members at Midtown were not wholly at the committed to the IB PYP was also supported by interview responses of two Midtown teachers. T2M shared her perception that "a lot of people" were not open to change and viewed the new practices as more work that did not impact their teaching even though they complied with program expectations. Similarly, T1M indicated Midtown was still struggling with whole staff commitment to the IB PYP. He explained:

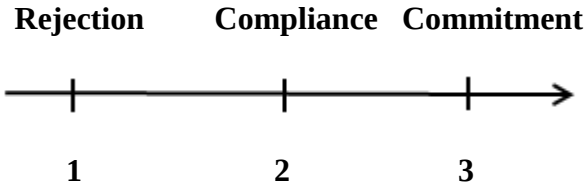
> We have essential agreements…set up for our whole faculty…by our faculty…Every year, they're revisited, and…if there's a area of concern…we're all willing to come together and talk about it. When we agree to them, we have to do them…Sometimes the hardest part is to step forward and say, "You're not doing this" or "We're kind of weak on this." We need to step forward.

Level of buy-in continuum. Through survey, interview, and focus group discussion a pattern formed that indicated three levels of buy-in for program implementation: rejection, compliance, and commitment. Level one, rejection, represents zero buy-in for program implementation. Teachers at this level refuse to try new program initiatives. Compliance, at level two, is characterized by a desire to cooperate and complete necessary paperwork of the program, sit through meetings, and listen as new knowledge is shared. Classroom practice for teachers at this level, however, is changed very little by professional development in the new program. The third level, commitment, is best characterized by a willingness to learn and try new strategies and willingness to reflect and continually improve practices.

Figure 5 shows the Levels of Buy-in Continuum for New Programs that was developed through analysis of staff members' responses. Survey, interview, and focus group data indicate Southeast staff members perceive that the Southeast staff is at the commitment level of buy-in. Midtown survey respondents indicated buy-in at their school was high. Interview responses of the program coordinator, the Midtown principal, and two Midtown teachers, though, seemed to disagree with that assessment. Data indicated,

as a whole, the staff of Midtown would fall somewhere between Compliance and Commitment on the buy-in continuum. The Midtown principal summed it up as he stated, "That's something where some teachers are ahead of others."

Data Analysis: Three Levels of Buy-In for New Programs



- **Rejection - Characterized by**
  - Avoidance and/or refusal
  - Desire to continue current practices
- **Compliance - Characterized by**
  - Completing paper work associated with new program
  - Attending meetings
  - Minimal change in practice
- **Commitment - Characterized by**
  - Willingness to actively implement the program, learn new things, reflect on current practice, and align practice with program standards
  - Belief that the new program improves the educational experiences for students

Figure 5. Data Analysis: Three levels of buy-in for new programs were indicated by the analysis of interview, focus group, and survey data.

At Southeast, the principal, the program coordinator, T1S, and SEC all mentioned that in the early days of the program's development, teachers who rejected the IB PYP left the school. These teachers never moved beyond the rejection level of buy-in for the

program. Other teachers stayed with the program and complied, but eventually left because they never reached the commitment level, according to T1S. The general consensus of all but one of the staff members who participated in the Adult Learning Theory Faculty Perception Survey, interviews, and focus groups was that all Southeast staff members had reached a commitment level of buy-in for the IB PYP. T2S was the only participant from Southeast who revealed a lower level of commitment. She stated, "At least 95% of us [are wholly committed]….We might have an aide here or there that doesn't really get it. But as far as our teachers…I feel really strongly that they're all on board."

At Midtown, staff members shared that teachers who did not want to participate in the program had moved on and were no longer teaching at the school. The program coordinator, the Midtown principal, and T1M all discussed teachers at Midtown who had left the building because they did not want to learn about or implement the IB PYP. The program coordinator and the principal, along with two teachers who were interviewed at Midtown, indicated those teachers who were not totally committed to the program were, at least, compliant with the program requirements. Interview and focus group responses also indicated there were teachers at Midtown who exhibited the characteristics of the committed level of buy-in. For that reason, it was reasonable to conclude the staff as a whole would fall somewhere between compliance and commitment on the buy-in continuum.

Commitment to continuous improvement. Commitment to continuous improvement is strongly related to results orientation. MSIP Faculty Survey items used to

gauge results orientation can easily be used to gauge commitment to continuous improvement indicating each school also shows a strong commitment to continuous improvement. Without hesitation, staff members who were interviewed or participated in focus groups rated their commitment to continuous improvement as very high. Staff members indicated this is due to the reflection requirements of the IB PYP. When teachers complete a unit of inquiry, they revisit it. The required unit planner format lists questions they ask themselves about the student learning they observed during the unit. Planners are revised yearly based on the learning motivated by the reflective process. Teachers from both schools commented that the level of commitment to continuous improvement is manifested by staff members in the following ways:

- The amount of time they put into their work above and beyond espectations
- Their willingness to drop ineffective practices, be risk-takers, and try new strategies
- Their honest, reflective conversations
- Their desire to seek out new ideas, skills, and strategies
- Their eagerness to share their learning with others.

The PYP coordinator described the continuous improvement commitment of Southeast Elementary School:

> We always describe our work as a journey. I think everyone here is like, 'Oh gosh! We know way more than we did six months ago!' And in six months, we're going to think, 'What were we thinking?' Because we'll be in a different place."

Three Southeast staff members indicated they use a cycle of continuous improvement that begins with planning the use of a new strategy, implementation of the new strategy, and reflection of the strategies effectiveness. The Southeast principal described commitment to continuous improvement as personal accountability and following through with "trying a strategy out in a classroom or attending a training." She also related continuous improvement to honest reflection by seeing things as they are and committing to change if needed.

T1M eloquently related commitment to continuous improvement he promotes at Midtown to always setting greater goals. He explained:

> I'm always wanting to go farther than where I'm at…I tell the kids that a goal is nothing more than the minimum of expectations…In the classroom, when we're setting a goal of where we want to be…,that's the minimum, and I always want the kids to never be satisfied with that.

One of his colleagues, T2M, indicated the process of reflection provided her with the best example of commitment to professional learning in order to make the PYP successful at Midtown. She stated, "I think you're going to have to be [open to changing] to work here."

Both schools are on a journey of improvement. Data indicated that Southeast is a little further down the road than Midtown, but both are working toward continually improving their efforts to provide an excellent education to students.

Participation in collective learning. Collective learning is a practice required by the IB PYP Standards and Practices. Both Midtown and Southeast Elementary Schools

show strong evidence of collective learning as evidenced by the MSIP Faculty Surveys, the IB PYP evaluation self-studies, interviews, focus groups, and observations.

One MSIP Faculty Survey item was used to gauge the staff members' participation in collective learning. The MSIP survey item was: (17) Teachers in my school are routinely engaged in collaborative problem solving around instructional issues. This survey item assumes collaborative problem solving requires collective learning. MSIP Survey data showed100% of staff members at both schools agreed or strongly agreed with the statement. Both schools also indicated a high level of achievement on their self-studies in regard to the IB PYP required practice, "The school as a community of learners is committed to a collaborative approach to curriculum development." During observation of both large and small collaborative meetings, staff members of both schools demonstrated a high level of participant engagement, animated discussion, and effective problem-solving strategies.

Interviews with staff members at both schools indicated collective learning was accomplished through four structures: whole faculty study groups (WFSG), examination of wallboard displays of student learning, sharing of information gained through off-site workshops or conferences, and the IB PYP self-study process.

Seven staff members mentioned whole faculty student groups (WFSG) as one of the ways they participated in collective learning. WFSGs chose topics that were identified as school needs. Then WFSG members gathered information about the topics, discussed the information, and shared what they learned with the staff. The sharing was done in small and large groups and over the Internet on staff-created web pages.

Sharing information gained through research or attendance at off-site workshops and conferences was given as an example of collective learning by five of the staff members from both schools. A routine expectation for staff members at both schools is that if they attend a conference or workshop outside the school, they will bring back what they learned and share it at whole staff meetings. This sharing has taken a variety of formats from PowerPoint presentations describing new ideas to staff members conducting hands-on activities to share new strategies and skills.

Examination of wallboard displays of student learning was identified by three of the staff members as a way to initiate collective learning. PYP staff members are required to display what their students are working on outside their rooms on wallboards. The displays must indicate the learning process of the students as well as the final student work. Staff members routinely view and discuss each other's wallboard displays. They ask questions and discuss new ideas they see presented as a form of collective learning.

One staff member indicated the reflective PYP evaluation self-study was a beneficial collective learning activity for her. Although the IB Standards and Practices had been displayed in her room for years, she had not been aware of what they said or how closely the program was aligned to them until her school went through the evaluation self-study process.

Results orientation. Use of data in decision making is one indication that a school's staff is results-oriented. Required practices of the IB PYP engage teachers in using assessment data to plan learning experiences for students. While both schools referred to the use of data and the setting of high expectations for students, Southeast

staff members provided more details of data collection and use than did Midtown staff members.

Southeast staff members rated their level of implementation on data collection and use at the highest end of a continuum labeled low to high on their self-study document. Midtown staff rated themselves slightly lower on their evaluation self-study, but stated, "Units are created using the backward design model." The backward design model requires teachers begin with the result they want to accomplish in mind. This indicates the Midtown teachers are results-oriented, according to the self-assessment of their practices.

Five MSIP Faculty Survey items were used to gauge the extent to which staff perceived they had an orientation toward results. The MSIP items were: (21) I routinely analyze disaggregated student data and use it to plan my instruction; (23) My school administers assessments throughout the school year that are used to guide instruction; (24) My school uses assessment data to evaluate and align the curriculum; (33) My school's principal monitors the effectiveness of school practices and their impact on student learning; (54) All staff in our school hold high expectations for student learning; and (116) I believe the principal at my school utilizes multiple sources of data when making decisions.

Of the Southeast staff members who responded, 100% agreed or strongly agreed with MSIP items 24, 33, 54, and 116. For MSIP item 21, 90.6% of the Southeast staff members responding agreed or strongly agreed with the item. On MSIP item 23, 95.2% of the staff at Southeast agreed or strongly agreed. These results indicated a strong

orientation of the staff members to results for their students. Focus group participant, SEC, confirmed this by stating, "We have high expectations. We consistently collect data…If we find that we are lacking in an area, we work on it." Three interview participants from Southeast provided evidence of their commitment to results as they revealed their professional development activities were based on school needs identified through the self-evaluation process.

Midtown's results were slightly higher. For items 23, 24, 33, 54, and 116, 100% of the Midtown staff agreed or disagreed with the items. Only item 21 showed a lower rating than Southeast staff survey results. For item 21, 86.6% of the staff members agreed or disagreed with the statement. As with the Southeast results, this showed a high orientation toward results by the Midtown staff. Interviews with two Midtown staff members indicated their results orientation as they discussed the expectation that the IB PYP be implemented with fidelity in their school.

Shared practice. Evidence of collective learning and shared practice seemed to overlap as indicated by interview and focus group responses at both schools. Whole faculty study groups (WFSG), grade-level team meetings, literacy leader/coach, and sharing sessions at staff meetings were ways teachers shared their personal practice through modeling and reflecting on their teaching strategies.

Five staff members at both schools mentioned sharing sessions at whole staff meetings that had resulted in shared practice. Staff members who had learned new strategies modeled these new strategies for their peers. Their peers then reflected with them on how they could apply what they had seen in their own classrooms.

The cycle of peer observation, reflection, and feedback was mentioned by five staff members as a shared practice technique that was just beginning to be utilized at each school. While teachers and administrators expressed the belief that peer observation was an effective learning tool, they also mentioned issues with scheduling and trust that had, so far, kept it from being a normal staff routine. The Southeast and Midtown principals had both provided ways for the peer observations to be conducted through providing a substitute for teachers and having teachers complete walkthrough observations during their release time. Staff and leaders at both schools indicated this would be a practice they planned to improve upon in future years. T1S described the reflection and feedback process she experienced after she participated in walkthrough peer observation:

> I sit out in the hallway for a minute and talk about it [with the principal]. Then we write a note that we put in the teacher's mailbox. I've had questions before, "What was the purpose of doing this? Was this just today, or do you do this every day?" Then we'll get together before faculty meeting or in the hallways and [say], "Hey, I saw your question, and this is why I did it."

Through WFSGs three staff members from both schools indicated they were able to share their practices through modeling, reflection, and feedback in vertical teams. Teachers in WFSGs researched new teaching strategies and tried them out then discussed the results with their WFSG colleagues.

Observation of the literacy leader at Southeast and the literacy coach at Midtown were also provided as evidence of shared practice by three members of the staff from

both schools. Two literacy leaders at Southeast and one literacy coach at Midtown provide modeling, coaching, reflection, and feedback sessions to the staff members at their schools. This process allows teachers to watch a new teaching strategy then practice it themselves. The literacy leader or literacy coach observes the teacher's use of the strategy and provides coaching and reflective feedback to the teacher. T2M at Midtown expressed the literacy coach's modeling, feedback, and coaching had been very valuable to her as a first year teacher.

Reflection during grade level meetings was mentioned by one teacher as evidence of shared practice. The teachers are required to discuss and reflect on their instructional practices regarding what was effective and what was ineffective. Teachers share their strategies and reflect. At times, they will try different strategies even though they teach the same units at the same grade level. During their reflective times, they will compare their strategies and discuss how successful they were. Southeast focus group member SET1 explained:

> We're constantly reflecting. I think it used to be that we'd wait until the end of a unit of inquiry to reflect but now it's…we've learned. You know, "How did it go in your room? This is how I did it. I thought it went well. This is why I thought it went well or why it didn't go well."…That type of conversation is occurring all the time.

The general consensus of the interview and focus group participants from both schools was that multiple ways exist for teachers to share their professional practice. Informal and formal modeling, feedback, and reflection opportunities, "share out"

sessions at faculty meetings, and peer observations were the ways mentioned most often.

Staff members and administrators from both schools mentioned the practice of peer observation and feedback was new, and as T2S explained, this practice is "in its infancy." Southeast teachers appeared ready to participate in peer observations and reflective feedback as a regular part of their professional learning activities. Logistics seemed to be the greatest inhibitor keeping the staff members from observing each other and engaging in significant reflection and dialogue on those observations. Staff members suggested time and scheduling were inhibitors to accomplishing peer observations and reflective dialogue.

At Midtown, the principal indicated he had offered subs to address the scheduling issues for teachers who wanted to observe their colleagues. He felt the main inhibitor was trust and comfort with the process, and he did not push teachers to participate. As a result, the perception was that most teachers did not engage in peer observations. These findings are consistent with Hord et al. (2010) who suggested, "[shared practice] is likely the last [PLC characteristic] to develop as it requires abundant trust and openness to critique" (p. 19).

The more mature PLC at Southeast had conquered the issue of trust and respect. Staff members at Southeast were ready to dive into peer observations if they could solve logistical issues of time and scheduling. Midtown Elementary School staff members still struggled with trust issues, according to the principal. He felt they would be ready in time, but "were not there" yet.

Evidence of PLC characteristics as defined by Hord (2004), DuFour et al. (2006), and Jones et al. (2010) were sought to address research question three. The seven characteristics of shared mission and vision, shared and supportive leadership, supportive conditions for collaboration, participation in collective learning, shared practice, results orientation, and commitment to continuous improvement were all found to be evident at both schools. Requirements of the IB Standards and Practices for PYP schools had helped to set up the structures for PLCs to develop. Analysis of MSIP Faculty Survey data, IB PYP Self-Study documents, interview and focus group transcripts, and notes on observations suggested Southeast Elementary School's staff had matured further in its development as a PLC than had the staff at Midtown Elementary School.

Summary

Providing continuously improving educational experiences for public school children in the United States to meet legislative mandates and public demand compels school leaders to seek out and implement school improvement models. In the past 30 years, national government intervention in local school reform has expanded tremendously. When the *No Child Left Behind Act* was signed into law in 2002, schools were forced to improve their student achievement on standardize test scores or face loss of funding and sanctions as severe as school restructuring or closure. President Obama's *Race to the Top* educational initiative has further cemented the federal government's influence on school reform initiatives through offering federal incentives grants for educational improvement. Open enrollment policies and the option to transfer out of

failing schools have added another layer of urgency to the need for cutting-edge programing.

School improvement programs are readily available, but the challenge for school leaders is to successfully implement innovations that will bring about desired outcomes. Effective staff development is critical to the successful implementation of school improvement models. Targeting professional development to school, teacher, and student needs and providing follow-up, feedback, and coaching has been shown by research to be most effective in bringing about change. When school personnel function as a learning community, more of what is learned through professional development will translate into classroom practice.

The purpose of this study was to investigate the professional development practices of two elementary schools in a small Midwestern U.S. city that had adopted the International Baccalaureate Primary Years Program (IB PYP) as a school improvement model. The study was designed to determine staff members of these two IB PYP World Schools perceive their professional development met their needs as adult learners, was targeted to impact their classroom practice, and had transformed them into PLCs. Data collected and analyzed by way of this study indicated professional learning activities at Southeast and Midtown Elementary Schools supported the adult learning needs of teachers. Learning activities that were afforded in small study group formats were shown to produce greater transfer into the classroom than whole staff or district-provided professional development. Finally, both schools showed significant evidence their staffs had developed into PLCs.

Further discussion of the study's findings will be presented in Chapter Five which begins with a brief introduction of the study and its design. Following the instruction and study design, the purpose of the study is revisited, and major themes that emanated from the findings are discussed. Implications for practice derived from the findings are also presented in Chapter Five. Connections to academic literature, as presented in Chapter Two, have been woven through the discussion and implications for practice sections. Following the implications for practice, the limitations of the study have been examined. Chapter Five is concluded with a discussion of recommendations for future research.

CHAPTER FIVE

DISCUSSION

Introduction

U.S. public school educators have struggled with government-mandated school reform for nearly thirty years since the publication of the critical report, *A Nation at Risk* (Desimone, 2002; Hord, 2004). National legislative initiatives have evolved from setting requirements for standardization at the state level to strict government sanctions for school failure. The *No Child Left Behind Act (NCLB)* of 2002 placed public K-12 schools under pressure from the federal government they had never before faced (Corcoran & Silander, 2009). In an effort to ensure success for all students, *NCLB* tied federal funding to student achievement on standardized tests and established harsh sanctions for schools failing to make Adequate Yearly Progress (AYP) towards all students being proficient in reading and math by 2014 (Kim & Sunderman, 2005).

Schools failing to meet AYP have faced economic sanctions as well as the possibility of school restructuring or closure. Failing schools also must inform their student population of their failing status and provide transportation for students who wish to transfer to other schools. Although *NCLB* is currently under review and President Obama has offered a waiver plan that would excuse schools from *NCLB* penalties, government expectation for school improvement is not expected to ebb (McNeil & Klein, 2011). Expectations for school improvement required by the waiver plan and President Obama's 2009 *Race to the Top (RTTT)* educational initiative continue to place pressure on schools to raise student achievement.

In recent years, government mandates for public school reform have been joined by demand for school choice as factors compelling school leaders to seek innovative school improvement programs. Schools have faced the loss of valuable resources due to a shift toward open enrollment policies that allow parents to choose the schools their children attend. School choice has been welcomed by school reform advocates as a way to force competition between schools for the best students and push schools to improve practices (Hursh, 2005; Manno, 2011; Rabovsky, 2011). Schools that lose students as a result of competition created by open enrollment policies also lose important resources of teachers and programs as their enrollments decline (Howe et al., 2002; Jimerson, 2002).

Parents who choose to seek out and transfer their students to better schools are often more highly education and involved in their children's education than those who do not choose to take advantage of open enrollment. Those active parents represent a resource of support that schools cannot replace (Bifulco et al., 2009). Research has indicated loss of important financial, staff, program, and parent support resources as a result of school competition has inflicted unfair disadvantage on students whose parents cannot or will not transfer them out of lower performing schools (Bifulco et al., 2009).

Leaders impelled to reform their schools to meet the demands of federal and state mandates and the trend toward school choice in U.S. public schools have found there are plenty of innovative school improvement models available. Implementing those innovative programs is where the greatest challenge lies (Chynoweth et al., 2008). Even the best educational program will produce limited results without the support of effective

professional development of those on the front lines of its implementation (Desimone, 2002).

Shrinking sales tax revenues and falling property values due to U.S. economic recession of the past decade have further complicated school reform initiatives (Chakrabarti & Setren, 2011). School districts have been forced to cut budgets as federal, state, and local funds that are dependent on tax revenues have dwindled. Experts have advised school district leaders to examine their spending closely to make sure the money spent on reform initiatives is producing needed results (Bonstingl, 2009).

Traditional professional development formats show notoriously low impact on changing classroom practice (Hunefeld, 2009; Lassonde & Israel, 2010; Royce, 2010). Research has shown that, in order to have the greatest impact, professional development of teachers must be targeted to their needs as adult learners and to school and student needs (Hord, 2004; Tate 2009). Targeted professional development meets teachers' needs for self-directed, collaborative, relevant, goal-driven, and learner-centered, professional learning that is supportive of continuous improvement (Cudeiro et al., 2005). When professional learning is targeted to meet school, student, and teacher needs, time, money, and human resources are put to best advantage (Hunefeld, 2009).

Hord (2004) found high-performing schools she studied developed their staffs into professional learning communities in which staff members exemplified a shared mission and vision, enjoyed shared and supportive leadership, demonstrated a commitment to collaboration, participated in collective learning, and benefited from

shared practice. DuFour et al. (2006) and Jones et al. (2010) added results orientation and commitment to continuous improvement to the list of PLC characteristics.

This current investigation presents insights into the professional development practices of two Midwestern U.S. K-5 elementary schools that adopted the International Baccalaureate Primary Years Program (IB PYP) in 2006. Southeast Elementary School, a traditionally high performing suburban school made up of 424 mostly white (96%), middle class students, adopted the IB PYP and became a choice school within its district in an effort to boost declining enrollment and keep the neighborhood school open. Midtown Elementary School, a smaller urban school serves a high-poverty (80% free and reduced lunch) population of 260 racially diverse students (30% minority). Midtown also became a choice school within the district. The adoption of the IB PYP at Midtown was directed at raising student achievement and boosting shrinking enrollment in an effort to keep the low-performing neighborhood school open.

Compliance with the IB Standards and Practices is required of all IB World Schools. The IB Standards and Practices set up structures that support a school staff's development of PLC characteristics. Practices of collaboration, shared mission and vision, collective learning, commitment to continuous improvement, reflection on practice, and targeting of staff learning experiences to school and student needs are all laid out as expectations by the IB Standards and Practices. The assumption that served as the basis of this study was that as staff members of Southeast and Midtown Elementary Schools have worked to implement the IB PYP according to the IB Standards and Practices, they have come to reflect the characteristics of PLCs.

The following sections of Chapter Five provide an overview of the purpose of the study and the study's design and procedures for collecting data relevant to the research questions. A brief discussion follows that connects the study's findings to the current literature concerning targeted professional development and PLCs. Implications of the study's findings for professional practice are suggested following the discussion of findings. Finally, recommendations for further research that were noted as the study was conducted are presented as a conclusion to the study.

Purpose of the Study

The purpose of this study was to investigate the assumption that since Southeast and Midtown Elementary School adopted a school improvement model that required establishment of structures that support targeted professional development, the schools had evolved into PLCs. Based on this assumption, the following central question was developed: At suburban Southeast Elementary School and urban Midtown Elementary School in the Midwestern United States, what has been the role of targeted professional development in creating professional learning communities during the implementation of the schools' improvement model as perceived by the teaching staff members of the schools?

Sub-questions that served to frame the investigation were:

1. How does the functioning of the professional learning community support the teachers' needs as adult learners?
2. To what extent do teachers feel their professional development is targeted to impact their classroom practices?

3. What characteristics of a professional learning community as defined by Hord (2004), DuFour et al. (2006), and Jones et al. (2010) are evident at the school?

Through this study, the researcher hoped to illustrate relationship among the concepts of adult learning theory and learner-centered theory for adults, targeted professional development, and PLCs. The study was designed to collect staff perception data from a variety of sources in order to afford a clear picture of professional learning at the schools. The intention of the researcher was to use the findings of the study to provide implications for practice to other school leaders seeking to provide effective professional learning to support the implementation of school improvement models.

Design and Procedures

The study examined teacher perspectives of their professional learning through analysis of data collected by means of surveys, interviews, focus groups, observations, and public documents. One month was set aside for data collection using instruments designed for the study and two public documents readily available to the researcher. Permission to complete the study at Southeast and Midtown Elementary Schools was sought and obtained from the building principals and the school district's research approval committee. Since the study involved interviewing and surveying human subjects, University of Missouri Institutional Review Board (IRB) approval was also sought and obtained.

The Adult Learning Theory Faculty Perception Survey was created for this study and was placed in the school mailboxes of all teachers at Southeast and Midtown Elementary Schools. Responses to the six open-ended questions on the Adult Learning

Theory survey were intended to determine the extent to which teachers perceived their professional learning opportunities met their needs as adult learners. Informed consent forms were collected with survey responses from staff members who chose to complete the survey.

Semi-structured interviews and focus group sessions were conducted with staff members of both schools. The building principal and two teachers were interviewed, and a focus group session was conducted with two teachers and one counselor at Southeast Elementary School. At Midtown Elementary School, the building principal and three teachers were interviewed, and a focus group made up of one teacher and one librarian was conducted. The IB PYP coordinator was also interviewed to provide insight into the professional learning practices of each school. Interview and focus group protocols were designed and used during these sessions. Interview and focus group sessions were audio recorded to ensure accuracy of transcription.

In addition to survey, interview, and focus group data, observations of collaborative activities were made at each school. One whole-staff collaborative meeting was observed at Southeast Elementary School, and one small collaborative planning meeting was observed at Midtown Elementary School. An observation protocol provided guidance that focused the recording of field notes.

Two public documents were analyzed to provide staff perceptual data regarding professional development for each school. The Missouri School Improvement Plan (MSIP) Faculty Survey and the IB PYP Evaluation Self-Study documents were analyzed using a document analysis protocol developed for this study. Access to the MSIP Faculty

Survey was obtained through the Missouri Department of Elementary and Secondary Education website, and access to the IB PYP Self-Study documents was obtained through the IB PYP coordinator for both schools.

Document analysis was conducted both during and following data collection through a process of organization and reflection within the framework of the study's research questions. Survey responses were collated into a chart and analyzed according to the adult learner needs assessed by the Adult Learner Theory Survey instrument. Interview and focus group recordings were first transcribed then read. Notes were recorded in the margins of the transcriptions as patterns of ideas and themes emerged related to the research questions. A chart was created to categorize responses according to characteristics of PLCs.

MSIP Faculty Survey Item responses of staff members from each school related to characteristics of PLCs were recorded in the document analysis guide. Data related to PLCs were also pulled from the IB PYP Self-Study documents for each school and organized by the document analysis guide. Once data were organized and reviewed for repeating patterns and the development of themes, a narrative of findings was produced that addressed each of the research questions.

Summary of Findings

Each of the three research questions was addressed by the data collected during this study. Findings supported the assumption on which the study was based that compliance to the IB Standards and Practices would create conditions for the

development of PLCs at Southeast and Midtown Elementary Schools. Findings also indicated that the two schools have developed into PLCs at different rates.

Data suggested Southeast Elementary School evolved more quickly into a PLC because structures for collaboration had been in place prior to the adoption of the IB PYP and there has been low turnover in the school since the PYP was adopted. Midtown's evolution into a PLC seemed to have been slowed in part by the size of the school and availability of same grade-level collaboration partners, more staff turnover, and less staff experience and comfort with collaboration processes. Major themes that emerged from the data are provided in the next section.

Analysis of data uncovered patterns in the staff members' perception of their professional learning at Southeast Midtown Elementary Schools. The patterns were categorized into major themes. The following major themes emerged from this study

1. Teacher buy-in is essential to the successful implementation of new educational programs.
2. Staff members rely on the effective collaboration that results in the creation of new knowledge which is supported by physical and relational structures.
3. Professional development is most effective when it supports teachers' needs as adult learners and is targeted to school and student needs.
4. Honest, deep reflection drives continuous improvement.
5. Collective learning of innovative strategies is best accomplished in small, on-site collaborative groups focused on school and classroom needs.

Teacher buy-in seemed to have underlying significance to all staff members surveyed and interviewed. Of equal importance to buy-in was the teachers' perspective of their growing reliance on collaboration and the solid structural provisions in place at both schools that supported collaboration. Targeting professional development to school needs so that professional learning time is not wasted was very important to staff members at both schools. Participating in honest reflection on practices was mentioned by teachers at both schools as essential to improving their teaching and student learning. Finally, many of the teachers at each school mentioned they learned more in small collaborative study groups and grade-level meetings than in whole staff meetings. A discussion of the major themes that surfaced as the study progressed is presented in the next section. These major themes have been related to the professional literature reviewed in Chapter Two.

Discussion of Major Themes

During the study of Southeast and Midtown Elementary Schools, many connections were realized between themes offered in academic literature regarding professional development and the study's emergent themes. Discussion of the five major themes of this investigation is presented according to the order by which the themes appeared to be most predominant at both Southeast and Midtown Elementary Schools.

Teacher Buy-in

Bryk (2010) advised, "Cultivating teacher buy-in and commitment becomes a central concern in promoting the deep cultural changes required for such [innovative programming] to be successful" (p. 27). Staff members of Southeast and Midwest

Elementary Schools agreed teacher buy-in was essential to the implementation of the International Baccalaureate Primary Years Program (IB PYP) at their schools.

Responses provided by staff members at both schools to survey, interview, and focus group questions suggested when staff members were encouraged and supported by peers, the program coordinator, and their principals, they were more likely to try new strategies. Staff members who appeared to have the greatest buy-in for the IB PYP indicated their buy-in was based on the positive learning results they observed in their students. The culture of experimentation which developed in both schools, but especially at Southeast Elementary School, seemed to breed passion in staff members for the program that secured its implementation.

Physical and Relational Support for Collaboration

Data from this study indicated successful collaboration at Southeast and Midtown Elementary Schools was dependent on the establishment of physical structures of time and space and the relational structures of trust and respect. Glanz (2006) noted the importance of physical supports for collaboration: "By providing time for teacher involvement (e.g. released time), you do much to demonstrate your true commitment…Providing work space, too, is essential…Giving teachers access to material and financial resources is also critical" (p. 81).

Relational supports include cultivating trust and respect among staff members. Desimone (2002) explained, "Collaborative planning and collegial relationships contribute to positive school culture and have the potential to be more important to implementation than policy directives" (p. 447). Staff members at both Southeast and

Midtown Elementary Schools indicated their peers treated them with respect. One Southeast teacher stated the expectation of respectful behavior was set by the principal and supported by all the staff of Southeast. A Midtown teacher revealed both schools had collaborated together to write essential agreements, or norms, for collaboration that guided professional interaction among staff members. From staff responses to survey, interview, and focus group questions, it appeared effective collaboration was supported by trust and respect. Conversely, there was evidence provided by the data that trust and respect were enhanced by effective collaboration.

The physical structure of time also played a part in the relational aspects of collaboration at the two schools. Southeast staff members had been together longer as a cohesive group and had a structure of collaboration established for a longer period of time than did Midtown. The IB PYP coordinator indicated Southeast teachers were more comfortable with collaboration, and a Southeast focus group member indicated staff members at Southeast felt very comfortable taking risks in front of each other. Staff perceptions indicated a less enthusiastic comfort level for collaboration around Midtown staff members who had several teachers who were new to the building.

Targeted Professional Development and Classroom Practice

Nelson and Cudeiro (2009) explained the importance of targeting professional development to school, teacher, and student needs: "By using a targeted professional learning plan, schools can increase the likelihood of student success by using cycles of learning to incorporate professional development lessons into daily school and classroom rhythms" (p. 32). Opportunities for self-direction of professional learning within the

framework of identified school needs were identified by the evaluation self-study process at Southeast and Midtown Elementary Schools. Targeting professional development to address these needs ensured new knowledge impacted classroom practice at both schools.

According to Fogarty and Pete (2010), "Adult learners have preferences and predilections that make them different from other learners. That is especially true for teachers who are seeking professional development" (p. 32). As adults, teachers need self-directed, goal-driven, relevant, learner-centered, and collaborative professional learning experiences that supportive a commitment to continuous improvement (Cudeiro, 2005; Fogarty & Pete, 2010; Gibb, 1960; Trotter, 2006).

Teachers at Southeast and Midtown Elementary Schools related their best professional learning occurred in collaborative whole faculty study groups and grade-level teams focused on what they were doing every day in their classrooms. Their collaborations were self-directed, goal-driven, and relevant to their classroom practices. Meetings included in-depth reflection on their practices and student learning which supported continuous improvements in learning experiences teachers offered their students. The teachers developed a cycle of continuous improvement by which they researched and identified strategies they wanted to try, implemented the strategies, reflected on the success of strategies, and revised strategies based on results.

Reflection and Continuous Improvement

Reflection on practice is an essential aspect of the cycle of continuous improvement. Hirsh (2009) explained how reflection fits in the cycle of improvement:

> Effective team learning is organized to support a cycle of improvement that begins with a thorough examination of school- and classroom-level data. It continues through a process of identifying adult learning priorities, determining how those learning priorities will be addressed, applying new practices on the job, assessing the impact of those practices, reflecting on the results, and repeating the process as a commitment to continuous improvement (p. 71).

The fundamental importance of reflection was mentioned many times by almost all staff members participating in the study. Staff members indicated targets for improvement were set by the reflective process of the IB PYP evaluation self-study and through completing required PYP unit planners. The IB PYP requires a formal, written reflection at the end of each unit of study. Most of the teachers at Southeast and Midtown Elementary Schools commented that the reflection process drove them to continually improve their practices. The Southeast principal commented that for continuous improvement to be part of the culture "there is an element of honesty that has to take place in reflections." She explained a teacher had to be able to look at a strategy, disconnect personally from it, and honestly evaluate how the students responded and change if change is necessary.

A teacher at Southeast indicated as she and her grade-level team members dig into the reflection process at the end of a unit of study, they hash out what worked, what did not work, and brainstorm ideas on how to improve. One Southeast teacher revealed

reflections did not "sugar-coat" what transpired in the classroom. The reflective process provided deep, rich detail of what really happened with students in the classroom. Their honest conversations resulted in a more accurate picture of student learning during their units and improved practice.

Needs-based Small Group Study

Hunefeld (2009) recommended, "Professional learning [in a small group, self-directed] context becomes much more authentic, as teacher-learners choose their own topics to emphasize and proceed at a pace that is appropriate to them and to their students' needs" (p. 24). Most of the staff members of Southeast and Midtown Elementary schools mentioned their on-site grade-level team meetings and small whole faculty study groups provided them with the best learning experiences. Grade-level members investigated new strategies and reflected on their together. Grade-level teams also self-selected their professional learning topics based on the needs of their students. Teachers researched and brought in new strategies that would help them improve their classroom practice. Staff members shared they had come to rely heavily on these collaborative learning experiences and sought them out daily.

The whole faculty study groups were offered choices of topics determined to be needs by the schools' evaluation self-study. Teacher buy-in for professional learning was increased by giving the teachers choice regarding which needs they were most interested in investigating. The new knowledge they acquired from these small groups was also shown to have the most impact on their classroom practices.

Staff members indicated learning brought back from off-site workshops and conferences also transferred into classroom practice. A standard practice at both schools was for staff members who had attended off-site workshops and conferences to "share out" their learning at whole staff meetings. Through the sharing of new knowledge gained from workshops and conferences, staff members were able to learn from each other. Learning from these sharing sessions had less impact on the classroom than small group work, however.

Required district-produced whole staff meetings produced the least amount of transfer into the classroom because the topics were not relevant to the teachers' practice. These findings are consistent with research that indicates that large group professional development on topics not targeted to teachers' needs shows very poor translation into the classroom and smaller, teacher led study groups provide better transfer of learning into classroom practice (Hunefeld, 2009).

Implications for Practice

Leaders hoping to implement improvement programs at their schools must provide effective professional development experiences for teachers. The implications for practice provided in the following sections are aligned with the major themes that arose out of the study of Southeast and Midtown Elementary Schools' professional development practices. They also reflect current research on professional learning in schools that was presented in Chapter Two.

Foster Teacher Buy-in

Bryk's (2010) advice to cultivate teacher buy-in suggests leaders intentionally create an environment where experimentation with research-based, innovative strategies becomes accepted practice. Follow-up and support must accompany experimentation in order to ensure new practices are sustained long enough for teachers to see positive results in student learning. Teachers at both Southeast and Midtown Elementary Schools credited changes in students' learning as the main reason teacher buy-in for the IB PYP was high at their schools. As school leaders introduce change in schools, they must first present a convincing argument that change is needed to produce positive results in students. Then they must establish structures that encourage and support experimentation with new strategies to cultivate teacher buy-in for the changes.

Provide Physical and Relational Support for Collaboration

School leaders must provide common planning time in the master schedule for staff members. They must also make sure staff members are not physically isolated from their collaborative partners. In addition to physical support structures, school leaders should set the expectation for respectful collaboration. Jones et al. advised, "Clearly defined expectations must be in place so that all members of a professional learning community feel like trusted, respected and valuable contributors" (p. 1). Trust building takes time, and leaders should not expect immediate high-level collaboration. The structure for collaboration should include essential agreements, or norms, of behaviors and outcomes for collaborative groups that will, over time, foster trusting relationships.

Target Professional Development to Needs

Two implications for practice are offered to school leaders based on a major theme gleaned through observations and conversations with teachers at Southeast and Midtown Elementary Schools. The major theme is that when professional development is targeted to school, teacher, and student needs, it is more likely to impact classroom practice.

The first implication for practice based on this major theme is school leaders should lead staff members through a self-study or needs assessment to determine school and student needs. Then they should allow teachers to choose from the established needs topics for study based on what they feel they need to learn. The second implication for practice is to allow teachers to choose strategies within the framework of their curriculum with which they want to experiment. Set up an expectation that experimentation will be part of a cycle of continuous improvement in which experimentation is followed by reflection and evaluation of results that lead to improved practice.

Require Honest, Deep Reflection on Practices

Reflection drives continuous improvement as teachers evaluate the effectiveness of their practices. School leaders should establish an expectation of honest reflection as part of their staff professional learning experiences. Writing aids the process of reflection and establishes a permanent record of ideas and is a good practice, but school leaders can also set an expectation for honest, deep reflection through their conversations with staff members. Questions that aid the reflection process are: “What did you try? How did that

work? What do you think you want to keep doing? What do you need to change?" These questions stimulate the kind of discussion which nurtures continuous and improvement.

Provide for Small Needs-based Group Study

Southeast and Midtown Elementary School staff members signified that their small group study had the most impact on their teaching. New knowledge gained through whole faculty study group investigations and grade-level team study and reflection was most likely to impact their classroom practices. An implication for practice suggested by these findings is that better use of professional development time would be achieved by allowing the majority of professional learning experiences to be small, collaborative group work driven by teacher and student needs.

Hunefeld (2009) contended, "Rather than hiring external presenters, schools can see much better results by putting the responsibility for, and the control of, professional growth in the hands of their own teachers" (p. 24). Professional development coordinators should evaluate the relevance of whole group meetings and work to provide as many small group experiences as possible. Allowing the learning to be inquiry-based rather than directed by those unfamiliar with the teachers' needs would produce a higher level of learning and greater transfer into the classroom.

Limitations

Limitations of this study include time, activity, and applicability of findings to other schools. The study was bounded by both time and activity. Data were collected over a period of just one month. Findings represent only a snapshot of professional learning at the two schools from the perspective of current staff members. No attempt was made to

gather the perceptions of former staff members. The study was also bounded by activity. The study focused on the role targeted professional development played in the development of a PLC during the implementation of a school improvement model. Other factors that might have impacted the implementation of the IB PYP at the schools were not investigated. Scope of the study was another limitation. Only staff members of the school were asked to provide their perceptions of professional learning at the schools. Parents, students, and other stakeholders were not invited to be stud participants.

Another limit to the scope of the study was that it was carried out within the context of only two schools. Teacher perceptions were limited to the contexts of the two schools. Data collected from Southeast Elementary School might not be applicable to other schools with different demographics. Southeast serves a 424 predominantly white (96%), middle class students in a small Midwestern United States city. Midtown Elementary School serves 260 ethnically diverse students in a high-poverty, urban setting. Results of the study may not be applicable to larger or smaller schools, with similar demographics, located in a larger city, a rural area, or another region of the United States.

Researcher bias was the final limitation of the study. The IB PYP is the elementary version of the program model the researcher is implementing in the middle school and high school setting. Midtown Elementary School is within the feeder pattern of the middle school and high school where the researcher is employed as an IB coordinator. The researcher has a personal interest in the schools' success. Additionally, the researcher taught at Southeast Elementary School for three years and is currently

employed by the same district to which Southeast and Midtown Elementary Schools belong. Currently, the researcher works closely with the IB PYP program coordinator and has a working relationship with the principals of the two schools.

Recommendations for Future Research

The current study of Southeast and Midtown Elementary Schools focused only collecting staff members' perceptions of targeting professional learning and the development of PLCs within their schools. Interesting ideas presented for branching from this study's focus include investigation into:

- Leadership qualities that drive school improvement
- Factors that impact staff buy-in for new initiatives
- The relationship between educational practices and student achievement
- The relationship between collaboration and implementation of school improvement programs; and
- The relationship between human resources issues and the development of PLCs.

The following sections present discussion of these ideas and future research questions that might be investigated related to the ideas.

Leadership Characteristics

Research suggests the principal of a school sets the tenor for successful implementation of school programs. Desimone (2002) reported, "Principal leadership was a strong factor in distinguishing between slower-and faster-starting schools" that were engaged in implementing new school programs (p. 449). At both Southeast and Midtown Elementary Schools, staff members expressed an appreciation for the support

they received from their building principals and the IB PYP coordinator. Data revealed similarities in the leadership styles among the principals and the coordinator. It seemed apparent the building leaders had realized buy-in for the IB PYP from staff members during implementation of the program. Staff perceptional data indicated there were certain traits shared by the administrators and coordinator. This study did not focus on leadership qualities, but the following questions about leadership characteristics emerged from analysis of the study's data that could frame future research.

- What leadership characteristics drive successful implementation of innovative educational program models?
- What leadership qualities are most highly associated with teacher buy-in for new programs?

Staff Buy-in for New Initiatives

Perceived ownership, or buy-in, for new programs is essential to their successful implementation (Bryk, 2010; Desimone, 2002; Jones et al., 2010). Data collected from staff perceptions at Southeast and Midtown Elementary Schools indicated a difference in the level of buy-in for the IB PYP. This raised questions regarding possible reasons for lower buy-in at one school and higher buy-in at the other. The following are possible guiding questions for future research regarding buy-in for new initiatives:

- What stimulates a shift in level of buy-in for new programs from compliance to commitment within school staff members?
- What is the relationship between a school's socio-economic status and staff buy-in for new initiatives?

Educational Practices and Student Achievement

Developing a culture of experimentation within a school is an important part of continuous improvement (Joyce & Showers, 2002). Experimentation by itself, though, is not enough to affect improvements in teaching and learning. Jones et al. (2010) proffered the idea of an "improvement loop" that included "(1) a plan for implementing change, (2) a mechanism for gathering data on the effectiveness of the change, (3) a method of analyzing the data, (4) a means of applying any findings and (5) a plan for continuing the improvement loop" (p. 1).

Experimentation with innovative educational practices was encouraged and supported at both Southeast and Midtown Elementary Schools. Staff members at both schools mentioned they had observed improvements in their students' learning as they implemented the inquiry-based IB PYP. Descriptive data presented in this study indicated Southeast had continued to be a high achieving school, and Midtown's achievement had improved since the implementation of the IB PYP. This study did not, however, delve into the relationship between the innovations being implemented and improved student achievement. It would be interesting to study the impact of different innovative teaching strategies on student learning. Within the context of innovative programming, the questions below could be investigated using different definitions and measures of success, achievement, and learning than those determined by currently employed standardized tests.

- How is learning measured in high-achieving schools?
- What pedagogical practices drive the most successful schools?

- What is the relationship between inquiry-based instruction and student achievement in math and communication arts?

Collaboration and School Improvement

School improvement is enhanced by knowledge creation that results from collaboration among professionals. Von Krogh et al. (2000) asserted, "Creating the right context [for knowledge creation] involves organizational structures that foster solid relationships and effective collaboration" (p. 176). The IB PYP requires structures that support collaborative practices that create the context for knowledge creation. Southeast and Midtown Elementary Schools several staff members shared they had come to rely on collaboration and appreciated the conditions established to support it in their buildings.

This investigation was not an impact study. Although staff members indicated they appreciated their collaborative time and wished for more, no cause and effect relationship between collaboration and school improvement was sought by the study's design or determined through the study's findings. The following questions would be possible starting points for future research on the impact of collaboration on school improvement

- To what extent does increasing collaborative planning time for teachers impact the implementation of school improvement programs?
- What peer collaboration practices are evident in schools successfully implementing innovative educational programs?

Human Resources and PLCs

It is reasonable to assume PLCs operate within a human resources framework. Southeast and Midtown Elementary Schools differed in the extent to which they had developed into PLCs. Southeast seemed to be further developed as a PLC than Midtown. One reason the IB PYP coordinator suggested for this was the amount of staff turnover and hiring practices at the two schools. These two factors may have inhibited the growth of relational factors essential to the effective functioning of PLCs.

Southeast had enjoyed several years of extremely low staff turnover. Staff members indicated they felt extremely comfortable with collaboration and worked well as a whole school team because they knew each other well. The IB PYP coordinator indicated Southeast was in a position to recruit new staff members who "fit" with the IB PYP. As a collective group, Southeast also seemed to have greater buy-in for the IB PYP.

On the other hand, Midtown staff turnover was higher. New teachers were welcomed by other staff members, and it was indicated that staff members were willing to help them. A question was raised, however, about the ability of the school community to build the trusting relationships over time that are required for the maturing of a PLC when new members were continually being added to the staff. In addition, the IB PYP coordinator revealed Midtown has been pressed to hire teachers who had been removed from other district schools due to the elimination of their jobs or who were first-year teachers. Staff members did not have the luxury of recruiting teachers who would assimilate easily into the challenging IB PYP.

Hord et al. (2010) contended, "Trust is a prime factor in the development of positive and productive relationships of the staff" within a PLC. Trust takes time to develop, and Southeast seemed to have staff members who had been together longer than did Midtown. Even teachers new to Southeast seemed to have an advantage because they were selected as IB teachers rather than hired as teachers and then trained to be IB teachers as happened at Midtown.

Observations of the differences between the development of PLCs at Southeast and Midtown spawned the following questions that could be the basis for future research.

- What is the relationship between teacher quality (as defined by academic scholarship) and the development of PLCs?
- What is the relationship between staff turnover and the development of PLCs?
- To what extent are pre-service teachers prepared to assimilate into PLCs?

Collecting staff members' perceptions regarding the role of targeted professional development in the creation of PLCs during the implementation of a school improvement model two Midwestern U.S. elementary schools was the focus of this qualitative instrumental case study. As the investigation progressed, ideas for future research developed around leadership qualities that drive school improvement; staff buy-in for new initiatives; the relationship between various educational practices and student achievement; the relationship between collaboration and implementation of school improvement programs; and the relationship between human resources issues and the development of PLCs. Research questions provided would help guide future inquiry into these ideas. Data and discussion of findings related to this current study could be used as

foundational literature for leaders seeking guidance with implementing school improvement models and for researchers who wish to delve into the ideas for future study.

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APPENDIX A

Professional Development Case Study
Principal Permission Request – Email Script

This email was sent to the principals of Southeast and Midtown Elementary Schools to request permission to complete the study at their schools.

[School Principal's Name],

I am a doctoral student completing my final requirements for the EdD in Educational Leadership and Policy Analysis at the University of Missouri. The research that will support my dissertation is a case study of schools implementing the IB Primary Years Program. The purpose of my study is to examine the role of targeted professional development in the creation of a professional learning community during the implementation of a school improvement model. I am hoping to be able to conduct this study at Southeast and Midtown Elementary Schools in Springfield.

At this time, my research proposal is complete and I am seeking IRB approval from MU as well as approval to conduct research through [the school district]. I have run into the problem that MU requires [school district] approval and [the school district] requires MU approval before either will grant permission for me to complete the research project. The only way to address this problem is to get principal approval from the two schools that I can forward to MU. Your approval of the project does not indicate [school district] approval, but it will allow me to obtain MU approval so that I can finish my application for [school district] approval.

I would like to be able to meet with you regarding the study this week if possible to further explain my project and, if possible, obtain a letter from you that would allow me to complete my MU IRB application. Please let me know when I can meet with you this week. Thank you.

Susan Langston
Middle Years Program Facilitator
International Baccalaureate Program
Pipkin Middle School/Central High School
slangston@spsmail.org
417.523.6155
417.523.9715

Professional Development Case Study
Participant Recruitment Email Script

Greetings! I hope this email finds you well. My name is Susan Langston and I am contacting you to inform you of a research project I am conducting at your school during the month of February. As a doctoral student at the University of Missouri, I am currently working on my dissertation entitled "A Qualitative Instrumental Case Study Investigating the Role of Targeted Professional Development in the Creation of Professional Learning Communities during the Implementation of an Elementary School Improvement Model" (IRB project #1200520). The advisor for this dissertation project is Dr. Cynthia MacGregor, professor in the Counseling, Leadership, and Special Education Department at Missouri State University. My study has been approved by the Institutional Review Board of the University of Missouri, the Springfield Public Schools Research Approval Committee, and your building principal.

In the current era of federally mandated school reform and open enrollment policies, public schools have been impelled to adopt innovative educational models to address legal requirements for school improvement and to compete for students. Effective and targeted professional development of school staff members has proved to be one of the most important factors in successfully implementing school improvement initiatives. Teachers as adult learners have specific needs. Research indicates that professional development activities targeted to meet the needs of adult learners result in more effective transfer of new strategies into the classroom.

I have chosen to complete my study at your school because I feel the IB Primary Years Program standards and practices that require collaboration among school staff members and professional development targeted toward the implementation of the IB PYP transforms a school staff into a professional learning community. My interest in completing the study is to collect staff perceptions of professional development practices within your school and the role they have played in the creation of a professional learning community. I believe information collected during this study will be valuable in helping school leaders as it will provide an example of effective and collaborative professional development processes.

Data collection for this study will be done through the use of an open-ended survey sent to teachers, semi-structured interviews with teachers and your building principal, focus groups made up of teachers, your librarian, and your counselor, observations of small and large group professional learning activities, and a participant journal kept by a staff member of your school.

I hope you will be willing to assist me in this research project by agreeing to be a research participant. In the next few days, I will be sending all teachers at your school the open-ended survey and asking that it be completed and returned to me. I will also be asking individuals to participate in a one-on-one interview with me and other individuals

to serve together as a focus group. Information will be provided to interview and focus group participants prior to the interview and focus group sessions.

If you have any questions regarding this research project, please do not hesitate to contact me or my research advisor. I can be reached at slangston@spsmail.org or 417-880-2909. Dr. Cynthia MacGregor, my dissertation advisor, can be reached at CMacgregor@missouristate.edu or 417-836-6046. If at any time you have questions about your rights as a research project participant, you may contact the MU Institutional Review Board at 573-882-9585.

Thank you in advance for your participation in this important study. I will be contacting you soon to recruit your participation as a survey respondent and/or an interview or focus group participant.

Sincerely,

Susan Langston
slangston@spsmail.org
417.880.2909

APPENDIX B

Professional Development Case Study
Survey – Informed Consent Letter Text

Please sign and return this letter with your completed survey to Susan Langston.

Dear Teachers,

The purpose of this letter is to elicit your participation in a survey I am conducting. As a doctoral student at the University of Missouri, I am currently working on my dissertation entitled "A Qualitative Instrumental Case Study Investigating the Role of Targeted Professional Development in the Creation of Professional Learning Communities during the Implementation of an Elementary School Improvement Model" (IRB project #1200520). The advisor for this dissertation project is Dr. Cynthia MacGregor, professor in the Counseling, Leadership, and Special Education Department at Missouri State University.

Background: In the current era of federally mandated school reform and open enrollment policies, public schools have been impelled to adopt innovative educational models to address legal requirements for school improvement and to compete for students. Effective and targeted professional development of school staff members has proved to be one of the most important factors in successfully implementing school improvement initiatives. Teachers as adult learners have specific needs. Research indicates that professional development activities targeted to meet the needs of adult learners result in more effective transfer of new strategies into the classroom.

Survey Instrument: Enclosed you will find a copy of the **Adult Learning Theory Faculty Perception Survey** that has been mailed to all teachers at your school. I am using this survey to collect data for my study. The survey responses will help me understand how professional development at your school addresses your needs as an adult learner and how the staff members of your school reflect the characteristics of a professional learning community. The brief open-ended survey should take only 15 to 20 minutes to complete. Text boxes have been provided for your written responses. If you need more room for your answers, please feel free to add pages to the survey form.

Participation is Voluntary: Your participation is entirely voluntary. You are under no obligation to complete the survey. You can decline to answer any questions or withdraw your participation in this study at any time without negative consequences. If there are certain questions you do not wish to answer, that is acceptable. If you choose to withdraw from the project, all data pertaining to you will be destroyed. Refusal to participate or discontinued participation at any time will not result in penalty or loss of benefits to which you are otherwise entitled.

Potential Benefits and Forseeable Risks: Findings of this project will be integrated into reports, presentations, and publications that can advance the scholarship around targeted professional development and professional learning communities. Findings may also be used in articles, presentations, and other publications to inform a national and international audience. Potential risks associated with participation in this study are loss of privacy should confidentiality of responses be compromised. The researcher has taken steps listed below to protect participants' identity in order to protect individuals from embarrassment that may be caused by associating identities of respondents with their responses.

Confidentiality: All information associated with project participants will be kept in a locked office accessible only to the researcher. In accordance with the Federal regulations, the research materials will be kept for a period of seven years after the completion of the research project. No comments will be attributed to you by name in any reports or publications related to this study. You may be identified by category (e.g., teacher), but a pseudonym will be used in place of your name in all reports. Neither the school nor the school district will be identified in any reports or publications related to this study.

Informed Consent: Your input is very valuable, and your participation will be greatly appreciated. **Two copies of this form are included with the survey. Please sign and return one to me with your completed survey and keep the second copy for your reference. By signing this informed consent form and returning it to me, you are consenting to allow your survey responses to be used in this study.**

Thank you for your consideration of my request to complete this survey. If you have questions, feel free to contact me (417-880-2909 or slangston@spsmail.org) or my dissertation project advisor, Dr. Cynthia MacGregor (417-836-6046 or CMacgregor@MissouriState.edu). If you have questions about your rights as a research project participant, you may contact the University of Missouri Campus Institutional Review Board at 573-882-9585.

Sincerely,

Susan Langston
1272 E. Hayden Ct.
Springfield, MO 65804

____ I give my permission for the responses I have made on the enclosed survey to be used as data for the study being conducted by Susan Langston as a requirement for completion of her degree as doctor of education at the University of Missouri.

_____ _____
Survey Participant Signature Date

Professional Development Case Study
Survey – Informed Consent Letter Text

Please keep this copy of the Informed Consent Letter for your records.

Dear Teachers,

The purpose of this letter is to elicit your participation in a survey I am conducting. As a doctoral student at the University of Missouri, I am currently working on my dissertation entitled "A Qualitative Instrumental Case Study Investigating the Role of Targeted Professional Development in the Creation of Professional Learning Communities during the Implementation of an Elementary School Improvement Model" (IRB project #1200520). The advisor for this dissertation project is Dr. Cynthia MacGregor, professor in the Counseling, Leadership, and Special Education Department at Missouri State University.

Background: In the current era of federally mandated school reform and open enrollment policies, public schools have been impelled to adopt innovative educational models to address legal requirements for school improvement and to compete for students. Effective and targeted professional development of school staff members has proved to be one of the most important factors in successfully implementing school improvement initiatives. Teachers as adult learners have specific needs. Research indicates that professional development activities targeted to meet the needs of adult learners result in more effective transfer of new strategies into the classroom.

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Thank you for your consideration of my request to complete this survey. If you have questions, feel free to contact me (417-880-2909 or slangston@spsmail.org) or my dissertation project advisor, Dr. Cynthia MacGregor (417-836-6046 or CMacgregor@MissouriState.edu). If you have questions about your rights as a research project participant, you may contact the University of Missouri Campus Institutional Review Board at 573-882-9585.

Sincerely,

Susan Langston
1272 E. Hayden Ct.
Springfield, MO 65804

Professional Development Case Study
Adult Learning Theory Faculty Perception Survey

Thank you for your willingness to complete this brief survey. Results of the survey will be used to paint a picture of professional development practices as they are carried out in your school in relation to adult learning theory. You are under no obligation to complete the survey. If there are certain questions you do not wish to answer, that is acceptable. All responses will be kept confidential during the period of this study and will be destroyed seven years following the completion of the study.

Survey Item	Your Response
1. How are you supported when you try new strategies in your classroom?	
2. In what ways do staff members within your school help each other learn new strategies?	
3. How often are professional activities in your school designed to be hands-on experiences?	
4. How are you included in decisions regarding your professional development?	
5. How does your professional development impact your classroom instruction?	
6. Please complete this sentence:	**Staff buy-in for the IB PYP at this school is _____ because**

APPENDIX C

Professional Development Case Study
Interview Participant Recruitment Email Script

Dear _____,

A few days ago I sent an email to the staff members of your school introducing the research project I will be conducting at your school. As a doctoral student at the University of Missouri, I am currently working on my dissertation entitled "A Qualitative Instrumental Case Study Investigating the Role of Targeted Professional Development in the Creation of Professional Learning Communities during the Implementation of an Elementary School Improvement Model" (IRB project #1200520). The advisor for this dissertation project is Dr. Cynthia MacGregor, professor in the Counseling, Leadership, and Special Education Department at Missouri State University. My study has been approved by the Institutional Review Board of the University of Missouri, the Springfield Public Schools Research Approval Committee, and your building principal.

The purpose of this email is to ask you if you would be willing to be interviewed by me regarding the professional development practices at your school. During the week of February 27, I will be visiting your school to conduct interviews and make observations of collaborative professional development activities. The interview will only take 30 to 40 minutes. I can set this interview up at your convenience to be conducted after school or during the school day during the week of my site visit to your school.

Your participation is completely voluntary. All information associated with project participants will be kept in a locked office accessible only to the researcher. In accordance with the Federal regulations, the research materials will be kept for a period of seven years after the completion of the research project. No comments will be attributed to you by name in any reports or publications related to this study. You may be identified by category (e.g., teacher), but a pseudonym will be used in place of your name in all reports.

If you would be willing to be interviewed and have your interview responses included in the study results, please let me know. You can either call me at 417-523-6155, 417-523-9715, or 880-2909. You can also simply respond to this email. I will follow up this email with a phone call to set a day and time for the interview. Thank you in advance for your participation in this project.

Sincerely,

Susan Langston
slangston@spsmail.org
417-880-2909

Professional Development Case Study
Interview Participant Recruitment Email Script - Administrator

Dear _____,

A few days ago I sent an email to the staff members of your school introducing the research project I will be conducting at your school. As a doctoral student at the University of Missouri, I am currently working on my dissertation entitled "A Qualitative Instrumental Case Study Investigating the Role of Targeted Professional Development in the Creation of Professional Learning Communities during the Implementation of an Elementary School Improvement Model" (IRB project #1200520). The advisor for this dissertation project is Dr. Cynthia MacGregor, professor in the Counseling, Leadership, and Special Education Department at Missouri State University. My study has been approved by the Institutional Review Board of the University of Missouri, the Springfield Public Schools Research Approval Committee, and your building principal.

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Sincerely,

Susan Langston
slangston@spsmail.org
417-880-2909

Professional Development Case Study
Recruitment Script – Reminder Phone Call

This is Susan Langston. I'm just calling to remind you about the interview we have set up next week on _____(day) at _____ time. Your responses to the interview questions will be used as data to support my doctoral research study regarding role of targeted professional development in the creation of a professional learning community during the implementation of a school improvement model. I sent you an email today describing the topics we will cover during the interview. Do you have any questions that I can answer before we get together next week?

Professional Development Case Study
Interview Informed Consent

Please sign and return this copy of the Informed Consent Letter to Susan Langston.

Dear _____ ,

This form requests your consent to participate in a research study entitled "A Qualitative Instrumental Case Study Investigating the Role of Targeted Professional Development in the Creation of Professional Learning Communities during the Implementation of an Elementary School Improvement Model" (IRB project #1200520). This study explores faculty perceptions of collaborative relationships and professional development. Data collection and analyses will be completed under the direction of Susan Langston, a doctoral student of the statewide cooperative EdD program in Educational Leadership and Policy Analysis through the University of Missouri and Missouri State University. The interview will take approximately 30 to 40 minutes. The advisor for this dissertation project is Dr. Cynthia MacGregor, professor in the Counseling, Leadership, and Special Education Department at Missouri State University.

Project description: During this research project faculty members from two elementary schools will be interviewed to determine the extent to which targeted professional development played a role in the development of professional learning communities during the implementation of a school improvement model.

Potential Benefits and Forseeable Risks: Findings of this project will be integrated into reports, presentations, and publications that can advance the scholarship around targeted professional development and professional learning communities. Findings may also be used in articles, presentations, and other publications to inform a national and international audience. Potential risks associated with participation in this study are loss of privacy should confidentiality of responses be compromised. The researcher has taken steps listed below to protect participants' identity in order to protect individuals from embarrassment that may be caused by associating identities of respondents with their responses.

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Interview recording: All interviews will be audio recorded to help the researcher provide accurate transcripts of the participant answers. If you agree to be interviewed, you have the right to request the recorder be stopped at any time—either to stop the interview completely or to continue the interview unrecorded. Audio recordings and transcripts of the recordings will be destroyed seven years following the completion of the study.

Follow-up Interviews: If necessary, the researcher may contact you for follow-up interviews for the purpose of clarifying information.

Participation is Voluntary: Your participation is entirely voluntary, and you can decline to answer any questions you do not wish to or withdraw your participation in this study at any time without negative consequences. If you choose to withdraw from the project at any time, all data pertaining to you will be destroyed. Refusal to participate or discontinued participation at any time will not result in penalty or loss of benefits to which you are otherwise entitled.

Informed Consent: Your input is very valuable, and your participation will be greatly appreciated. **Two copies of this form are being provided to you. Please sign and return one to me and keep the second copy for your reference. By signing this informed consent letter and returning it to me, you are consenting to allow use of your focus interview responses in this study.**

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Sincerely,

Susan Langston

Please check the appropriate line and sign this form to indicate that you have read and understand this informed consent letter and return the form to Susan Langston.

_____I agree to participate, and I give consent that the interview can be audio recorded. At any time I may ask that the recorder be stopped.

Signed: _____ _____
(Date)

Professional Development Case Study
Interview Informed Consent

Please keep this copy of the Informed Consent Letter for your reference.

Dear _____ ,

This form requests your consent to participate in a research study entitled "A Qualitative Instrumental Case Study Investigating the Role of Targeted Professional Development in the Creation of Professional Learning Communities during the Implementation of an Elementary School Improvement Model" (IRB project #1200520). This study explores faculty perceptions of collaborative relationships and professional development. Data collection and analyses will be completed under the direction of Susan Langston, a doctoral student of the statewide cooperative EdD program in Educational Leadership and Policy Analysis through the University of Missouri and Missouri State University. The interview will take approximately 30 to 40 minutes. The advisor for this dissertation project is Dr. Cynthia MacGregor, professor in the Counseling, Leadership, and Special Education Department at Missouri State University.

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Participation is Voluntary: Your participation is entirely voluntary, and you can decline to answer any questions you do not wish to or withdraw your participation in this study at any time without negative consequences. If you choose to withdraw from the project at any time, all data pertaining to you will be destroyed. Refusal to participate or discontinued participation at any time will not result in penalty or loss of benefits to which you are otherwise entitled.

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Sincerely,

Susan Langston

APPENDIX D

Professional Development Case Study
Interview Protocol

Professional capacity identification codes:

T1S T2S T1M T2M AS AM PC

Category	**Items for Discussion**
Warm-up Item	What has been the best thing that has happened to you as a staff member of this school?
Question 1. Supportive Structures	How is collaborative learning among staff members supported in your school (physical structures/relationships)?
Question 2. Targeted Professional Development/ Commitment to Continuous Improvement	What is the focus of your professional learning activities?
Question 3. Shared Leadership/ Self-direction	How are topics for professional development determined for you? • Who determines them?
Question 4. Relevance	How much of your professional learning is directly related to your professional responsibilities?
Question 5. Commitment to Continuous Improvement	At your school what does "being committed to continuous improvement" mean?

Category	Items for Discussion
Question 6. Collective Learning Shared Practice	How do members of the staff share their learning with others? • Is this a normal routine? • Is there an acknowledged structure set up to support shared learning?
Question 7. Shared Mission/Vision	Would you characterize the mission/vision of the school as shared?
Question 8. Shared Mission/Vision	How do staff members demonstrate they share the vision and mission of the school?
Question 9. Collective Learning Knowledge Creation	How do staff work together to seek knowledge, skills, and strategies?
Question 10. Collective Learning Supportive Conditions Shared Practice	How is experimentation with new strategies encouraged?
Question 11. Supportive Conditions Shared Practice	How is application of new knowledge sustained? • Is there an on-going process of feedback and coaching?
Concluding Item	Is there anything more you would like to share with me regarding professional development and collaboration at your school?

APPENDIX E

Professional Development Case Study
Focus Group Participant Recruitment Email Script

Dear _____,
A few days ago I sent an email to the staff members of your school introducing the research project I will be conducting at your school. As a doctoral student at the University of Missouri, I am currently working on my dissertation entitled "A Qualitative Instrumental Case Study Investigating the Role of Targeted Professional Development in the Creation of Professional Learning Communities during the Implementation of an Elementary School Improvement Model" (IRB project #1200520). The advisor for this dissertation project is Dr. Cynthia MacGregor, professor in the Counseling, Leadership, and Special Education Department at Missouri State University. My study has been approved by the Institutional Review Board of the University of Missouri, the Springfield Public Schools Research Approval Committee, and your building principal.

The purpose of this email is to ask you if you would be willing to serve on a focus group regarding the professional development practices at your school. During the week of February 27, I will be visiting your school to conduct interviews and focus groups and make observations of collaborative professional development activities. The focus group session will only take approximately one hour. The focus group will be made up of the counselor, the librarian, and three teachers from your school. Since these staff members all have different schedules, the focus group session will have to be set up after school during the week of my site visit to your school.

Your participation is completely voluntary. All information associated with project participants will be kept in a locked office accessible only to the researcher. In accordance with the Federal regulations, the research materials will be kept for a period of seven years after the completion of the research project. No comments will be attributed to you by name in any reports or publications related to this study. You may be identified by category (e.g., teacher), but a pseudonym will be used in place of your name in all reports.

If you would be willing to serve on this focus group and have your responses included in the study results, please let me know. You can either call me at 417-523-6155, 417-523-9715, or 880-2909. You can also simply respond to this email. I will follow up this email with a phone call to set a day and time for the focus group session. Thank you in advance for your participation in this project.

Sincerely,
Susan Langston
slangston@spsmail.org
417-880-2909

Professional Development Case Study
Recruitment Script – Reminder Phone Call

This is the phone script that will be used to remind subjects of the dates and times of their interviews and focus group sessions.

This is Susan Langston. I'm just calling to remind you about the focus group session we have set up next week on _____(day) at _____ time. Your responses to the focus group questions will be used as data to support my doctoral research study regarding role of targeted professional development in the creation of a professional learning community during the implementation of a school improvement model. I sent you an email today describing the topics we will cover during the focus group session. Do you have any questions that I can answer before we get together next week?

Professional Development Case Study
Focus Group Informed Consent

Please sign and return this copy of the Informed Consent Letter to Susan Langston.

Dear _____ ,

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Project description: During this research project two focus groups comprised of staff members from two elementary schools will meet to discuss the extent to which the schools reflect the characteristics of professional learning communities. In addition, questions for the focus groups will help provide data regarding the staff members' perceptions of staff buy-in for the school improvement model and evidence of knowledge creation as the result of targeted professional development within the schools. The focus group sessions will last approximately one hour.

Potential Benefits and Forseeable Risks: Findings of this project will be integrated into reports, presentations, and publications that can advance the scholarship around targeted professional development and professional learning communities. Findings may also be used in articles, presentations, and other publications to inform a national and international audience. Potential risks associated with participation in this study are loss of privacy should confidentiality of responses be compromised. The researcher has taken steps listed below to protect participants' identity in order to protect individuals from embarrassment that may be caused by associating identities of respondents with their responses.

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Interview recording: Focus groups will be audio recorded to help the researcher provide accurate transcripts of participant answers. If you agree to have the focus group session recorded, you have the right to request the recorder be stopped at any time—either to stop the interview completely or to continue the interview unrecorded. Audio recordings and transcripts of the recordings will be destroyed seven years following the completion of the study.

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Sincerely,

Susan Langston

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_____I agree to participate, and I give consent that the focus group session can be audio recorded. At any time I may ask that the recorder be stopped.

Signed: _____ _____
(Date)

Professional Development Case Study
Focus Group Informed Consent

Please keep this copy of the Informed Consent Letter for your reference.

Dear _____ ,

This form requests your consent to participate in a research study entitled "A Qualitative Instrumental Case Study Investigating the Role of Targeted Professional Development in the Creation of Professional Learning Communities during the Implementation of an Elementary School Improvement Model" (IRB project #1200520). This study explores faculty perceptions of collaborative relationships and professional development. Data collection and analyses will be completed by Susan Langston, a doctoral student of the statewide cooperative EdD program in Educational Leadership and Policy Analysis through the University of Missouri and Missouri State University. The advisor for this dissertation project is Dr. Cynthia MacGregor, professor in the Counseling, Leadership, and Special Education Department at Missouri State University.

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Informed Consent: Your input is very valuable, and your participation will be greatly appreciated. **Two copies of this form are being provided to you. Please sign and return one to me and keep the second copy for your reference. By signing this informed consent letter and returning it to me, you are consenting to allow use of your focus group responses in this study.**

Questions: Please contact Susan Langston (417-880-2909 or slangston@spsmail.org) or Dr. Cynthia MacGregor (417-836-6046 or CMacgregor@MissouriState.edu) with any questions or concerns. If you have questions about your rights as a research project participant, you may contact the MU Institutional Review Board at 573-882-9585.

Sincerely,

Susan Langston

APPENDIX F

Professional Development Case Study
Focus Group Protocol

Identifying Participant Codes:

Focus Group 1 – Southeast Elementary School

T=Teacher # = Grade level

Group Make-up: _____

Category	Items for Discussion
Warm-up Item	Share an example of when you felt you had the greatest impact as a professional.
Shared and supportive leadership	1. Are opportunities provided for staff members to initiate change? How? 2. Is leadership promoted and nurtured among staff? Give examples.
Shared vision and values/Results-oriented	3. Do all staff members share values and support norms of behavior that guide decisions about teaching and learning? 4. How are policies and programs aligned to the school's vision?
Collective learning and application	5. Provide examples of how staff members plan and work together to search for solutions to address diverse student needs. 6. Describe a time when staff collaboration resulted in the creation of a new policy, strategy, or procedure that improved student learning. 7. The IB PYP is an inquiry-based program for students. In what ways does the staff reflect inquiry-based professional learning?

Commitment to continuous improvement	8. Give examples of how the school staff committed to programs that enhance learning for all students. 9. If you had to rate the commitment of your school's staff to continuous improvement as high, variable, or low, how would you rate it? Why?
Shared personal practice	10. Is there a process for peer observations, feedback, and coaching in place? Explain. 11. In what other ways do staff members share ideas and suggestions for improving instructional practices?
Supportive conditions – relationships	12. How is trust and respect cultivated to support collaborative interactions? 13. How is outstanding achievement recognized and celebrated in your school?
Supportive conditions – structures	14. Are adequate time and space allotted to support collaboration among staff members? 15. How does the availability of fiscal resources, appropriate technology, and access to expert resources support your professional learning?
Closing Question	Is there anything you would like to add that would help me better understand professional learning processes in your school?

Focus group protocol items adapted from the "Professional Learning Community Assessment" instrument (Huffman & Hipp, 2003).

APPENDIX G

Professional Development Case Study
Formal and Informal Observation Protocol

Research question one: What characteristics of a professional learning community as defined by Hord (2004) DuFour et al. (2006), and Jones et al. (2010) are evident at the school?

"Look Fors"

- Supportive and Shared Leadership
- Shared Values and Vision
- Collective Learning and Application of Learning
- Supportive Conditions (Physical and Social)
- Shared Practice
- Results Orientation
- Commitment to Continuous Improvement

Research question three: How does the functioning of the professional learning community support the teachers' needs as adult learners?

"Look Fors"

- Self-directed
- Hands-on
- Relevant
- Collaborative Activity
- Clear Expectations for Application of Learning (Goal Oriented)

Date:	**Activity:**
Observation Data	

APPENDIX H

Professional Development Case Study
Document Analysis Guide

Document Description:
_____

Category	Observation
Impact on classroom teaching	
Commitment to shared vision	
Commitment to collaboration	
Evidence of shared and supportive leadership	

APPENDIX I

Professional Development Case Study
Participant Journal Informed Consent

Please sign and return this copy of the Informed Consent Letter to Susan Langston.

Dear _____,

This form requests your consent to participate in a research study entitled "A Qualitative Instrumental Case Study Investigating the Role of Targeted Professional Development in the Creation of Professional Learning Communities during the Implementation of an Elementary School Improvement Model" (IRB project #1200520). This study explores faculty perceptions of collaborative relationships and professional development. Data collection and analyses will be completed by Susan Langston, a doctoral student of the statewide cooperative EdD program in Educational Leadership and Policy Analysis through the University of Missouri and Missouri State University. The advisor for this dissertation project is Dr. Cynthia MacGregor, professor in the Counseling, Leadership, and Special Education Department at Missouri State University.

Procedures and Duration of Participation: By agreeing to keep this participant journal, you are consenting to write your perceptions of your interaction with colleagues in both formal and informal settings for a period of four weeks. The focus of your journal recordings will be your perceptions of collaboration and professional learning between and among your colleagues. The attached document entitled **Participant Journal Instructions** will serve as a guideline for your journal entries.

Potential Benefits and Concerns: Findings of this project will be integrated into reports, presentations, and publications that can advance the scholarship around targeted professional development and professional learning communities. Findings may also be used in articles, presentations, and other publications to inform a national and international audience. Potential risks associated with participation in this study are loss of privacy should confidentiality of responses be compromised. The researcher has taken steps listed below to protect participants' identity in order to protect individuals from embarrassment that may be caused by associating identities of respondents with their responses.

Confidentiality: All information associated with project participants will be kept in a locked office accessible only to the researcher. In accordance with the Federal regulations, the research materials will be kept for a period of seven years after the completion of the research project. No comments will be attributed to you by name in any reports or publications related to this study. You may be identified by category (e.g., teacher), but a pseudonym will be used in place of your name in all reports. Neither the school nor the school district will be identified in any reports or publications related to this study.

Participation is Voluntary: Your participation is entirely voluntary. If you choose to withdraw from the project at any time, all data pertaining to you will be destroyed. By completing and turning the participant journal over to me you are giving your consent to having your journal entries included with the data for this study. Refusal to participate or discontinued participation at any time will not result in penalty or loss of benefits to which you are otherwise entitled.

Questions: Please feel free to contact me (417-880-2909 or slangston@spsmail.org) or Dr. Cynthia MacGregor (417-836-6046 or CMacgregor@MissouriState.edu) with any questions or concerns. If you have questions about your rights as a research project participant, you may contact the MU Institutional Review Board at 573-882-9585.

Informed Consent: Your input is very valuable, and your participation will be greatly appreciated. **Two copies of this form are being provided to you. Please sign and return one to me and keep the second copy for your reference. By signing this informed consent form and returning it to me, you are consenting to allow use of your journal responses in this study.**

Sincerely,

Susan Langston
1272 E. Hayden Ct.
Springfield, MO 65804
417.880.2909
slangston@spsmail.org

Please sign this copy of the Informed Consent Letter and return it to Susan Langston.

____ I give my permission for the responses I have made in the participant journal to be used as data for the study entitled "A Qualitative Instrumental Case Study Investigating the Role of Targeted Professional Development in the Creation of Professional Learning Communities during the Implementation of an Elementary School Improvement Model" being conducted by Susan Langston as a requirement for completion of her degree as doctor of education at the University of Missouri.

_____ _____
Signature Date

Professional Development Case Study
Participant Journal Informed Consent

Please keep this copy of the Informed Consent Letter for your reference.

Dear _____,

This form requests your consent to participate in a research study entitled "A Qualitative Instrumental Case Study Investigating the Role of Targeted Professional Development in the Creation of Professional Learning Communities during the Implementation of an Elementary School Improvement Model" (IRB project #1200520). This study explores faculty perceptions of collaborative relationships and professional development. Data collection and analyses will be completed by Susan Langston, a doctoral student of the statewide cooperative EdD program in Educational Leadership and Policy Analysis through the University of Missouri and Missouri State University. The advisor for this dissertation project is Dr. Cynthia MacGregor, professor in the Counseling, Leadership, and Special Education Department at Missouri State University.

Procedures and Duration of Participation: By agreeing to keep this participant journal, you are consenting to write your perceptions of your interaction with colleagues in both formal and informal settings for a period of four weeks. The focus of your journal recordings will be your perceptions of collaboration and professional learning between and among your colleagues. The attached document entitled **Participant Journal Instructions** will serve as a guideline for your journal entries.

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Sincerely,

Susan Langston
1272 E. Hayden Ct.
Springfield, MO 65804
417.880.2909
slangston@spsmail.org

Professional Development Case Study
Participant Journal Instructions

Journaling Instructions: The purpose of this journal is for you to record your perceptions of formal and informal collaborative professional sessions with colleagues. Please record your perceptions of your collaborative interactions with colleagues for one month. Journal recordings should occur after your meetings or collaborative sessions and should not interfere with completion of your professional tasks during your meetings. Specific names of colleagues should not be used in the journal, and the journaling should not impede, constrain, or harm your relationships with colleagues.

In the participant journal you will describe formal or informal meetings you observe or in which you participate. Your journal should be a free-flowing record of your thoughts related to your collaborative activities or observations of collaboration between and among your colleagues. The following questions may serve as a guide to help you begin your journaling of collaboration with and among your colleagues in both formal and informal settings. Please do not limit your writing, though. It is understood that you may record observations that do not fall within the scope of these items.

- From your point of view, was the collaboration guided by norms of mutual respect?
- Did your professional collaboration impact your classroom practices? Why or why not?
- Did you and your colleagues learn something new related to teaching and learning as you collaborated?
- Describe any of the following professional learning community characteristics you observed during collaborative sessions between or among teachers:
    - Supportive and shared leadership (shared decision making)
    - Shared values and vision
    - Collective learning and application of learning (researching/studying together)
    - Supportive physical or social conditions for collaboration (logistical support for collaboration/setting of norms for respectful behavior during collaboration)
    - Shared practice (peer evaluation)
    - Results-orientation (goal-setting)
    - Commitment to continuous improvement

VITA

Susan Fay Langston was born September 4, 1958, in Chicago Illinois. She grew up as the daughter of a home missions pastor and inherited from her parents a love of education and service to others. Mrs. Langston graduated in 1988 with honors from Drury University, earning a Bachelor of Arts in Elementary Education. She began teaching in Springfield Public Schools in 1988. Mrs. Langston taught third, fifth, and sixth grade students at the elementary school level for six years and later moved to middle school where she taught sixth grade science for 15 years. In 1994 she earned a Master of Science in Elementary Education from Drury University. Mrs. Langston earned a second Master of Science in Educational Administration in 2007 from Missouri State University in order to pursue an interest in educational leadership.

More recently, Mrs. Langston moved to the position of International Baccalaureate Middle Years Program (IB MYP) coordinator for Pipkin Middle School and Central High School in 2009. As IB MYP coordinator, she is responsible for implementation and sustainability of the program that was authorized in 2009. Her main responsibilities include training of middle school and high school teachers in the philosophy and practices of the IB MYP curriculum model and ensuring the program is aligned with IB Standards and Practices. She is also responsible for educating students, parents, and community members about the program's philosophy and practices. In addition, Mrs. Langston is responsible for marketing the IB MYP as a Choice Program within Springfield Public Schools. In her capacity as IB MYP coordinator, Mrs. Langston has served as the MYP representative on the executive board of the Midwest IB Schools organization serving a five state region.

Mrs. Langston has been very involved in lay leadership at James River Assembly of God Church. She served as a hospitality leader from 1999 to 2009 and helped to develop the hospitality ministry of a satellite church in 2006. She continues to serve in a volunteer leadership role within the church. Mrs. Langston and her husband of 31 years are the proud parents of three beautiful girls and grandparents to two wonderful boys and a beautiful baby girl.