Connecting Differentiated Professional Development to School Improvement Goals

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Mark W. Branco

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Dr. Chris Unger, Advisor

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Abstract

Research and practical experience has shown that, more often than not, the professional development opportunities that are provided for teachers are not intentionally structured to meet their individual needs nor do they have a systemic impact on the knowledge base and skill sets of an entire faculty. Furthermore, the continuous pressure that schools face to raise standards and improve performance requires educational leaders to develop and implement school improvement strategies that will lead to increased student achievement.

This problem of practice was explored through a qualitative program evaluation of a site-based, differentiated professional development model that is aligned with school improvement goals. This program was implemented at a small, suburban middle school in central Massachusetts. The professional development offerings were differentiated by delivery method, included on-site and off-site sessions, and provided teachers with opportunities to participate in the design of, or make choices related to, their own professional development. This study focused on the participants’ perceptions of the development, implementation, and impact of the program as well as its utility as a program for individual growth and continuous school improvement. Data was collected through an end of year survey and focus group.

The findings of this study suggest that that this type of professional development model is useful in that it should lead to organizational improvement and capacity building. Additionally, this study revealed four specific components that, when included in a professional development model, can effectively contribute to the professional growth of teachers.

Key words: differentiated professional development, authentic/job-embedded learning, teacher perceptions of professional development, school improvement planning, and program evaluation.
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Chapter I: Introduction

“I have no special talents. I am only passionately curious.” - Albert Einstein

Problem of Practice

Over the past few years, it has been acknowledged that current models of professional development are not effectively improving the practice of teachers. For example, Cole (2004) has gone so far as to call our current methods “a great way to avoid change” (p. 1). In many cases “there is almost no opportunity for teachers to engage in continuous and substantial learning about their practice in the setting in which they actually work” (Elmore, 2004, p. 127). Fullan (2008) reinforces this point by stating that professional development programs or courses, even when they are good in themselves, at best, represent useful input, but only that. Recently, Reeves (2009) has suggested that educational leaders should focus on what to teach, how to teach, how to meet the needs of individual students, and how to build internal capacity. He goes on to say that “with an emphasis on internal capacity, the leadership of professional development efforts comes from the faculty itself, and a large part of professional education takes place in the classroom while teachers are engaged in authentic teaching” (p. 63).

Professional development has been presented and defined in many different ways. In a study of research done between 1988 and 2003, Maxwell, Field, and Clifford (2006) failed to find a clear, common working definition. They believe that researchers, policy makers and study participants struggle with this task due to inconsistencies in nomenclature and terminology. They recommend that the industry develop common definitions of professional development. Since that time many scholars and educational organizations have taken up this challenge. For the purpose of this study, the following definition as developed by the National Staff Development Council (2008) will be used: “the term 'professional development' means a
comprehensive, sustained and intensive approach to improving teachers' and principals' effectiveness in raising student achievement.”

Bowgren and Sever (2010) ask, “if, as Marzano, Picking, and Pollock (2001) note, the classroom teacher is the most important factor in student success, then how can we ignore the value of differentiation for the most valuable students: our teachers themselves?” (p. 22). It is imperative that we provide teachers with frequent, high quality, and up-to-date professional development. We must meet the individual needs of our teachers in the same way that we ask them to meet the individual needs of their students. However, Reeves (2009), tells us that in many cases this is not being done. “Ironically, we may find 500 teachers in a dark auditorium listening to an expert lecture at length about the need for differentiated instruction - in precisely the same way to each teacher” (p. 63). Not only does this type of experience lack the ability to meet the various needs of teachers, it also offers little if any opportunity to apply what has been learned in a meaningful, authentic way.

The term differentiated instruction has been defined, used and interpreted in a variety of ways by those in the field of education. For example, Tomlinson and Cunnigham-Eidson (2003) tell us that “differentiated instruction refers to a systematic approach to planning curriculum and instruction for academically diverse learners” (p. 3). They state that the following five classroom elements can be differentiated: (1) content, (2) process, (3) products, (4) affect, and (5) learning environment. These authors further explain that when crafting curriculum and instruction, teachers can respond to the following three characteristics: (1) readiness, (2) interest, and (3) learning profile (p. 3). Tomlinson (2003) has also written that “differentiation can be accurately described as a…practice with a balanced emphasis on individual students and course content” (p. 14). According to Spencer-Northey (2005), “differentiation of instruction means tailoring
instruction to meet the various needs of students” (p. xi). When discussing differentiating professional development, Bowgren and Sever (2010) hone in on Tomlinson and Cunnigham-Eidson’s concepts of differentiating the process and learning environment. They “stress that ‘differentiating’ does not mean supporting individuals’ personal interests and agendas. To the contrary, the goal of differentiating the delivery of professional development for individual adult learners is to support the mission of the professional learning community” (p.20). For the purpose of this study, differentiated professional development refers to a model that includes differentiated delivery methods which, when appropriate, include differentiated instruction based on the needs of the teachers.

Many researchers and educators recognize the importance of the relationship between professional development and school improvement. Guskey (2000) explains that “a clear, systemic approach to professional development that considers both individual and organizational development is necessary for improvement” (p. 21). Marzano, Waters and McNulty (2005) state that one “approach to identifying the right work to undertake in a school is to design a site-specific” (p. 81) plan. Croft, Coggshall, Dolan, Power & Killion (2010) tell us that “powerful and practical connections can be made between district and school improvement plans and…professional development, resulting in greater coherence across the system” (p. 8) and/or within an individual school. Hoque, Alam & Abdullah (2009) conducted a research study that explored the “relationship between teachers’ traditional professional development activities and school improvement” (p. 337). These authors concluded that after participating in professional development, teachers often “view their work from a new vantage point to meeting the classroom needs on the way to school improvement” (p. 345). Cole (2004) also recognizes the strong connection between these two important components of education. He states that “the
effectiveness of teacher development programs and strategies thus should be measured by individual teacher improvement and by improved school performance which results from the effects of accumulated teacher improvement” (p. 3). According to Harris (2002) “the most successful school improvement projects across many countries…recognize that school improvement is not a single activity or approach but a powerful set of processes that can significantly enhance the quality of teaching and learning” (p. 18). An effective professional development program is one such process.

**Problem of Practice at Littleton Middle School.** In previous years, professional development in the Littleton Public Schools looked similar to that of other schools. The delivery model fluctuated from year to year, the professional development was not consistently differentiated to attend to the specific needs of teachers, and it was not specifically and consistently connected to the school improvement efforts of each school in the district. Recognizing the need to both differentiate professional development to best meet the needs of teachers and align these efforts to the larger goals of school improvement at each school the administrative council, made up central office and building level administrators, considered how best to attain this goal. They started in the 2010-2011 school year, by redesigning the school improvement plan template in an effort to present a clearer focus on how the action steps for each goal area would be implemented, monitored and evaluated. During the 2011-2012 school year, the district made a concerted effort to align much of its professional development efforts with the individual school improvement plans.

At Littleton Middle School, the Principal in collaboration with the site-based Professional Development Committee (PDC), developed a site based Professional Development Plan (See Appendix F). This plan included structures and strategies related to funding, differentiated
delivery methods, choice, authentic and embedded experiences, capacity building, clear connections to the school improvement plan, and a program evaluation component. In addition to tuition reimbursement for graduate and post-graduate course work, which was contractually provided, the plan included: funds budgeted at the building level for teachers to attend conferences/workshops of their choice, opportunities for teams of teachers to attend two specific conferences chosen by the PDC, and multiple in-house professional development sessions led by contracted consultants and school/district faculty. Each of these professional development delivery methods was deliberately connected to the school improvement goals.

The question for the 2011-2012 school year was whether such a program could indeed lead to individual and school-wide growth as well as measurable school improvement. Given this question, the purpose of this study was to collect and assess participants’ perceptions of the professional development model as aligned with the school improvement plan.

**Significance of the Problem**

These are not new issues. In 1983, The National Commission on Excellence in Education released its report entitled *A Nation at Risk*. This report included recommendations specifically related to professional development. Recommendation D3 states that “school boards should adopt an 11-month contract for teachers. This would ensure time for curriculum and professional development” (National Commission on Excellence in Education, 1983, p. 26). Recommendation D7 states that “master teachers should be involved in designing teacher preparation programs and in supervising teachers during their probationary years” (p. 26).

In 1999, The National Research Council’s Committee on Learning Research and Educational Practice released a report entitled *How People Learn: Bridging Research and Practice*. The authors of the report, Donovan, Bransford, and Pellegrino (as cited in Mims,
2003) stated that authentic learning is a pedagogical approach that allows students to explore, discuss, and meaningfully construct concepts and relationships in contexts that involve real-world problems and projects that are relevant to the learner. Donovan et al. (1999) state that “How People Learn proposes a framework to help guide the design and evaluation of environments that can optimize learning” (p. 19). Donovan et al. (1999) also tell us that while the framework assumes that the learners are children, the principles can apply to adult learning as well. They add that “many approaches to teaching adults consistently violate principles for optimizing learning. Professional development programs for teachers, for example, frequently are not learner centered…are not knowledge centered…are not assessment centered…are not community centered” (Donovan et al, 1999, p. 24). Additionally, they state that “teachers need opportunities to be involved in sustained learning, through teaching that models the methods that they are being urged to adopt” (p. 27).

In April of 2008, twenty-five years after A Nation at Risk, the U.S. Department of Education released a follow-up report entitled A Nation Accountable: Twenty-five Years After A Nation at Risk. In response to the original findings and recommendations related to teacher quality, this report states that instead of strengthening teacher preparation in subject-matter knowledge, there “was an even greater focus on classroom-teaching philosophy” (U.S. Department of Education, 2008, p. 6). This recent report claims that the No Child Left Behind Act’s Highly Qualified Teacher provision has done little to increase teachers’ subject-matter knowledge or individual teacher effectiveness (U.S. Department of Education, 2008). In the final section entitled Looking Ahead, the authors of the report unfortunately admit that “we do not yet know as much as we would like about how to develop these great teachers or the best
way to allocate our teaching resources to do the most good” (U.S. Department of Education, 2008, p. 14).

Fernandez (2011) tells us that “the merits of good planning by schools may seem obvious to some. Intuitively, many believe that high quality planning should help organizations of all kinds achieve their goals” (p.339). This author goes on to state that

at any given time, a school or school system may have a battery of reforms or pedagogical activities from which to choose from to improve the quality of education. Formal planning at the school level may assist schools in making decisions in this complex context. (p.339)

According to White and Smith (2010),

School improvement in its current form is ubiquitous in public and private schools [throughout] …most developed nations around the world. For North Americans, at least a generation has passed since the wholesale adoption of school improvement planning as a means to improve student achievement and build capacity among staff. (p. 14)

These authors state that we should change “the school improvement emphasis from creating an improvement cycle to refining the quality of that cycle, with clearly defined planning, implementation, monitoring, and evaluation protocols undergirded by extensive collaboration and accountability” (p. 15).

As previously explained, this problem of practice is significant in Littleton. This study was intended to provide a better understanding of the significance of this problem of practice at the local level as well as a structured way to address it.
Practical and Intellectual Goals

Maxwell (2005) states that “practical goals are focused on accomplishing something” while intellectual goals should be “focused on understanding [or] gaining insight into what is going on” (p.21). The practical goal of this study is to evaluate to what extent teachers and the Principal perceive a professional development program closely aligned with the school improvement plan to be advantageous for both teachers and the school. The intellectual goal of this study is to better understand what structures and strategies might effectively benefit both the individual development of teachers and school-wide improvement efforts by connecting differentiated, authentic/job-embedded professional development with school improvement goals.

Research Questions

The following three questions will guide the collection and analysis of data for this study.

1. To what extent (how and why) do teachers and the Principal perceive the utility of a professional development program that is aligned with the school’s improvement plan?

2. To what extent (how and why) do teachers perceive components of such a program to be effective in contributing to their individual professional growth as connected to the goals of the school improvement plan?

3. To what extent (how and why) can this type of professional development structure positively impact school improvement, as perceived by teachers and the Principal?

Document Organization

The introduction of this thesis presents the educational problem of practice under study as well as the historical and current significance of this problem. An overview of the practical and
intellectual goals as well as a summary of the research questions are followed by a presentation of the theoretical framework that guided the collection and analysis of data. The following chapter provides the literature review, which has been organized by four emergent themes, providing additional context for the study. The literature review is followed by a presentation of the research design which includes: a presentation of the research questions and methodology identified for this study; a presentation of the site and participants involved; data collection methods and analysis procedures; and a discussion of issues related to validity, reliability and ethical considerations. The findings are then presented, followed by the summary chapter which provides the key findings and their relationship to the theoretical framework and literature review, as well as the significance of the study.

**Theoretical Framework**

In efforts to better understand professional development, researchers have organized their work around a multitude of theoretical frameworks or central ideas. Butin (2010) states that it is important to articulate “not only what idea you are going to be examining, but from what perspective” (p. 58) you will be examining it as well. Creswell (2009) tells us that theory is used and presented differently depending on whether the study is qualitative or quantitative. For example, quantitative researchers “often test theories as an explanation for answers to their questions” (p. 49), while for qualitative researchers, theory either “provide[s] a lens that shapes what is looked at and the questions asked” (p.49) or is generated “as the final outcome of a study” (p. 49).

This study was informed by Adult Learning Theory, as well as Change Leadership and Transformational Leadership theories. According to Bush (2003) “Griffiths provides strong arguments to underpin his advocacy of ‘theoretical pluralism’” (p.25). Griffiths states that "the
basic idea is that all problems cannot be studied fruitfully using a single theory” (as cited in Bush, 2003, p. 26). Together, the above theories provided the researcher with a better understanding of how to effectively provide teachers with meaningful and appropriate learning experiences that meet their individual needs as well as the goals of the school and/or school district.

Adult learning theory. Adult Learning Theory has been chosen by many researchers who have studied professional development. Miller (2011) tells us that developmental theories, such as Adult Learning Theory, focus on change over time and attempt “to explain by what process a phenomenon (a) emerged from prior development and (b) leads to subsequent development” (p. 8). She goes on to state that as a result of this focus on change, developmental theories are presented with three tasks. “These tasks are (1) to describe changes within one or several areas of behavior, (2) to describe changes in the relations among several areas of behavior, and (3) to explain the course of development that has been described” (p. 8). Knowles, Holton, and Swanson (2005) state that agents of change should explore learning theory because it will “increase [their] understanding of various theories and [their] chances for achieving [their] desired results” (p.7).

Knowles, Holton & Swanson (2005) tell us that Malcolm Knowles first introduced “andragogy and the concept that adults and children learn differently” (p. 1) in the early 1970’s. Knowles et al. state that:

Our position is that andragogy presents core principles of adult learning that in turn enable those designing and conducting adult learning to build more effective learning processes for adults. It is a transactional model in that it speaks to the characteristics of the learning transaction, not to the goals and aims of that transaction. (2005, p. 2)
The six principles of Adult Learning Theory are presented as follows: “(1) the learner’s need to know, (2) self-concept of the learner, (3) prior experience of the learner, (4) readiness to learn, (5) orientation to learning, and (6) motivation to learn” (Knowles et al., 2005, p. 3). These six principles have developed over time with the first four (2-5) becoming solidified between 1975 and 1980. Knowles added principle number six in 1984 and principle number one between 1989 and 1990 (Knowles et al., 2005). The strength of andragogy is that “it is a set of core adult learning principles that apply to all adult learning situations. The goals and purposes for which the learning is offered are a separate issue” (p. 2).

In Making Sense of Adult Learning, MacKeracher (2004) explains that she subscribes to a learning centered approach that “focuses primarily on the learning process and the learning characteristics of the learner, and secondarily on teaching and the characteristics of those who help the learner to learn” (p. 4). She breaks down the adult learning process through a variety of lenses that help the reader better understand this complex topic.

In her book Leading Adult Learning: Supporting Adult Development in Our Schools, Drago-Severson (2009) asks “how can we create high quality learning and growth opportunities for adults with different needs, preferences, and developmental orientations” (p. x)? In this book she presents her learning-oriented model of school leadership that is built upon four pillar practices for growth that she introduces, connects to developmental theory, and then gives implementation examples of through various case studies. Ms. Drago-Severson’s work in this book can serve as a practical guide for anyone interested in or required to lead adult learning.

The various components of Adult Learning Theory, as outlined above, have been used in this study to guide the analysis of data as well as to inform the program evaluation in the areas of implementation and identification of improvement areas.
**Change leadership.** Researchers often study and/or apply various types of change leadership when working on professional development. According to Burke (2008), “we need to know much more than ever before about how to understand, lead, manage and in particular, change organizations” (p.1). In his book *Leading Change in Your School*, Reeves (2009) states that change leadership is “the single greatest challenge for organizations around the world - not only in education, but also in business, government, professional practices, and nonprofit organizations” (p. 1). Quality professional development is a major component of the change process on both an individual and whole school level.

Michael Fullan has written extensively on the subject of change leadership. Some of the theories that he presents in *The Six Secrets of Change* were helpful in planning and implementing this project. In Secret Two, entitled *Connect Peers with Purpose*, he explains that “positive purposeful peer interaction, works effectively under three conditions” (Fullan, 2008, p. 45). The first is when the values of the organization and its individuals are intertwined. The second is when those individuals collectively share information and knowledge related to effective practices. Thirdly, proper monitoring mechanisms must be in place to recognize and recreate effective practices, as well as to identify and address those practices that are ineffective (Fullan, 2008).

**Transformational leadership.** According to Burns, “transformational leadership is more focused on change [and converting] followers into leaders” (as sited in Marzano et al., 2005, p.14). According to Marzano et al. (2005), Leithwood built on the work of Burns, Bass, and Bass and Avolio when he “developed the transformational model of school leadership” (p. 15). These authors also tell us that Leithwood “notes that the four I’s of transformational leadership identified by Bass and Avolio (1994) are necessary skills for school principals if they
are to meet the challenges of the 21st century” (p.15). These four characteristics are individual consideration, intellectual stimulation, inspirational motivation, and idealized influence.

Leithwood, Jantzi, and Steinbach state that transformational leadership “assumes that the central focus of leadership ought to be the commitments and capacities of organizational members. Higher levels of personal commitment to organizational goals and greater capacities for accomplishing those goals are assumed to result in extra effort and greater productivity” (as cited in Bush, 2003, p 76-77).

In an effort to effectively implement and sustain change and build capacity as an organization, it was important to apply the concepts of the above theories throughout the development, implementation and evaluation of the program. It was of equal importance to glean from this study, the extent to which school-wide change and capacity building have occurred.

**Chapter II: Literature Review**

An extensive amount of research has been done in the areas of teacher professional development and school improvement planning. In an effort to ground this project within the larger context of the stated problem of practice, the literature reviewed was chosen with a specific focus on differentiated professional development, authentic/job-embedded learning, teacher perceptions of professional development, school improvement planning and change leadership. This focused search led to books by many highly regarded educational leaders as well as articles that appear in a variety of publications including: *Phi Delta Kappa, Academic Leadership, Planning and Changing, Educational Policy, The Clearing House, The Qualitative Report, Journal of Research on Technology in Education, College Reading Association Yearbook, Educational Review, Journal of Educational Change, American Secondary Education,*
School Leadership and Management, Journal of Research on Technology in Education, Journal of Teaching in Physical Education, Issues in Educational Research, Exceptionality, School Science & Mathematics, Journal of Education for Students Placed at Risk, and Educational Evaluation & Policy Analysis. The authors/researchers of these articles/studies are professors of education, educational consultants, coordinators and directors of university and national programs and projects, and in many cases, former classroom teachers. The literature review gave way to the following four emerging themes:

1. The benefits of teachers participating in the design of their own professional development.
2. The benefits of differentiated delivery methods that lead to the alignment of professional development and school, district, or state goals.
3. The benefits of authentic/job-embedded professional development.
4. The benefits of administrators supporting professional development.

Before exploring the four emerging themes, it is important to frame the topic of professional development. Guskey (2000) tells us that “never before in the history of education has greater importance been attached to the professional development of educators” (p. 3). He explains that there are many reasons for this fact such as a rapidly growing knowledge base in education as well as in most subject areas and academic disciplines. “Like practitioners in other professional fields, educators must keep abreast of this emerging knowledge and must be prepared to use it to continually refine their conceptual and craft skills” (p. 3).

Many scholars and educational leaders have developed working definitions of professional development. Guskey (2000) writes that “professional development is defined as those processes and activities designed to enhance the professional knowledge, skills, and
attitudes of educators so that they might, in turn, improve the learning of students” (p. 16). He adds that “we need to consider three additional defining characteristics. Professional development is a process that is (a) intentional, (b) ongoing, and (c) systemic” (p. 16). For the purpose of this study, the following definition as developed by the National Staff Development Council (2008) will be used: “the term 'professional development' means a comprehensive, sustained and intensive approach to improving teachers' and principals' [administrators’] effectiveness in raising student achievement.”

The benefits of Teachers Participating in the Design of Their Own Professional Development

It seems only logical that teachers would have a voice in the design and implementation of their own professional development. However, this has not been and is not always the case. When discussing her study of the “change phenomenon as it impacts practicing teachers” (Meister, 2010, p. 881), Meister references the work of Fullan; Barth; Hargreaves; Webb, Corbett & Wilson; and Wideen. Her study was developed to “ascertain common traits that can serve as a framework for providing professional development to assist teachers in the workforce” (p. 880). She tells her reader that this study supports the fact that “teachers remain plagued and rewarded by the same issues of those who predated them…It is time for these perceptions to be taken seriously, especially in the way professional development is approached” (p. 893). Then, according to Meister, sustained and effective change can take place.

Guskey (2000) tells us that:

Educators themselves frequently regard professional development as having little impact on their day-to-day responsibilities. Some even consider it a waste of their professional time. They participate in professional development primarily because of contractual
obligations but often see it as something they must “get out of the way” so that they can get back to the important work of educating students. (p. 4)

By becoming involved in the design, and in some cases, the implementation of their own professional development, teachers’ negative response to or opinions of professional development may be replaced by a new found sense of investment and purpose.

According to Hawley and Valli (2000), “professional development should involve teachers in the identification of what they need to learn, and when possible, in the development of the learning opportunity and or the process to be used” (p. 2). Involving teachers in this way increases their “motivation and commitment to learn” as well as “the likelihood that what is learned will be relevant to particular contexts and problems.” It also “encourages them to take instructional risks and assume new roles” (p. 2).

Lucilio (2009) writes that “the most significant recommendation that can be made from the literature reviewed and findings presented [in her study] is that teachers want to be asked what they need to improve student learning and their suggestions must be used when planning professional development experiences…Teachers must be included in the design, development, implementation, and delivery of professional development” (p. 73). Prusiecki (2009) cites Stingler and Hiebert when he writes that “in order for professional development to succeed in impacting and sustaining school change, teachers need to be an integral part of the process from the beginning” (p. 15).

Lester (2003) concludes her study by stating that teachers:

will buy into professional development programs in which they feel their voices are heard and valued…Planning with administrators gives teachers a voice in the management of their professional growth, engages them in meaningful dialogue, breaks down
misconceptions, initiates activities that provide support for improved practice, and results in teachers who are accountable and who have a positive impact on student learning. (p. 57)

The Benefits of Differentiated Delivery Methods That Lead to the Alignment of Professional Development and School, District, or State Goals

There is a considerable amount of research that provides today’s educational leaders with concrete evidence that in order to positively impact school-wide professional growth, the individual needs of teachers must be identified and addressed when planning professional development. In a study done by Morewood, Ankrum and Bean (2010), it was determined that teachers have a wide variety of professional learning needs that must be addressed through professional development choices. In a previous study, Quick, Holtzman and Chaney (2009) wrote that teachers…and leadership team members…reported that effective professional learning is responsive, addressing the identified needs of teachers” (p. 56). According to Dahlberg and Philippot (2008), “professional development should be differentiated given the varying needs and career stages of teachers” (p. 39). These authors state in the conclusion of their study that when given professional development choices, there is increased buy-in and greater enthusiasm that leads to teachers being “highly motivated to learn and grow” (p. 39).

Bowgren and Sever (2010) cite Tomlinson and Cunningham-Eidson when they write that by combining “whom we teach with what we teach, and how we teach, we engage in responsive teaching” (p. 21). They go on to state that “responsive teaching of adults brings the realization that one-size-fits-all professional development cannot provide success for all…Matching teacher needs with district [or school] initiatives requires adjustments in planning and implementing professional development activities. Differentiation is key” (p. 23).
In their 2005 report entitled *School Improvement Planning: What’s Missing*, The Center for Mental Health in Schools at UCLA presented five major recommendations. The first recommendation states that “every school improvement planning guide should have a focus on development of a comprehensive, multifaceted, and cohesive learning supports system which is fully integrated with plans for improving instruction at the school” (p. V). White and Smith (2010) support this notion as well. They explain that “focused and supported professional development” (p. 17) is a major element of school improvement planning. When considered holistically with the “master plan design” and “targeted instructional strategies,” professional development enables “schools to respond with agility to the changing needs of students and changing requirements and challenges for teachers” (p. 17).

Prusiecki (2009) writes that “the current interest in effective professional development is enhanced by the demand of the public for improved educational opportunities for all children” (p.15). “It is not surprising that one of the most persistent findings from research on school improvement is the close relationship between professional development and school improvement efforts. The two processes are so tightly woven that their efforts are almost impossible to disentangle” (Hawley & Valli, 2000, p. 5).

Darling-Hammond and Richardson (2009) tell their readers that “professional development is more effective when schools approach it not in isolation…but rather as a coherent part of a school reform effort” (p.2). Pritchard and Marshall (2002) state that “healthy districts tend to make a fit of all their professional development activities by integrating them into a systems belief or vision that moves the district forward” (p. 136).

Research has begun to show that teachers understand and value the connection between professional development and school improvement planning. The results of a qualitative case
study conducted by Morewood and Bean (2009) showed that teachers value professional development that is aligned with their own personal, district and state goals. Quick, Holtzman and Chaney (2009) write that teachers “highlighted the value of professional development experiences that are connected to one another and to the overall school vision and goals” (p. 57).

The Benefits of Authentic/Job-Embedded Professional Development

Over the past ten years, many authors have written about the positive impact of teachers experiencing authentic, “job-embedded learning” (DuFour, Dufour & Eaker, 2008, p. 95) or professional development through the professional learning community (PLC) model (DuFour & Eaker, 1998; DuFour, Dufour & Eaker, 2008; Schmoker, 2006). DuFour, DuFour, Eaker, and Many (2006) supplied us with a strong PLC definition when they wrote:

We define a professional learning community as educators committed to working collaboratively in ongoing process of collective inquiry and action research to achieve better results for the students they serve. Professional learning communities operate under the assumption that the key to improved learning for students is continuous, job-embedded learning for educators. (p. 14)

Mike Schmoker (2006) wrote that most professional development “makes no formal, immediate arrangements for teachers to translate learning into actual lessons or units, whose impact we assess and then use as the basis for ongoing improvement. Without this simple cycle, training is irrelevant” (p. 109). He goes on to say that if teachers combine their knowledge and skill sets by working collaboratively, they in fact possess the ability to make serious improvements that will positively impact student achievement. Other countries such as Japan and Germany learned some time ago that instead of workshops, “effective team-based learning communities” (p. 109) are the strongest, most impactful type of professional development.
Slepkov (2008) conducted a study “that closely followed and documented the journeys of professional growth for a group of teachers from their points of view, over a period of six months” (p. 85). The participants took part in a technology oriented project that was embedded in an authentic learning environment. According to Slepkov, the data collected in this study proves that one way to facilitate positive change in teachers is to structure “professional development in such a way that it is authentic, based in the classroom and focused on tasks meaningful to and specifically chosen by the teacher” (p. 85). His work was influenced by that of many others who had also viewed professional development through the developmental, learning and adult learning theory lenses. He specifically cites Ball & Cohen, Hawley & Valli, Little, Guskey, Mezirow, Lieberman & Miller, and McLaughlin & Oberman.

In order to effectively meet the needs of teachers while simultaneously building capacity and moving the organization forward, “districts must gradually and systematically move from the one-shot, one-day, out-of-the-district workshop to job-embedded, teacher lead collaboration” (Bowgren & Sever, 2010, p. 23).

Interestingly enough, while so many researchers and educational leaders believe in the value of authentic, job embedded learning, Guskey and Yoon (2009) remind us that there is still a place for workshops and outside experts. “Of all professional development activities, none has been more disparaged in recent years than workshops, particularly those of short duration” (p.496). These authors go on to explain that while a lot of workshops are in fact a waste of time and money, those that are impactful have focused on “the implementation of research-based instructional practices, involved active-learning experiences for participants, and provided teachers with opportunities to adapt the practices to their unique classroom situations” (p. 496). By applying their new found knowledge authentically and sharing what they have learned with
their colleagues in an effort to build capacity, teachers who attend workshops help prove that “they are not the poster child of ineffective practice that they are often made out to be” (p.496).

Guskey and Yoon (2009) also state that, “many writers in education today stress that professional development should be strictly site-based and should build on the combined experience of in-house staff members” (p. 496). According to these authors, a comprehensive analysis of over 1,300 studies addressing the effect of professional development on student learning revealed that the involvement of outside experts is an important component of a successful professional development effort. In the studies analyzed, “these individuals were either program authors or researchers who presented ideas directly to teachers and then helped facilitate implementation” (p. 496).

Hawley and Valli (2000) bring both schools of thought together in a logical way. They write that “professional development should be primarily school based and integral to school operations” (p. 2). However, “this does not mean denying teachers’ access to out-of-school learning experiences through professional associations or networks, graduate study, or teacher centers” (p. 2). They go on to say that “the most powerful opportunities to learn are often connected with the recognition of and solution to authentic and immediate problems” (p. 2).

By designing a site-based professional development program that includes a variety of experiences and delivery methods such as: supporting teachers’ enrollment in graduate courses, sending teachers to workshops/conferences, bringing in consultants, and empowering in-house experts to share their knowledge with their colleagues, school leaders will be able to thoughtfully and systematically provide teachers with professional development that is differentiated, authentic/job-embedded and connected to the needs and goals of the school.
The Benefits of Administrators Supporting Professional Development

Zepeda (2008) reminds us that “although no principal can ‘do it all,’ the principal is the point of convergence for all that the school is and does” (p. 1-2). Darling-Hammond (2003) states that “great school leaders create nurturing school environments in which accomplished teachers can flourish and grow” (p. 13). Fullan (2008) writes that “leaders have to provide direction, create the conditions for effective peer interaction, and intervene along the way when things are not working as well as they could” (p. 49). Marzano, Waters and McNulty (2005) identify “21 responsibilities of the school leader.” Under the responsibility of “resources” these authors explain that “one of the most frequently mentioned resources important to the effective functioning of a school is the professional development opportunities for teachers” (p.59). They further explain that in their meta-analysis resources “refers to the extent to which the leader provides teachers with materials and professional development necessary for the successful execution of their duties” (p. 60).

Whitaker (2003) explains that one of his “certain essential beliefs” (p.113) is that “success comes from people not programs.” This is an important statement to make in an industry that is constantly being bombarded by the next new product, program, methodology, concept, initiative, and mandate. However, it is also a very logical statement due to the fact that education is a people business. Whitaker makes the bold statement that the concept of school improvement is very simple and that “there are really two ways to improve a school significantly: 1. Get better teachers. 2. Improve the teachers you have” (p. 7-8). He explains that “outstanding principals know that their primary role is to teach the teachers…great principals focus on students – by focusing on teachers…it we assume that all teachers do the best they know how, we can switch our attention to improving what they know” (p. 35-36).
While it is evident that it is incumbent upon the principal to establish him/herself as the educational leader of the school, researchers have established that it is equally important that (s)he is, to the extent that is possible, an active participant in the professional development programming. Yager, Pederson and Yager (2010) write that “principals play a key role in supporting and encouraging teachers’ professional development needs. Successful principals establish the work conditions that enable teachers to be better teachers” (p.1). According to these authors, the teachers interviewed in their study stated that a contributing factor to the success of their professional development initiative was the fact that “the principal was not only present at the coaching and training sessions, but was actively engaged and participating as a learner with the teachers” (p. 2). Guskey (2000) believes that “the barriers between teachers and administrators need to be removed so that they can work together as partners in improvement efforts” (p. 37). Engstrom and Danielson (2006) state that one of the lessons learned in their study is that “administrators need to actively participate in the professional development opportunities provided by the district. This would allow them to work collaboratively with teachers and play a key role in organizing and supporting staff development at the building level” (p. 172).

Summary

Professional development in the field of education has been studied, written about, implemented, critiqued, and experienced by countless people in countless ways. The results of this limited, yet focused literature review demonstrate the potential benefits of designing and implementing a professional development model that considers the individual and collective needs of teachers, provides said teachers with the opportunity to participate in the design of the model, is authentic/job-embedded and/or explicitly connected to the work being done in the
classrooms, is supported by the school administrator, and is explicitly aligned with the school’s improvement goals. When studied in isolation, each of the themes identified in this review have merit and validity in their own right. However, when studied, and applied collectively, there is great potential for meaningful and impactful professional development to occur.

**Chapter III: Methodology**

Butin (2010) reminds us that our “research questions, research purpose, research methods, and type of data are all integrally connected” (p. 77). The purpose and questions will lead to a methodology, and the methodology will lead to the data and analysis.

**Research Questions**

The following questions were explored through this qualitative program evaluation of a site-based professional development program.

1. To what extent (how and why) do teachers and the Principal perceive the utility of a professional development program that is aligned with the school’s improvement plan?

2. To what extent (how and why) do teachers perceive components of such a program to be effective in contributing to their individual professional growth as connected to the goals of the school improvement plan?

3. To what extent (how and why) can this type of professional development structure positively impact school improvement, as perceived by teachers and the Principal?

**Research Design**

**Qualitative methodology.** The research methodology used in this study was a qualitative evaluation of a site-based professional development program that is aligned with the school improvement goals. Hesse-Biber and Leavy (2011) write that “unlike quantitative
research, in which the goal is to make generalizations about the degree or extent of a problem or set of patterns, qualitative research aims to look at a “process” or the “meanings” individuals attribute to their given social situation” (p. 45). Creswell (2009) tells us that “qualitative research is a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem” (p. 4). Maxwell (2005) states that “the strengths of qualitative research derive primarily from its inductive approach, its focus on specific situations or people, and its emphasis on words rather than numbers” (p.22). He goes on to say that due to the fact that qualitative researchers tend to keep their studies small in numbers of both people and situations, thus preserving the individuality of both, “they are able to understand how events, actions and meanings are shaped by the unique circumstances in which they occur” (p. 22). Qualitative researchers focus on the meaning that individuals or groups attribute to a specific problem of practice. The research process most often takes place in the participant’s setting (Creswell, 2009).

As a result of this focus on people, meaning and authentic setting, qualitative research seems to be a natural fit for many studies related to educational practices. In this study, the experiences of the participants and the analysis of said experiences, will be used to not only answer the above research questions, but also to document the process and outcomes of this particular program implementation in an effort to strengthen future programming and design a transferable professional development model.

**Practice-based research (PBR): Program evaluation.** According to Wholey, Hatry and Newcomer (2010), “program evaluation is the application of systemic methods to address questions about program operations and results. It may include ongoing monitoring of a program as well as one-shot studies of program process or program impact” (p. 5-6). Program
evaluation “should not only assess program implementation and results but also identify ways to improve the program” (p. 6). This study focused on the implementation process, the perceived impact of the program, and improvement goals for the next professional development cycle. Royse, Thyer and Padgett (2010) state that “unlike theoretical research, where scientists engage in science for its own sake, program evaluation systematically examines human service programs for pragmatic reasons” (p. 12). The authentic, practical nature of this methodology lends itself nicely to the desired outcomes of this study.

According to the Kellogg Foundation (2004), “many evaluation experts agree that use of a logic model is an effective way to ensure program success” (p. 5). This organization also tells us that “a logic model is a systematic and visual way to present and share your understanding of the relationships among the resources you have to operate your program, the activities you plan, and the changes or results you hope to achieve” (p. 1). In an effort to design a “roadmap describing the sequence of related events connecting the need for the planned program with the program’s desired results” (p. 3), the researcher/Principal, along with the site-based Professional Development Committee (PDC) developed a logic model for the program (see Table 1).
<table>
<thead>
<tr>
<th>Resources/ Inputs</th>
<th>Activities</th>
<th>Outputs</th>
<th>Outcomes</th>
<th>Impact</th>
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<tbody>
<tr>
<td>Principal</td>
<td>Graduate course work</td>
<td>Attendance as required</td>
<td>Increase in individual &amp; school-wide pedagogical knowledge &amp; skill sets (content &amp; instructional methodologies)</td>
<td>Provide a differentiated PD delivery model that is connected to the SIP</td>
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<tr>
<td>Central office</td>
<td>Conferences &amp; workshops</td>
<td>3-5 ind. attendees of content specific conferences</td>
<td>Reduce the perception that PD is not thoughtfully planned, meaningful, or related to increased student learning &amp; engagement</td>
<td>Create a PD environment that builds capacity through the transfer of knowledge among the faculty</td>
</tr>
<tr>
<td>admin. team</td>
<td>Site-based PD: - Second Step - Open Response</td>
<td>1 team of 7 to attend NELMS conf.</td>
<td></td>
<td>Create a transferable framework for PD that can be applied in a variety of school settings regardless of content or discipline</td>
</tr>
<tr>
<td>PDC</td>
<td>- Co-teaching - Technology integration - Curriculum revision &amp; alignment</td>
<td>1 team of 4 to attend Blue Ribbon Conf.</td>
<td></td>
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<tr>
<td>Faculty</td>
<td></td>
<td>Faculty attendance at site-based PD sessions as required</td>
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<td>Budget:</td>
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<tr>
<td>Materials</td>
<td>End of year SIP progress update to School Committee</td>
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<td>Substitutes</td>
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<td>Trainers</td>
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<td>Tuition/fees</td>
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</table>

**Site and participants.** Creswell (2007) tells us that qualitative researchers use purposeful sampling to “select individuals and sites for study because they can purposefully inform an understanding of the research problem and central phenomenon in the study” (p. 125).

This study was conducted at Littleton Middle School in Littleton, Massachusetts. Littleton Middle School houses three hundred and eighty students and approximately thirty professional staff in grades six through eight. This site was chosen due to the fact that, this year, the district has been working on including a site-based component in the district professional development.
model. As a result the building Principals, in collaboration with the Director of Curriculum, are charged with organizing the professional development at the building level. There is a concerted effort to link the professional development offerings with the school improvement plan in an effort to contribute to the individual professional growth of teachers while moving the organization as a whole towards the attainment of common improvement goals. The researcher was granted permission to conduct this study from the Superintendent of the Littleton Public School District (See Appendix A).

All thirty faculty members took part in the site-based professional development program. The study participants were chosen based on their individual interest and willingness to volunteer to take part in this study. The participants were a representative group of faculty from various disciplines and grade levels. These faculty members participated in a variety of professional development offerings that were aligned with the school’s improvement plan goals. Due to the fact that the researcher is also the Principal of this school, and as such, is one of the individuals responsible for providing professional development opportunities, as well as is charged with the execution of the school improvement plan, he was also a participant in this study. An interest letter (See Appendix B), and an informed consent document (See Appendix C) were used to generate interest, explain the purpose of the study, and finalize the participant roster.

**Data collection.** The data collected during a qualitative study can include almost anything that is heard, seen, or communicated in any other possible way during the time of the study (Maxwell, 2005). Creswell (2007) suggests that it is beneficial to group the ever-expanding forms of qualitative data into the following four categories: observations, interviews, documents,
and audio-visual materials. In this study, data was collected through (1) an end of program survey and (2) focus group.

Survey. At the conclusion of the program, all teachers completed a survey (See Appendix D). It is important to note that this survey was developed as part of the school’s professional development model. Its original intent was to gather information that would be used to evaluate the program and to inform the planning process for the following year. DeVaus (2002) writes that “when using a survey one collects “information about the same variables or characteristics from at least two (normally far more) cases and end[s] up with a data grid” (p. 3). “Survey research is widely regarded as being inherently quantitative… [However], the nature of the data that are collected for the grid need not be quantitative at all…Each cell in the grid…may be filled with much more qualitative information.” (p. 5-6). Due to the fact that all teachers completed the survey, there was a broader base of perspectives and feedback compared to the focus group which was dependent on a smaller participant group. Survey results used as data in this study have not been attributed to any particular individual.

The faculty survey provided data in two distinct ways. The faculty survey consisted of 24 total questions, nineteen of which were closed-ended. The first two questions related to years of experience. Eight of the closed ended questions applied the same likert scale which included the following ratings: very frequently, frequently, occasionally, rarely, never. Eight other questions applied a yes/no rating scale. The final closed–ended question asked participants to rate their over-all current professional development experience as high, medium, low, or none. Of these nineteen closed-ended questions, nine included an open-ended component that provided respondents with an opportunity to elaborate in a text field. The survey also included five open-ended questions.
**Focus Group.** Close to the end of the year, study participants took part in a focus group (See Appendix E). The purpose of the focus group was to find out from participants what components they believe should be part of an effective professional development experience, their perceptions of this year’s professional development opportunities, and the degree to which these opportunities and experiences effectively supported their professional growth and contributed to the school’s improvement goals.

According to Sharken Simon (1999), “organizations most often use focus groups in planning, marketing, or evaluation, either to improve some specific product or service or, more globally, during the development of strategic plans or mission statements” (p. 15). Krueger and Casey (2009) tell their readers that “a focus group study is a carefully planned series of discussions designed to obtain perceptions on a defined area of interest in a permissive, nonthreatening environment. Each group is conducted with 5 to 10 people led by a skilled interviewer. The discussions are relaxed, and often participants enjoy sharing their ideas and perceptions” (p.2).

Due to the fact that the teachers participating in this professional development have developed strong collegial relationships and are members of grade level and or content teams, their interactions during the focus groups were “likely [to] yield [some of] the best information” (Creswell, 2007, p. 133) collected in this study. The focus group was designed to “involve unstructured and generally open-ended questions that are few in number and intended to elicit views and opinions from the participants” (Creswell, 2009, p. 181). According to Lincoln and Guba (1985):

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The structured interview is the mode of choice when the interviewer knows what he or she does not know and can therefore frame appropriate questions to find it out, while the
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unstructured interview is the mode of choice when the interviewer does not know what he or she doesn’t know and must therefore rely on the respondent to tell him or her. (p. 269)

By utilizing the unstructured format, the researcher was able to gather answers to specific questions that allowed him to draw conclusions, determine final results and next steps. This format allowed participants to play an integral role in the assessment of the program as well as its continued development.

When meeting with the focus group, as Creswell (2009) recommends, a pre-determined focus group protocol was used. This protocol included a heading (date, place, interviewer, interviewee), instructions for the interviewer to follow, the questions, probes that trigger elaboration and/or more detail, space on the page to record responses, and a final thank-you statement (p. 183). Sharken Simon (1999) provides a “step-by-step guide to focus groups” (p. 19). This ten step framework is divided into three sections: (1) planning the group, (2) implementing it, (3) and acting on the results. This framework was used as a guide throughout the focus group portion of this study.

**Data analysis.** Swanborn (2010) states that “the basic problem of data analysis is the same for all types of research: to reduce a huge amount of data in order to obtain an answer to the research question” (p. 113). The general process of collecting data during a qualitative study consists of “preparing and organizing the data for analysis, reducing the data into themes through a process of coding and condensing the codes, and finally representing the data in figures, tables, or a discussion” (Creswell, 2007, p. 148). The data collected in this study was organized using a combination of predetermined and emerging codes (Creswell, 2009).

Once all of the survey data was collected and the focus group recording was transcribed, the researcher conducted a first read-through. During the second read-through the researcher
applied multiple first cycle coding methods. In an effort to make a connection between the study and the literature review, the survey and focus group data was coded using Structural Coding methodology. According to Saldana (2009), “Structural Coding applies a content-based or conceptual phrase representing a topic of inquiry to a segment of data that relates to a specific research question [or emerging theme] used to frame the interview” (p. 100). Another benefit of this coding methodology is that it “both codes and initially categorizes the data corpus” (p. 101). The data was coded in relationship to the four emerging themes that came out of the literature review. Additionally, during the second read-through, In Vivo Coding was also used. This coding methodology “refers to a word or short phrase from the actual language found in the qualitative data record” (Saldana, 2009, p. 111). This methodology allowed the participants true thoughts to be authentically represented in the data.

Pattern Coding was the method of choice during the second cycle of coding. Miles and Huberman (1994) explain that “pattern coding is a way of grouping those summaries into a smaller number of sets, themes, or constructs” (p. 69). This methodology is beneficial in the development of major themes and the examination of human relationships (Miles & Huberman as cited in Saldana, 2009). This process was used to code the data in relationship to the three research questions.

The qualitative data analysis software MAXQDA was used “to systematically evaluate and interpret textual data” (Retrieved from: http://www.maxqda.com/products/what-is-maxqda). The data was interpreted through the personal lens of the researcher as well as through a comparison of the findings with information from the literature reviewed during the study (Creswell, 2009).
Validity and Credibility

As reported by Fraenkel and Wallen (2009), “identifying possible threats during the planning stages of a study…can often lead researchers to design ways of eliminating or at least minimizing these threats” (p. 167). By addressing and overcoming these threats, the researcher is more apt to present a valid and credible study. The validity of a study speaks to whether or not, and to what extent, the researcher, participants and readers deem the results accurate (Creswell, 2009). It is important for a researcher to show that his/her research “is not simply a self-fulfilling prophecy” (Maxwell, 2005, p. 126). Creswell (2009) provides his readers with eight primary “validity strategies” that a researcher can chose from to check the accuracy of his/her findings. Of these strategies, the following four are well suited for this particular study: Triangulation of data; member checking; rich, thick descriptions; and clarification of researcher bias.

As discussed earlier, in this study data was collected via a survey and a focus group. This data was put together to “build a coherent justification for themes” (Creswell, 2009, p. 191). Triangulating data in this manner allowed the researcher to lay a credible foundation for his findings.

Member checking was done throughout all stages of the study. After reviewing specific pieces of the research such as interpretations from the survey and focus group, the participants provided feedback regarding the accuracy of the material (Creswell, 2009). This was done through follow up interviews and asynchronous online discussions.

By providing the reader with a substantive description of the case that immerses them in the study in such a way that they feel as if they have participated themselves, (Creswell, 2009) the findings will most likely be deemed credible and valid. It was important for the researcher to
allow the individual participants’ perspectives to come out as much as possible while still maintaining a sense of cohesiveness and structure.

In order to create an “open and honest narrative” it is important to “clarify the bias the researcher brings to the study” (Creswell, 2009, p. 192). It is important to acknowledge here that there are multiple reasons for the researcher’s interest in improving teacher professional development. Not the least of which is the fact that during his twelve years as a public school music teacher, rarely was he exposed to professional development that was designed to meet him at his level of need or was transparently connected to school improvement efforts. After working for eight years as a public school administrator, he has witnessed far too many professional development offerings that assume teachers have like needs and experiences and/or lack sustainability and a focus on overall improvement. It is believed that the research strongly supports the need for differentiated, authentic/job-embedded professional development that is clearly and deliberately connected to school improvement efforts. Furthermore, it is believed that, when in place, the four components outlined in the literature review will create a successful professional development experience.

Another possible threat to the validity of this study is the fact that the researcher was also an active participant due to the fact that he is the building Principal and is responsible for coordinating and overseeing this program. In an effort to counterbalance this threat, as discussed earlier, member checking was done throughout all stages of the study, particularly after the development of the research findings.

In an effort to eliminate the possibility for these or any other biases to impact the data as it is analyzed and interpreted, the validity strategies outlined above will be strictly adhered to.
Additionally, all interviews will be recorded using digital audio equipment and survey data will be preserved and archived in their original format as well as in hard copy print.

**Protection of Human Subjects and Ethical Considerations**

According to Hesse-Biber and Leavey (2006) “researchers need to anticipate ethical issues that may arise during their studies” (as cited in Creswell, 2009, p. 87). It is also important that researchers have been educated to the ethical concepts and issues that are associated with educational research. The researcher successfully completed a course entitled *Ethical Decision Making for Educators*. This course, which is part of Northeastern University’s doctorate of education program, provided him with an opportunity to study the various factors that support and hinder ethical decision-making, as well as time to evaluate and discuss the professional competencies, intellectual foundations, and dispositions that help educational leaders make ethical decisions. In addition, the researcher successfully completed the National Institutes of Health (NIH) web-based training course entitled “Protecting Human Research Participants” as offered through the program’s course work.

It is of the utmost importance to protect all participants as well as any other individuals who may be indirectly associated with the study. Measures should be taken to maintain participant confidentiality and to ensure their physical, social and emotional well being (Fraenkel and Wallen, 2009). The participants in this study were selected purposefully to form a representative group of teachers from various disciplines and grade levels who demonstrated a willingness to participate in this study. A preliminary meeting was held to inform the participants of the purpose of the study as well as the timeline and procedures that were to be followed. They were given an opportunity to review this proposal, ask any questions about the
study and were be provided with an informed consent form to be signed prior to the start of the study.

An additional ethical consideration is the fact that the researcher is the direct supervisor and evaluator of all of the participants. It was made clear that, neither their participation in, the data collected from, nor the results determined in this study will have any negative impact on their individual evaluation processes and/or reports. They were encouraged throughout the study to share any concerns or reservations that may emerge individually or collectively.

Conclusion

Corbin & Strauss (2008) tell us that “persons choose to do research because they have a dream that somehow they will make a difference in the world through the insights and understandings they arrive at. But it is not enough to dream. Dreams must be brought to fruition” (p. 15). The material cited in this study, as well as the knowledge and information that the researcher gained through his coursework and professional experience has been a part of an on-going focus on the importance of teachers participating in meaningful, differentiated professional development that is aligned with school and/or district goals. It is the researcher’s contention that the research reveals four components that, when successfully addressed, can be combined to create a transferable framework for professional development that can be applied in a variety of school settings regardless of content or discipline.

Chapter IV: Research Findings

The purpose of this chapter is to report and discuss the findings from the research conducted following an end of year professional development program evaluation at Littleton Middle School. The first section provides a brief review of the study context including a review of technical terms associated with the study, an overview of the Logic Model that guided the
site-based professional development plan, and a presentation of study participants. The second section presents the themes that emerged as connected to the research questions based on the data collected and analysis employed for the closed-ended and open-ended survey questions as well as the end-of-year focus group. The final section presents a summary of the key research findings as they relate to the research questions.

Study Context

As explained in Chapter I, during the 2011-2012 school year, the Littleton Public School District made a concerted effort to align much of its professional development efforts with the individual school improvement plans. At Littleton Middle School these efforts included maintaining a site-based professional development committee that worked with the Principal to develop a site-based professional development plan as well as the logic model highlighted in this study. This logic model identified the relationship between resources/inputs, activities, and expected outputs, intended outcomes, and possible impacts. This logic model, as well as the school improvement plan was used throughout the program cycle as a calibration tool to check on the direction and progress of the program in real time. In the spirit of continuous improvement, it was decided that a program evaluation would be done at the end of the year.

Participants

Survey participants. Littleton Middle School houses grades six through eight. Each grade level team is comprised of four core subject area teachers (English/Language Arts, Mathematics, Science, and Social Studies), one World Language Teacher, and one Special Education Teacher. The Unified Arts Team is made up of a total of seven teachers in the following content areas: Music (Band, Chorus, and General Music), Art, Health, Physical Education, Library, and Technology Education. Other members of the faculty include:
Adjustment Counselor, Board Certified Behavior Analyst (BCBA), Speech Pathologist, Math Intervention Specialist, English Language Learner (ELL) Specialist, and Alternative Special Education Teacher. The faculty survey was administered at the end of the school year using the product Survey Monkey. Thirty one faculty members took the survey (See Appendix D). This accounts for 100% of the faculty assigned to the school. Figures 1 and 2 are intended to provide a profile of the faculty who participated in the survey.

Figure 1. How many years have you been teaching overall as a certified teacher?
Focus group participants. At the conclusion of the school year a focus group met as part of the program evaluation and as formal participants in this study. As was explained in Chapter III, an interest letter (See Appendix B) was used to generate interest, explain the purpose of the study, and finalize the participant roster. At the start of the focus group, an informed consent document (See Appendix C) was reviewed with the group as a whole in an effort to clarify the participation expectations and requirements. Ten faculty members and one administrator (Principal/researcher/facilitator) participated in the focus group. Four of the participants were male. Seven of the participants were female. The professional experience of the group ranged from five to thirty years. The group was made up of representatives from the following discipline areas: English/Language Arts, Science, Social Studies, Counseling, Physical Education, Technology Education, ELL teacher, BCBA, Principal. The focus group met for ninety minutes and followed the protocol and question format designed for this study (See Appendix E). Each of the focus group participants also took part in the survey.
Presentation and Analysis of Findings

The findings will be presented in relation to each research question. The results and analysis of the likert scale data will be presented first. This will be followed by a presentation and analysis of the data collected through the open-ended survey questions and the focus group.

Research Question #1: To what extent (how and why) do teachers and the Principal perceive the utility of a professional development program that is aligned with the school’s improvement plan?

Closed-ended survey data. Two survey questions were asked in an effort to better understand the extent to which teachers believe their past and present professional development has been aligned with the school improvement plan. Table 2 provides an analysis of participant responses to these questions.
Table 2

Survey Participant Responses - Perception of PD Alignment with SIP

<table>
<thead>
<tr>
<th>Question</th>
<th>Never</th>
<th>Rarely</th>
<th>Occasionally</th>
<th>Frequently</th>
<th>Very Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to this school year, to what extent have your PD experiences been deliberately and clearly aligned with school, district, or state goals? (n = 29)</td>
<td>3%</td>
<td>10%</td>
<td>31%</td>
<td>45%</td>
<td>10%</td>
</tr>
<tr>
<td>[This year], to what extent have the PD offerings that you listed above been deliberately and clearly aligned with school, district, or state goals? (n = 26)</td>
<td>4%</td>
<td>4%</td>
<td>23%</td>
<td>50%</td>
<td>19%</td>
</tr>
</tbody>
</table>

n = total number of respondents

Table 2 illustrates that the majority of respondents believe that, over time, their professional development has been Frequently/Very Frequently aligned with the School Improvement Plan, and as a result of the current professional development model there has been a (positive) 18% increase in this area. The current model also shows a 14% decrease in the respondents’ belief that professional development is not often aligned. It is important to note that, although a low number, there is one person that believes professional development had never been aligned with the SIP. In future evaluations it would be beneficial to include a comments field to allow respondents the opportunity to further explain their responses. Overall, the current model has shown improvement in the perception that professional development is aligned with the school improvement plan.
Open-ended survey and focus group data. Through the open-ended survey questions and the focus group, a majority of teachers reported that it is in fact useful to align their professional development with the school’s improvement plan. Table 3 illustrates the themes that emerged from the analysis of both data sources in relation to research question 1.

Table 3

Themes in Relation to the Usefulness of a Professional Development Program that is Aligned with the School’s Improvement Plan.

| Aligning professional development with the school improvement plan provided teachers with a clear framework for how they would be working towards meeting the collective goals of the school. |
| Participating in professional development that was aligned with the school improvement plan provided teachers with opportunities to collaborate and build capacity. |

Aligning professional development with the school improvement plan provided teachers with a clear framework for how they would be working towards meeting the collective goals of the school. Nine out of eleven focus group participants commented on the usefulness of having a clear understanding of what the professional development goals were and the plans that were in place to meet them. When asked about their perception of the value of professional development, one focus group participant said that her “experience is that it [PD] has the potential for being very valuable and very often falls short.” At different times throughout the focus group, participants discussed that this was primarily because in the past there was a lack of understanding related to what professional development teachers were being provided and why. One participant may have summed it up best when she stated that “it’s of little value when the district doesn’t provide a context for why we have to do some of the required things that we sit through.” As pointed out by one focus group participant during a member checking session, “the entire faculty took part in the development of the school improvement plan…due to this fact, we
all knew what the direction was and what areas we should or would focus on when it came to PD.”

Despite the previous statement, there was some concern that not all teachers had a clear understanding of the intended connection between professional development and school improvement planning. One focus group participant asked “is that what professional development is for, going along with the school improvement plan?” He went on to say “I’ve never read the school improvement plan [and]…literally sat down and said I’m going to tie this to [my] professional development.” There was consensus that it would be beneficial to more clearly explain and document this important connection. There was also consensus that it was a small minority of faculty members who did not have at least a general understanding of this connection. This is also supported by the previously discussed survey data.

Participating in professional development that was aligned with the school improvement plan provided teachers with opportunities to collaborate and build capacity. A variety of opportunities for collaboration came to be as a result of aligning the professional development plan with the school improvement plan. In particular, funds were budgeted at the building level to send two groups of six faculty members each to two different conferences. Each of these conferences included various sessions that directly related to the school improvement plan. Additionally, at least five different consultant led on-site sessions were provided to teachers. Teachers attended as content and/or grade level teams. Lastly, some teachers were afforded the opportunity to develop and lead multiple site-based sessions for their colleagues. A majority of teachers reported that they found these experiences to be useful in that they valued and benefitted from the collaborative learning process. Nine out of eleven focus group participants made positive statements related to this concept.
As one focus group participant stated: “we are all very knowledgeable and we all have something to bring to this professional development and so to have somebody who is a colleague presenting on something they’re an expert at, I think, is much more interesting and relevant and I feel like I’m in a collegial environment.” This comment was followed up by another participant who said, “we are a learning community, and so to be able to learn together and with one another is kind of inspiring.” A third participant simply stated, “we can learn a lot from each other.”

Additionally, multiple teachers provided open-ended survey comments related to this theme. One respondent wrote that “we have so much expertise in the school and could potentially learn and grow from one another’s areas of expertise.” Another respondent stated: “I think the staff has a lot to learn from each other if we have structured discussions.” A third teacher wrote that “we have many talented and knowledgeable individuals in each building and we should take advantage of that.”

By learning together and from one another, teachers are not only able to grow individually but also collectively. This leads to capacity building in a way that is not attainable or sustainable when teachers learn individually and in isolation. According to Fullan (2008)

Groups are high in capacity if they possess and continue to develop knowledge and skills, if they attract and use resources (time, ideas, expertise, money) wisely, and if they are committed to putting in the energy to get important things done collectively and continuously. (p. 57)

While discussing the concept of capacity building, one focus group participant said that it is beneficial “to have a group of people who I work with, who work with the same kids, who work in the same building where we could talk about the books we read [what we have learned] and come up with more of a systemic approach to things.” Another focus group participant added to
the conversation by saying that capacity could be/has been built by “sending groups to conferences so that they can workshop together… [in connection with] our themes and then [come back and] talk about it.”

Overall, teachers reported that they valued the connection between professional development and school improvement goals. In general, they believed that the concept is useful in that it should lead to individual and organizational improvement as well as capacity building.

**Research Question # 2: To what extent (how and why) do teachers perceive components of such a program to be effective in contributing to their individual professional growth as connected to the goals of the school improvement plan?**

**Closed-ended survey data.** Fourteen survey questions were asked in an effort to better understand the extent to which teachers believe their past and present professional development has included teacher involvement, differentiated delivery methods, authentically connected or embedded experiences, and the support of the Principal.

**Past professional development.** Survey questions 3, 4, 6 and 7 asked teachers the extent to which their past professional development had provided them opportunities to (1) design or choose their own professional development, (2) experience differentiated delivery methods, (3) experience authentically connected or embedded professional development, and (4) have their professional development supported by their Principal. Table 4 provides analysis of participant responses to these questions.
Table 4

**Survey Participant Responses – Past PD Experiences**

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
<th>Never</th>
<th>Rarely</th>
<th>Occasionally</th>
<th>Frequently</th>
<th>Very Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td># 3 Designing or choosing your own PD (n = 30)</td>
<td></td>
<td>10%</td>
<td>27%</td>
<td>37%</td>
<td>17%</td>
<td>10%</td>
</tr>
<tr>
<td># 4 District supported differentiated delivery methods</td>
<td></td>
<td>3%</td>
<td>21%</td>
<td>41%</td>
<td>28%</td>
<td>7%</td>
</tr>
<tr>
<td>(ex: graduate/post graduate courses, attending workshops/conferences,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in-house sessions led colleagues or consultants)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n = 29)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># 6 PD was authentically connected or embedded</td>
<td></td>
<td>3%</td>
<td>28%</td>
<td>21%</td>
<td>31%</td>
<td>17%</td>
</tr>
<tr>
<td>(n = 29)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#7 PD supported by your Principal</td>
<td></td>
<td>0%</td>
<td>4%</td>
<td>25%</td>
<td>36%</td>
<td>36%</td>
</tr>
<tr>
<td>(n = 28)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

n = total number of respondents

The data in table 4 shows that only 27% of respondents believe that, over time, they have been frequently or very frequently involved in designing or choosing the type of professional development that they have participated in. Additionally, a large majority of respondents believe that, over time, they have been occasionally, rarely, or never involved in designing or choosing the type of professional development that they have participated in.

The data also shows that only 35% of respondents believe that, over time, they have frequently or very frequently experienced a professional development model that included differentiated delivery methods. Additionally, 65% of respondents believe that, over time, they
have only occasionally, rarely, or never experienced a professional development model that included differentiated delivery methods.

Additionally, 48% of respondents believe that, over time, they have frequently or very frequently experienced professional development that was authentically connected to or embedded in their classroom or work environment. Conversely, 52% of respondents believe that, over time, they have only occasionally, rarely, or never had this experience.

The only positive past experience data is that 72% of respondents felt that, over time, their professional development efforts had been frequently or very frequently supported by their Principal. 25% felt that this had only happened occasionally, while only one teacher reported this as a rare occurrence.

Current professional development. Survey questions 9, 12, 15, and 18 were specific to the current school year and related to the different types of professional development opportunities that were provided to the faculty in the current model such as: district financed graduate or post-graduate courses, district financed off-site workshops/conferences, on-site sessions led by a district funded/contracted consultant(s), and on-site sessions led by district or school faculty member(s). Each of these four questions asked the following two questions in relation to the above types of professional development.

1. This was a PD of my own choice and/or had choice built in (yes or no).
2. I helped to design this PD offering (yes or no).

Table 5 provides an analysis of participant responses to question 9, 12, 15, and 18.
Table 5

Survey Participant Responses – Current Involvement in Designing or Choosing PD

<table>
<thead>
<tr>
<th>Type of PD</th>
<th>PD of my choice Had choice built in</th>
<th>I helped to design this PD</th>
</tr>
</thead>
<tbody>
<tr>
<td># 9 district financed graduate or post-graduate courses (n = 16)</td>
<td>100 %</td>
<td>0 %</td>
</tr>
<tr>
<td># 12 district financed off-site workshops/conferences (n = 17)</td>
<td>100 %</td>
<td>6 %</td>
</tr>
<tr>
<td># 15 on-site sessions led by a district funded/contracted consultant(s)</td>
<td>100 %</td>
<td>5 %</td>
</tr>
<tr>
<td>(n = 19)</td>
<td></td>
<td></td>
</tr>
<tr>
<td># 18 on-site sessions led by district or school faculty member(s) (n = 15)</td>
<td>79%</td>
<td>26 %</td>
</tr>
</tbody>
</table>

n = total number of respondents

Table 5 illustrates that a large majority if not all of the respondents reported that the current model provided them with opportunities to choose their own professional development or to make choices within specific professional development offerings. This table also highlights that while in individual categories a relatively low percentage of the respondents reported that they had been involved in designing professional development experiences this year, it is important to note that when asked this question in relation to on-site sessions, the percentage of affirmative responses was as high as 26%. Overall, the current model has shown substantial improvement in providing teachers with choices of professional development or with professional development that has choice embedded in it. Additionally, the data supports the obvious fact that teachers can be more frequently involved in the design of professional development that takes place on-site.
Survey questions 8, 11, 14, and 17 were specific to the current school year and related to differentiated delivery methods, specifically the different types of professional development opportunities that were provided to the faculty in the current model such as: district financed graduate or post-graduate courses, district financed off-site workshops/conferences, on-site sessions led by a district funded/contracted consultant(s), and on-site sessions led by district or school faculty member(s). Table 6 provides an analysis of participant responses to these questions.

Table 6

Survey Participant Responses – Current Differentiated PD Delivery Methods

<table>
<thead>
<tr>
<th>Type of PD</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td># 8 I have taken one or more graduate or post-graduate courses that LPS has reimbursed me for (in-part or in-full) as part of the district’s tuition reimbursement plan. (n = 31)</td>
<td>55 %</td>
</tr>
<tr>
<td># 11 I have attended one or more off-site workshops/conferences that LPS has either reimbursed me for or has paid the registration fee for (in-part or in-full). (ex: NELMS, Blue Ribbon, Professional Organizations, State/National Affiliations) (n = 30)</td>
<td>60 %</td>
</tr>
<tr>
<td>#14 I have participated in professional development that has been led by a LPS contracted consultant. (ex: Mathematics program, SMART notebook training, Co-Teaching, iPad, Atlas Curriculum Mapping) (n = 30)</td>
<td>87 %</td>
</tr>
<tr>
<td>#17 I have participated in professional development that has been led by an LPS/LMS faculty member. (ex: Second Step training, Introduction to the iPad, Atlas Curriculum Mapping) (n = 29)</td>
<td>93 %</td>
</tr>
</tbody>
</table>

n = total number of respondents

Table 6 shows that, as a result of the current model, a high percentage of teachers have experienced differentiated delivery methods of professional development. A comparison of the
data in tables 4 and 6 reveals that the faculty has experienced significant growth in this area as a result of the current model.

Survey question 21 provided faculty members with an opportunity to state the extent to which their professional development experiences in the current model were authentic/job-embedded. Table 7 provides an analysis of participant responses to question 21.

Table 7

Survey Participant Responses – Current Authentically Connected/Job-Embedded PD Experiences

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
<th>Never</th>
<th>Rarely</th>
<th>Occasionally</th>
<th>Frequently</th>
<th>Very Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>[This year], To what extent have the PD experiences listed above been authentically connected to or embedded in your classroom or work environment? (n = 27)</td>
<td></td>
<td>4%</td>
<td>15%</td>
<td>37%</td>
<td>30%</td>
<td>15%</td>
</tr>
</tbody>
</table>

n = total number of respondents

Unfortunately, after reflecting upon their experiences under the current model, the amount of respondents who believed that they occasionally, rarely, or never had this experience this year remains above 50%. As was highlighted in the literature review, there is great value in providing teachers with authentic/job-embedded professional development. Due to this fact, it is important to recognize that if more than half of the faculty believes that they have not frequently had this experience throughout their career, including the current year, a change must be made. Moving forward, there must be more emphasis placed on this concept.
Survey question 22 was asked in an effort to better understand the level of administrative support that teachers have received under the current professional development model. Table 8 provides an analysis of participant responses to question 22.

Table 8

*Survey Participant Responses – Current Principal Support of PD*

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>[This year], To what extent have the PD experiences listed above been supported by your Principal? (n = 27)</td>
<td>Never</td>
</tr>
<tr>
<td></td>
<td>0%</td>
</tr>
</tbody>
</table>

n = total number of respondents

The data shows that, under the current model, 92% of respondents believe that their PD experiences were frequently or very frequently supported by their Principal. Only two respondents felt that they had only occasionally been supported. Overall, a large majority of the faculty has felt supported throughout their career by their Principal. The current model has resulted in an even greater sense of support.

**Open-ended survey and focus group data.** Through the open-ended survey questions and the focus group, a majority of teachers agreed with the findings of the literature review that there are four components that, when included as part of a professional development model, are effective in contributing to their individual professional growth as connected to the goals of the school improvement plan. Table 9 presents the four themes related to research question 2 that emerged from the open-ended survey questions and the focus group.
Table 9

Themes in Relation to the Effectiveness of Various Programmatic Components Contributing to the Individual Professional Growth of Teachers as Connected to the School Improvement Plan.

Participants found that many components of the new professional development program were advantageous to their individual professional growth in the following four ways:

- By participating in the design of their own professional development, teachers gained a sense of investment and purpose, and demonstrated a focus on sharing and the development of site-based knowledge and consistency (capacity building).

- Providing teachers with differentiated delivery methods such as graduate/post graduate courses, conferences/workshops, and in-house sessions led by consultants or colleagues allowed for their varied learning styles and professional needs to be met.

- Authentically connecting the professional development to the classroom or embedding it in the classroom setting allows teachers to experience a more immediate and greater sense of connectivity between what they are learning and how they are applying it.

- A principal should provide support for professional development by planning financially, providing sufficient time, creating a collegial/supportive environment, and setting over-arching goals or a vision.

*By participating in the design of their own professional development, teachers gained a sense of investment and purpose, and demonstrated a focus on sharing and the development of site-based knowledge and consistency (capacity building).* Ten out of eleven focus group participants spoke positively about the social/emotional impact that is felt when they are included in the design of their own professional development. One teacher stated that “we feel more vested when we have a say in it.” This sentiment was echoed by another colleague who said “when we are allowed to pick what we want to do, then it becomes valuable.” The concept of choice is prevalent in both the literature review and the data produced in this study. Choice is an integral component of the design process. Opportunities should exist for teachers to choose their professional development experiences and/or be provided with programming that has choice embedded in it. It is also important to involve teachers in the discussion and planning.
process so that they can help identify what they need to learn and how they may best learn it. As one focus group participant put it: “as adults we should have even more awareness than our students do of how we learn best…and not just how we learn best, but also what we need to learn.”

Both survey and focus group participants emphasized the positive school-wide impact of teachers teaching and learning from each other. One survey respondent wrote:

“We should use our own resources to first figure out what the gaps are and where people want to grow and then design PD that is relevant and meaningful based on that. We have so much expertise in the school and could potentially learn and grow from one another’s areas of expertise.”

One of the focus group participants said that she “like[ed] the way some of the presentations have been done where they let our colleagues present.” Similarly, one faculty member said that participating in colleague led professional development provides quality opportunities for “learning together and building our learning community.”

There was a consistent theme related to keeping the professional development focus at the building level for the sake of building capacity. During a discussion related to this concept, one focus group participant summed up the thoughts of the group by stating: “what I’ve heard people [say] over and over again is keep it at the building level.” Another teacher said that she thought “it would be interesting to have themes just at our school and have our professional development just within the middle school.” Another focus group member said that we needed more “of getting together and talking together…there are a lot of practices that we need to discuss, across grade level classes, curriculum, and to try to have more similarity.”
Providing teachers with differentiated delivery methods such as graduate/post graduate courses, conferences/workshops, and on-site sessions led by consultants or colleagues allowed for their varied learning styles and professional needs to be met. Overall, teachers strongly support the concept and believe in the value of differentiated delivery methods. As one teacher stated in the focus group, “we don’t learn so differently than students learn…[the same] principles apply to us…one way isn’t enough.” Table 10 presents quotes representative of participants’ general thoughts related to differentiation.

Table 10

Focus Group Participants’ General Thoughts Related to Differentiation

<table>
<thead>
<tr>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>“It’s very hard to make it [PD] useful to a whole school community without differentiation.”</td>
</tr>
<tr>
<td>“Enrollment in graduate and postgraduates courses, sending teachers to workshops, bringing in consultants, controlling the PD in-house, those things all wrapped together are the PD experience.”</td>
</tr>
<tr>
<td>“I really realized differentiation isn’t just about everybody picking what they want. Differentiation…is offering different types.”</td>
</tr>
<tr>
<td>“It’s really important that you have differentiated pathways to your professional development and within those pathways if appropriate, the level of instruction is differentiated.”</td>
</tr>
<tr>
<td>“There are some things we all need to know the same way and better and then there are many, many areas where we are unique whether its skill sets or job descriptions that have to be developed.”</td>
</tr>
</tbody>
</table>

Graduate/Post graduate courses. Many survey respondents mentioned that they benefitted from the financial support that the district provided for graduate/post graduate level courses. One teacher stated that s/he had “been supported and reimbursed for all post-grad courses taken at LMS.” Another wrote that “almost all of the tuition for post-graduate courses I have taken has been reimbursed by LPS.” During the focus group, participants discussed the pros and cons of this type of professional development. One teacher stated “I really like being
able to choose graduate courses. My best classes have been the classes that I’ve been able to choose myself.” Another teacher added to this by stating that “when it’s a course that I’m taking and I’m actually in the classroom with the teacher, I’ve never had it happen where I didn’t learn something to use in my class.”

While there was strong support for the value of graduate/post graduate courses, some participants made it clear that this may not meet everyone’s needs. As one survey participant wrote “I have taken many over the years. Littleton's reimbursement is awesome, but taking a grad class has to fit in to the person's personal life.” A focus group participant stated that “not everything that would be valuable is available as a graduate level course.”

With over half of the faculty reporting that they had taken advantage of this type of offering as a result of this model, and with a majority of participants responding favorably to the benefits of taking upper level courses, it is evident that this is a valued and beneficial component of a differentiated delivery model.

Conferences/Workshops. As discussed in the literature review, despite negative opinions amongst some in education, conferences and workshops do in fact have the potential to provide teachers with valuable professional development experiences. This was strongly supported by the feedback from survey and focus group participants. As one teacher responded in the survey, “I love going to conferences and I think they are really energizing. When I went to Blue Ribbon it helped to transform my teaching.” Another survey respondent wrote: “I have been invited to NELMS and Blue Ribbon. Both were valuable experiences, particularly Blue Ribbon.” A third faculty member stated that “the NELMS conference provided options for teacher development through a variety of workshops.”
The focus group participants had rich discussions around this topic. As one focus group member put it, “I think the workshops offer very practical things that… you can go implement…oftentimes there’s something you can take back to school and do.” A different teacher made the simple yet definitive statement: “I like being in the good old workshop.” There was a strong sense that in most cases, teachers are able to return from a conference or workshop with a new lesson, skill, concept, or technique that can be applied in the classroom setting immediately.

The focus group discussion also included the benefit of teachers attending workshops together and sharing their new knowledge with their colleagues. One teacher thought that it would be nice “to send groups to conferences so that they can workshop together [on something] that maybe fits our theme and then talk about it.” It must be acknowledged that not all teachers are comfortable with teaching their colleagues immediately. As one teacher put it, sometimes “I don’t know enough about it to teach it.” It was just something that I was interested in.” Another teacher stated that he values the concept of sharing what he learned but would like better structures in place to do so. He stated “I’ve heard it a hundred times…we’ll have people train the trainer and looking back…there’s never a time when we have an assignment [to share].” There was agreement amongst focus group members that, when given time and a supportive environment, teachers welcome the opportunity to share what they have learned with their peers.

The fact that 60% of the faculty reported that they attended conferences or workshops under the current model and that none of the survey respondents or focus group participants provided negative or unsupportive feedback regarding these types of offerings makes it clear that teachers perceive conferences and workshops to be important components of a differentiated delivery model.
On-site sessions led by consultants or faculty members. There are multiple benefits to this type of delivery method. Many participants referred to the fact that by organizing professional development on-site it is easier to provide teachers with experiences as teams resulting in greater systemic impact. Additionally, this method can help to clearly link the professional development to school improvement goals.

During their conversation, the focus group participants spoke positively about the benefits of learning on-site from consultants or other faculty members. However, when discussing sessions led by consultants, their primary focus was on systemic impact and not on the benefits of learning from a consultant. One teacher stated that “there have been some really good organizational professional development units and direction.” One of his colleagues followed this up by stating “that [it takes] some sort of goal for the school and asking at least a chunk of people to…work towards [that goal].” There was similarly little feedback in the survey related specifically to the impact of learning from a consultant.

However, the feedback from both the survey and focus group related to learning from a colleague was specific and positive. A focus group member said “I like the way some of the presentations have been done where they let our colleagues present.” Another teacher said that “we’ve had things that are teacher-generated that have been great.” One of the survey respondents said that s/he found it beneficial to be “using in school staff [and to have them] sharing their expertise.” Another survey respondent wrote more specifically that the “iPad use, and other electronic device use, will be interesting to incorporate into lessons and projects. The Atlas Mapping system will hopefully be user friendly and helpful for future use.” Faculty led professional development sessions were held on both of these topics.
All survey and focus group data related to faculty led professional development was positive. It must be reiterated that teachers did not report substantial data related specifically to consultant led professional development. As a result, it is apparent that teachers place high value on professional development that is led on site by their peers.

Authentically connecting the professional development to the classroom or embedding it in the classroom setting allows teachers to experience a more immediate and greater sense of connectivity between what they are learning and how they are applying it. Overall, survey respondents and focus group participants believe that it is extremely important for their professional development experiences to be authentically connected to the work they do in the classroom. There was less importance placed on embedding their professional development experiences in the classroom.

Many survey respondents were quite strong in their belief that professional development must, first and foremost, be directly connected to their work in the classroom. One particular teacher went so far as to say that “all professional development should have to do with the improvement of classroom teaching.” Another teacher wrote that “we are here for the students and providing professional development that will improve our daily interactions with them makes us feel better about the jobs we do.”

During the focus group, participants spoke frankly about the concept of authentic/job-embedded professional development. One teacher said “teach me something new or something that I can use or something that’s relevant to my students or to what I teach.” Another participant said that “it’s not just choice though [that’s important], it’s authentic application [too].” During a discussion about the meaning of authentic professional development, one focus
group member said that “authentic is really just that leap between what you’ve learned and how it can really impact your teaching on an everyday basis.”

The focus group and open-ended survey data aligns with the closed-ended survey data in that teachers do not believe that they have been provided with enough authentic/job-embedded professional development. Furthermore the consensus of the focus group participants was that this is very important and in fact is something that teachers want more of.

*Principal should provide support for professional development by planning financially, providing sufficient time, creating a collegial/supportive environment, and setting over-arching goals or a vision.* Survey respondents and focus group participants shared their thoughts related to the importance of their professional development efforts being supported by their Principal. In the focus group one teacher stated that “it’s kind of obvious, it has to be supported by the Superintendent, Curriculum Director, building Principals, everybody has to be on board with the idea that it’s all [different types of PD] valuable.” Another teacher said that “they need to believe that if a teacher says I need to go to this, it’s because we need this.”

In addition to just valuing professional development, many teachers stated that they benefitted, in various ways other than financial, from their Principal’s support of their professional development efforts. As stated by one focus group participant, there are “other ways, other than financial [that] an administrator can support you, other than just being the gatekeeper for the money.” A teacher stated that it is important to provide “collaborative time.” This was echoed by multiple colleagues who stated that “having a chance to share what we learned at the conference” is important and that “sharing…comes from having supportive administrators that create an opportunity to share good ideas.”
In regards to leading with a vision, one focus group member said that it is important for the Principal “to be invested in you [individually] and everybody [collectively]...so that the school moves forward.”

While it is important to note that over 90% of survey respondents felt that their professional development efforts were frequently/very frequently supported by their Principal, it is more important to know what types of supports teachers find to be impactful and necessary. Teachers believe that having the support of an administrator is an important component of a successful professional development model for a variety of reasons. The most obvious reason is that the Principal or other upper-level administrators often control the money that is spent on professional development. In addition to financial support, principals must provide teachers with time to attend sessions, collaborate and share with colleagues, and implement new concepts/techniques. Principals must also provide a sense of trust and professionalism that leads to teachers feeling that they are listened to and that their opinions are valid. Finally, principals must provide a frame or goal driven vision for school improvement that is clear, yet flexible enough that all teachers will be able to gain professional development in a manner that is personally and collectively meaningful.

Individually, each of the components outlined in this section can be used to effectively deliver professional development. However, when combined into one professional development model, they have the ability to meet the various individual and collective learning styles and professional needs of teachers.

**Research Question # 3: To what extent (how and why) can this type of professional development structure positively impact school improvement, as perceived by teachers and the Principal?** In the case of both data sources, the survey and focus group, questions and
conversations were not specifically developed or facilitated in a way to lead participants in the direction of directly answering research question 3. Rather, the data related to this question was collected from responses throughout both data sources. In many cases, while addressing one of the themes previously discussed in this chapter, participants made statements and/or shared beliefs/perceptions related to the overall impact that a differentiated professional development model can have on school improvement.

**Open-ended survey and focus group data.** Analysis of the open-ended survey responses and the focus group transcripts revealed three themes related to research question 3. Table 11 presents these themes.

Table 11

<table>
<thead>
<tr>
<th>Themes in Relation to the Extent that a Differentiated Professional Development Model can Impact School Improvement.</th>
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<tbody>
<tr>
<td><strong>Focusing on a limited number of targeted areas/topics related to the school improvement plan provides teachers with attainable goals and a sense of direction that is not too broad-based.</strong></td>
</tr>
<tr>
<td><strong>By experiencing multiple opportunities to study or revisit specific areas/topics, teachers will be able to develop a deeper level of understanding and work towards impactful, measurable growth.</strong></td>
</tr>
<tr>
<td><strong>Including an assessment component in the professional development model provides opportunities for reflection and analysis of the impact on individual and systemic growth as well as a chance to discuss and design future programming.</strong></td>
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</tbody>
</table>

**Focusing on a limited number of targeted areas/topics related to the school improvement plan provides teachers with attainable goals and a sense of direction that is not too broad-based.** When working toward meeting the goals established in the school improvement plan, it is important to keep in mind that it is unrealistic and less productive to focus on all areas simultaneously. However, due to a multitude of mandated and self-imposed
initiatives, educators often find themselves spreading their professional development efforts across many areas at once, making it extremely difficult to provide anything more than superficial exposure. One of the focus group participants stated that “there were too many initiatives for one year.” Many of the survey respondents shared this concern. One teacher wrote that we should design professional development in a similar manner to the way we design our curriculum for students and focus on “more depth and less breadth.” Another survey participant wrote that “this year it seems there have been introductions to many new ideas and initiatives. This has resulted in a surface level of understanding.” In an effort to create a solution one teacher stated that “it would be helpful to have one focus for an extended period of time, where a teacher becomes skilled in this area before moving onto another concept.”

Due to the conversational nature of the focus group, participants were able to brainstorm solutions to this problem. One teacher thought that “it would be nice to have a block of professional development along the same theme instead of just doing this, this, this, and having it all stand alone.” Another teacher stated that “we need time…if you have a chance to go back and revisit, then you have a chance to cement those skills or improve them.” Later in the conversation a teacher said that it seems like “a lot of the professional development coming from central office is not directing what we need, what we want …it’s not building based…not individually based, it’s what they want us to do.” This led to a discussion of the importance of empowering the school-based professional development committee to work with the faculty to decide which areas would be focused on in a particular year and how best to do so. As explained by one of the teachers, “the school-based professional development committee is supposed to be people getting together and talking with him [Principal] about where we want to go.” As explained by one of the focus group members, this would help us address the fact “that there
needs to be overall communication about what everybody is doing and how we are all going to put it together.”

*By experiencing multiple opportunities to study or revisit specific areas/topics, teachers will be able to develop a deeper level of understanding and work towards impactful, measurable growth.* In relation to an earlier comment made by one of the teachers regarding depth vs. breadth, a majority of teachers believed that structures and strategies must be designed and put in place to address this theme. One survey respondent wrote that s/he was provided “minimal time for follow through, questions, and development of classroom connections.” Another teacher wrote that “a few [of the professional development sessions] were done briefly with little follow through and time to create lessons for in class use. This would have been helpful.”

This theme was a topic of discussion in the focus group as well. One of the focus group participants stated that “one shot talking about it isn’t enough…we [need to] come back and revisit and talk about how to improve our practice.” One of her colleagues agreed stating that “continuity and follow-through also, was an issue.” A third teacher thought that “the organizational growth could be a lot better if there was more revisiting of what we’ve already done.”

It is critical that this feedback is taken into account when planning future professional development sessions. As one survey respondent wrote “it is often overwhelming for teachers to be handed a new concept without the time to create lessons and then follow through with in class options.” By embedding a variety of educational experiences in one topic/area over multiple sessions, teachers will feel and be better prepared to apply what they have learned in a meaningful and effective way.
Including an assessment component in the professional development model provides opportunities for reflection and analysis of the impact on individual and systemic growth as well as a chance to discuss and design future programming. Ironically, one of the results of this program evaluation is that teachers place a high value on the importance of assessing the impact that professional development has on the work they do. This was a major discussion point during the focus group session. Two areas of assessment were discussed as being important.

Firstly, there needs to be some type of structure in place that provides opportunities for teachers to reflect on the impact that their recent professional development experiences have had on them individually. During a member checking session, one of the focus group participants stated that he found it “valuable to meet as a department to discuss how we could all do this [particular topic] better.” During a different member checking session, another focus group member said that “taking the PD survey at the end of the year helped me think about everything we had done…and what I might not have taken advantage of.” Also during a member checking session, one teacher thought that “this PD self-reflection is going to be really helpful when we set our individual goals as part of the new educator evaluation system.”

Secondly, at the conclusion of the professional development cycle, it is important to evaluate the over-all systemic effectiveness of the program in an effort to design future programming. As one focus group participant stated, “a lot of times we do something and we don’t revisit it, like assess how it went and what could be better and try to learn from each other. [That] would make the organization grow.” Another participant said that we have “a need to not just move forward, but [also to] evaluate what was good and bad about the program.”
Teachers believe that if these three themes are effectively incorporated into a professional development model, then said model could have a positive over-all impact on school improvement.

**Summary of Findings**

The findings from this study come together as a result of a program evaluation of a differentiated professional development model that is aligned with the school improvement plan. The data collected from an end of the year faculty survey and focus group provided an opportunity to not only analyze the usefulness and impact of such a model, but also to better understand the components of such a model and their effectiveness.

In respect to the three research questions, faculty feedback from the survey and focus group indicated that a professional development model aligned with school improvement plans:

1. Is useful in that it should lead to organizational improvement and capacity building;

2. Is effective in contributing to individual professional growth as connected to the goals of the school improvement plan when it includes the following four components;
   - teachers participating in the design of their own professional development
   - differentiated delivery methods
   - authentic/job-embedded experiences
   - administrative (Principal) support

3. Could have a positive over-all impact on school improvement if it focused on a limited number of PD areas/topics, provided multiple opportunities to study or revisit each area/topic, and included an assessment component.
Chapter V: Discussion of the Research Findings

This chapter begins with a review of the problem of practice and methodology of the study. This review is followed by a discussion of the major findings and presentations of those findings in relation to the theoretical framework and literature review. These are followed by a review of the validity and limitations of the study, a discussion of the significance of the study, recommendations for future studies, and a conclusion.

Revisiting the Problem of Practice

Marzano, Waters and McNulty (2005) tell us that “one of the most frequently mentioned resources important to the effective functioning of a school is the professional development opportunities for teachers” (p. 59). Yet history and research have shown that over time, the professional development opportunities afforded to teachers have been ineffective in meeting their individual and collective needs. Schmoker (2006) writes that “even the National Staff Development Council has run a series of advertisements in Phi Delta Kappan and elsewhere asserting that most staff development is ‘irrelevant,’ ‘inadequate,’ ‘unfocused,’ – even ‘a complete waste of time’” (p.26). Furthermore, according to DuFour, DuFour, and Eaker (2008), the concept of professional development has undergone a variety of cultural changes including a shift in focus “from short-term exposure to multiple concepts and practices…to [a] sustained commitment to limited, focused initiatives” (p. 95). The relationship between professional development and school improvement planning is critical to the effectiveness of a school.

There has been much discussion in the educational community regarding the various forms of professional development. Authors such as Schmoker and DuFour, DuFour, and Eaker advocate for teachers to have authentic/job-embedded professional development experiences. While Guskey and Yoon remind us that there are still benefits to workshops and outside experts.
Additionally, teachers have historically taken and will continue to take graduate and post
graduate classes. As a result, it is extremely important that teachers are provided with
differentiated delivery methods that are intentionally designed to meet their individual and
collective needs.

As stated in Chapter I, by connecting a differentiated professional development program
to a site-specific school improvement plan, school leaders will be able to foster an environment
that is focused on individual and school-wide professional growth that leads to measurable
school improvement. This study sought to address the usefulness and effectiveness of such a
program.

Review of Methodology

The purpose of this study was to collect and assess participants’ perceptions of the
professional development model as aligned with the school improvement plan. This study was
designed to specifically address the following research questions:

1. To what extent (how and why) do teachers and the Principal perceive the utility of a
   professional development program that is aligned with the school’s improvement
   plan?

2. To what extent (how and why) do teachers perceive components of such a program to
   be effective in contributing to their individual professional growth as connected to the
   goals of the school improvement plan?

3. To what extent (how and why) can this type of professional development structure
   positively impact school improvement, as perceived by teachers and the Principal?

In an effort to answer these questions, the researcher conducted a qualitative evaluation of a
site-based professional development program that is aligned with the school improvement goals.
This program provided teachers with differentiated delivery methods that included: district financed graduate or post graduate courses, district financed off-site workshops/conferences, on-site sessions led by district funded/contracted consultant(s), and on-site sessions led by district or school faculty member(s). Additionally, the approved and/or provided professional development was intentionally aligned with the school improvement plan. Data was collected through an end of year faculty survey and focus group. The survey was taken anonymously by all thirty one faculty members. Ten faculty members and one administrator (Principal/researcher/facilitator) participated in the focus group. Survey responses and focus group notes were carefully reviewed, analyzed, and then coded for significant themes.

Discussion of Major Findings

The survey and focus group data was thoroughly analyzed and coded in an effort to address the previously stated research questions. Table 12 presents the answers to these questions that emerged as a result of this study.

Table 12

<table>
<thead>
<tr>
<th>Answers to the Research Questions as a Result of this Study</th>
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<tbody>
<tr>
<td>A professional development model aligned with school improvement plans is useful in that it should lead to organizational improvement and capacity building.</td>
</tr>
<tr>
<td>A professional development model aligned with school improvement plans is effective in contributing to individual professional growth as connected to the goals of the school improvement plan when it includes the following four components:</td>
</tr>
<tr>
<td>- teachers participating in the design of their own professional development</td>
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<tr>
<td>- differentiated delivery methods</td>
</tr>
<tr>
<td>- authentic/job-embedded experiences</td>
</tr>
<tr>
<td>- administrative (Principal) support</td>
</tr>
<tr>
<td>A professional development model aligned with school improvement plans could have a positive over-all impact on school improvement if it focused on a limited number of PD areas/topics, provided multiple opportunities to study or revisit each area/topic, and included an assessment component.</td>
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</table>
A professional development model aligned with school improvement plans is useful in that it should lead to organizational improvement and capacity building. Over all, the survey respondents and focus group participants came to consensus around this belief. A majority of the faculty stated that this model provided professional development experiences that met their individual and collective needs. This was due in part to the existence of differentiated delivery methods. Also, as pointed out by one focus group participant during a member checking session, “the entire faculty took part in the development of the school improvement plan…due to this fact, we all knew what the direction was and what areas we should or would focus on when it came to PD.” As a result of this fact, there should be a positive gain in building capacity and measurable organizational improvement. Additionally, it was reported that as a result of multiple professional development sessions being led by faculty members, the faculty as a whole was able to build capacity in these areas. It is noted that in the above answer, the word “should” has been used in lieu of the words “did” or “will.” This is due to the fact that this program evaluation took place at the end of the first year of implementation. At this time, there is not enough data to make a stronger more definitive statement. It is believed that with further follow-up in some of the focus areas and/or with more time for teachers to apply what they have learned, broader capacity will be built and organizational improvement will be achieved.

A professional development model aligned with school improvement plans is effective in contributing to individual professional growth as connected to the goals of the school improvement plan when it includes teachers participating in the design of their own professional development. Teachers are in overwhelming agreement that professional development is something that must be done with them and not to them. Chapter IV included representative quotes that demonstrate the positive benefits of maintaining a high level of teacher
involvement. As stated in Chapter IV, these benefits include: teachers feeling respected and listened to (sense of investment and purpose), a focus on being a professional learning community, and a focus on sharing and the development of site-based knowledge and consistency (capacity building). Additionally, the concept of choice is prevalent throughout the data. Teachers reported that when they were allowed to choose what type of professional development they would receive (such as graduate and post graduate courses, conferences or specific conference sessions, or web-based workshops) they felt empowered, supported, and valued.

Furthermore, teachers shared a collective understanding of the importance of their chosen professional development being aligned with the school improvement plan. When planning and leading on-site professional development sessions, specific teachers thoughtfully and deliberately connected the work and over-all goals of the sessions to the school improvement plan. As one teacher stated in a PD follow-up meeting, “it is nice to know why we are doing this and to have known ahead of time that this was coming.”

A professional development model aligned with school improvement plans is effective in contributing to individual professional growth as connected to the goals of the school improvement plan when it includes differentiated delivery methods. As discussed earlier in this study, the term differentiation has been and can be defined or applied in a variety of ways in education. For the purpose of this study, differentiated professional development refers to a model that includes differentiated delivery methods which, when appropriate, include differentiated instruction based on the needs of the teachers. At first the faculty did not have a collective understanding of this definition. Overtime, it became more broadly understood and accepted as a way to structure the professional development plan. Both data sources produced
clear evidence that it is incumbent upon us to meet the needs of all teachers similarly to the way that we must meet the needs of all students. This can be difficult due to the fact that the school has teachers covering a wide range of disciplines including core academic subjects, special education, fine and performing arts, physical education and health, technology, and world languages, not to mention extended service providers such as an Adjustment Counselor, ELL teacher, Occupational Therapist, Speech Pathologist, and a Board Certified Behavior Analyst.

Overall, teachers reported that they had experienced individual professional growth as a result of being provided with and taking advantage of a variety of delivery methods including: district financed graduate or post-graduate courses, district financed off-site workshops/conferences, on-site sessions led by district funded/contracted consultant(s), and on-site sessions led by district or school faculty member(s). Table 13 presents quotes representative of participant feedback related to individual professional growth.
Table 13

Participant Feedback – Individual Professional Growth as a Result of Differentiated Delivery

Methods

<table>
<thead>
<tr>
<th>Survey</th>
<th>Focus Group</th>
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<tbody>
<tr>
<td>“I have been supported and reimbursed for all post-grad courses taken at LMS.”</td>
<td>“I’ve taken a few online classes some summers I really liked…I took two on differentiation, one on project-based learning, one on teaching gifted and talented students.”</td>
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<tr>
<td>“Almost all of the tuition for post-graduate courses I have taken have been reimbursed by LPS.”</td>
<td>“I went to the MAST Teachers Conference last year and won the Lego modules kit and so I now I use it and I actually, wrote an LEF to get another hands-on kit to teach about DNA. So it kind of changed [my teaching]”</td>
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<tr>
<td>“I took an on-line class on Summarizing which I chose. I was also reimbursed for the graduate credits associated with the Teaching American History grant. I was encouraged to register for this grant program, but chose to take the course as credit.”</td>
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<tr>
<td>“I have been invited to NELMS and Blue Ribbon. Both were valuable experiences, particularly Blue Ribbon.”</td>
<td>“I loved being able to see another middle school in action. I think I learned a lot from visiting the other middle school and it definitely…changed the trajectory of my career in that I realized last year that I wasn’t developing enough in terms of what was out there technology wise and I was becoming too much of a veteran teacher more than I want to be in terms of how I look compared to younger teachers in terms of developing our skills and being more modern and how I integrated technology.”</td>
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<tr>
<td>“The NELMS conference provided options for teacher development through a variety of workshops.”</td>
<td></td>
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<tr>
<td>“I love going to conferences and I think they are really energizing. When I went to Blue Ribbon it helped to transform my teaching.”</td>
<td></td>
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<tr>
<td>“I was in beginner’s class of ipad which had good differentiation.”</td>
<td></td>
</tr>
<tr>
<td>“I have greatly enjoyed Atlas…I also liked IPad training but know I need more training in this area.”</td>
<td>“I think the workshops offer very practical things that…you can take back to school and do.”</td>
</tr>
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</table>

In spite of the fact that the majority of teachers responded positively in this area, there was consensus around the belief that the consultant led on-site sessions could have been more
effective. This was due to the fact that there were too many different focus areas and not enough planned time for follow-up and implementation. The literature review and the data collected in this study support the fact that teachers benefit from the shared expertise of others. This disconnect must be addressed when planning the next round of professional development.

Furthermore, extended service providers reported that their individual needs are rarely met unless they attend conferences, workshops or take graduate classes. As one extended service provider stated in the focus group session: “When I was a classroom teacher, I found a much larger percent of my professional development was useful, now almost none is useful.” Another extended service provider echoed this frustration stating that: “I don’t need basic clinical skills. I need mine at a very high level in order to continue my development as a professional.” It was agreed upon that at times, this subset of the faculty has benefitted from on-site professional development that was more over-arching or broad-based such as character education and technology integration/implementation. When planning the next round of professional development, the needs of these professionals must be taken into consideration.

A professional development model aligned with school improvement plans is effective in contributing to individual professional growth as connected to the goals of the school improvement plan when it includes authentic/job-embedded experiences. As discussed throughout this study, both the literature and study participants support the need for and benefits of providing teachers with professional development that is authentic and, when possible, job-embedded. Survey respondents and focus group participants alike frequently cited the need and desire to experience greater authentic connections to their classrooms. There was an over-all belief that while some of the sessions or delivery methods provided opportunities for classroom connections, this must be a more frequent and more impactful occurrence in the
future. One survey respondent wrote that s/he would like to have more “PD that provides us with actual tools we can use in class.” Two other teachers shared this feeling by writing that “some PD sessions were not relevant or there was no additional training or time to apply to the classroom.” “Actual classroom use has been partial. Hopefully more practical application will occur in the future.”

It is important to note that, with the exception of one person, none of the respondents or participants stated that they hadn’t experienced any authentic connections as a result of the current model. Rather, that they would like to benefit from this experience more often. One teacher strongly supported the importance of making authentic connections when she stated in the focus group that in order for it to be “thorough and effective, professional development must be authentic and job embedded.”

While the data from this study places more importance on authentic connections than it does on job-embedded professional development, it must be noted that only one of the on-site professional development offerings included this experience. As a result, it is difficult to determine to what extent teachers perceive this to be valuable. In support of the literature review findings and in response to the faculty feedback, future professional development must include a more balanced amount of job-embedded offerings.

**A professional development model aligned with school improvement plans is effective in contributing to individual professional growth as connected to the goals of the school improvement plan when it includes administrative (Principal) support.** Another significant finding in this research study was the discovery of the importance that teachers placed on being supported by their Principal. As highlighted in Chapter IV, a large majority of teachers felt that their professional development efforts have been supported by their Principal over the
course of their career. Additionally, a large majority also believe that this support comes in a variety of ways such as planning financially, providing sufficient time, creating a collegial/supportive environment, and setting over-arching goals or a vision. Table 14 provides representative quotes related to the establishment of a collegial/supportive environment.

Table 14

Representative Quotes – Current Principal Support of PD

<table>
<thead>
<tr>
<th>Survey</th>
<th>Focus Group</th>
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<tbody>
<tr>
<td>“Always have been supported by Principal”</td>
<td>“I don’t think I will ever go to those conferences, me or [other teachers’ name], if our administrator didn’t support it.”</td>
</tr>
<tr>
<td>“The building Principals have been extremely supportive if I need to take a day off to attend a workshop or conference.”</td>
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<tr>
<td>“My Principal has been very supportive in my attendance of the conference and has often lobbied on my behalf to have it paid for.”</td>
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</tr>
<tr>
<td>“My Principal always supports my professional development.”</td>
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A professional development model aligned with school improvement plans could have a positive over-all impact on school improvement if it focused on a limited number of PD areas/topics, provided multiple opportunities to study or revisit each area/topic, and included an assessment component. As a result of their participation in this study, the faculty has provided three clear steps that need to be taken in order for the professional development model to have a greater over-all impact on school improvement in the future. By better or more consistently implementing these three steps, teachers believe that there will be a greater level of understanding and fidelity of implementation related to specific areas/topics being targeted for professional development and school improvement.
Chapter IV included representative quotes from teachers explaining their dissatisfaction with being exposed to too many initiatives, topics, and changes all at once. They were in overwhelming agreement that there needed to be more professional development in less focus areas. There was further agreement that teachers place a high value on the importance of assessing the impact that professional development has on the work they do. Including assessment opportunities, both formative and summative, will allow decisions to be made, in real-time and at the end of the cycle, that will lead to programmatic consistency, thoughtful change, and a positive over-all impact on school improvement.

It is noted that in the above answer, the word “could” has been used in lieu of the words “did” or “will.” This is due to the fact that this program evaluation took place at the end of the first year of implementation. At this time, there is not enough data to make a stronger more definitive statement.

**Discussion of the Findings in Relationship to the Theoretical Framework**

This study was informed by Adult Learning Theory, as well as Change Leadership and Transformational Leadership theories. These theories served as lenses to explore the utility and effectiveness of a differentiated professional development model that is aligned with the school improvement plan.

**Adult learning theory.** Knowles, Holton & Swanson (2005), present six core principles that “enable those designing and conducting adult learning to build more effective learning processes for adults” (p. 2). For the purpose of this study, some of these principles have been combined into the following over-arching principles: (1) the learner’s need to know and prior experience; (2) the learner’s readiness, orientation, and motivation to learn. These over-arching
principles align with MacKeracher’s (2004) approach that “focuses primarily on the learning process and the learning characteristics of the learner” (p.4).

*The learner’s need to know and prior experience.* Simply stated, “adults need to know why they need to know something before undertaking to learn it” (Knowles, Holton & Swanson, 2005, p. 64). According to Tough (1979) “when adults undertake to learn something on their own, they will invest considerable energy in probing into the benefits they will gain from learning it and the negative consequences of not learning it” (as cited in Knowles, Holton & Swanson, 2005, p. 64). Additionally, Knowles et al. (2005) tell us that “adults come into educational activities with both a greater volume and a different quality of experience from that of youths” (p. 65). As a result, “the richest resources for learning reside in the adult learners themselves” (p. 66). It is also important to consider the learner’s self-identity. If their “experiences are ignored or devalued, adults will perceive this as rejecting not only their experience, but rejecting themselves as persons” (p.67).

The results of this program evaluation clearly identify the benefits of teachers participating in the design of their own professional development. Providing them with a differentiated delivery model that includes choice, as well as opportunities to lead and learn from their colleagues in a variety of ways, can lead to an individual and collective understanding of why they need to know what is being taught as well as a sense that their prior experiences are understood, valued, and taken into consideration.

*The learner’s readiness, orientation, and motivation to learn.* Knowles et al. (2005) also tell us that adults become ready to learn those things they need to know and be able to do in order to cope effectively with real-life situations…adults are motivated to learn to the extent that
they perceive that learning will help them perform tasks or deal with problems that they confront in their life situations. (p. 67)

Adults are most often motivated to learn by internal pressures such as the desire for increased job satisfaction, self-esteem, and quality of life (Knowles et al., 2005). According to Knowles et al. (2005), “Tough (1979) found in his research that all normal adults are motivated to keep growing and developing, but this motivation is frequently blocked by such barriers as negative self-concept as a student, inaccessibility of opportunities or resources, and time constraints” (p. 68).

Throughout this study, the faculty as a whole demonstrated a collective motivation to improve based on a desire to better meet the needs of their students and to feel better about themselves as professionals. It is telling that the same barriers to success that Tough found in 1979 are still prevalent today based on the data collected in this study. It is imperative that principals and other instructional leaders foster a climate that creates a shared sense of understanding and motivation related to the individual and collective professional development efforts of the faculty.

**Change leadership.** Reeves (2009) tells us that effective change leaders must consider the following four components: creating conditions for change, planning change, implementing change, and sustaining change. As discussed in Chapter I, Fullan (2008) explains that “positive purposeful peer interaction, works effectively under three conditions” (p. 45). The first is when the values of the organization and its individuals are intertwined. The second is when those individuals collectively share information and knowledge related to effective practices. Thirdly, proper monitoring mechanisms must be in place to recognize and recreate effective practices, as well as to identify and address those practices that are ineffective.
This study has produced data that aligns with the tenants of change leadership. By involving faculty members in the collaborative processes of establishing school improvement goals, connecting the professional development program to those goals, choosing and designing the professional development offerings, and evaluating the utility and effectiveness of the program, the Principal and other district-wide educational leaders have been able to begin to effectively lead a change process that should remain sustainable and impactful.

**Transformational leadership.** Marzano et al. (2005) cite Bass (1985) and Burns (1978) when they state that “transformational leadership is the favored style of leadership given that it is assumed to produce results beyond expectations” (p. 14). Leithwood, Jantzi, & Steinbach (1999) explain “that this form of leadership assumes that the central focus of leadership ought to be the commitments and capacities of organizational members” (p. 9). As mentioned in Chapter I, Burns tells us that “transformational leadership is more focused on change [and converting] followers into leaders” (as sited in Marzano et. al, 2005, p.14).

Many faculty members reported and demonstrated a sense of collegiality, empowerment and ownership as well as a belief that they developed valuable skills and/or knowledge as a result of participating in the design of the professional development program. Additionally, it was reported and observed that, as a result of faculty-led professional development, many faculty members grew as leaders and took pride in their ability to make a positive school-wide impact.

**Discussion of the Findings in Relationship to the Literature Review**

The literature reviewed for this study gave way to four emerging themes. As discussed in Chapter III, in an effort to make a connection between the study and the literature review, during the first cycle coding process, the survey and focus group data was coded by these themes using Structural Coding methodology. Then, as explained in Chapter IV and earlier in this chapter, the
data analysis led to these themes becoming identified as major components of a differentiated professional development model. Due to the fact that the data related to these themes has been extensively discussed in previous sections, the following section will summarize the findings.

The benefits of teachers participating in the design of their own professional development. The findings from this study were consistent with those of the literature review regarding this theme. According to the literature, over time, teachers have not had enough of a voice in the design and implementation of their own professional development. Research has shown that by involving teachers in both of these processes, they will demonstrate a greater sense of investment and purpose, be in better position to lead and learn from each other, and ultimately will have a greater impact on school improvement.

A large majority of the survey respondents reported that the current model provided them with opportunities to choose their own professional development or to make choices within specific professional development offerings. Additionally, a growing number of teachers reported that they had been involved in designing on-site professional development experiences this year. As a result of these facts, all but one of the focus group participants spoke positively about the impact that is felt socially/emotionally as well as the impact on school-wide improvement efforts. Furthermore, faculty reported that as a result of being provided with various levels of choice and opportunities to teach and learn from each other, it was easier to focus the professional development on their needs from a building level perspective. By participating in the design of their own professional development, teachers gained a sense of investment and purpose, and demonstrated a focus on sharing and the development of site-based knowledge and consistency (capacity building).
The benefits of differentiated delivery methods that lead to the alignment of professional development and school, district, or state goals. As was noted in the literature review, there is a considerable amount of research related to the importance of meeting the individual and collective professional needs of teachers and the benefits of doing so in relation to school improvement planning. To review, many authors/researchers including Morewood, Ankrum and Bean (2010) have come to the conclusion that it is important to provide teachers with professional development choices in order to meet their various professional learning needs. Bowgren and Sever (2010) take it a step further when they state that “matching teacher needs with district [or school] initiatives requires adjustments in planning and implementing professional development activities. Differentiation is key” (p. 23). Hawley and Valli (2000) tell us “that one of the most persistent findings from research on school improvement is the close relationship between professional development and school improvement efforts. The two processes are so tightly woven that their efforts are almost impossible to disentangle” (p. 5).

A high percentage of faculty reported that as a result of this model they not only have experienced differentiated delivery methods of professional development, but also have experienced professional development that has been deliberately aligned with school improvement goals. Overall, teachers strongly support the concept and believe in the value of differentiated delivery methods. Providing teachers with differentiated delivery methods such as graduate/post graduate courses, conferences/workshops, and on-site sessions led by consultants or colleagues allowed for their varied learning styles and professional needs to be met. Additionally, by connecting the professional development offerings to the school improvement goals, most teachers had a clear understanding of where they were going and how they were going to get there.
The benefits of authentic/job-embedded professional development. The literature is strong in regards to this theme. Authors/researchers such as Dufour, Dufour and Eaker (2008), Schmoker (2006), and Slepkov (2008) all state that professional development must be connected to the classroom, embedded in the classroom, and when possible done collaboratively through a professional learning community or team-based approach.

In this study, faculty reported that they place heavy value on the concept of authentic professional development. Within the context of this study, “authentic” refers to a direct relationship to the classroom. Participants were strong in their belief that almost all professional development should be directly related (authentically connected) to the work being done in the classroom.

Despite the fact that the literature clearly puts forth the benefits of professional development that is embedded in the classroom environment, this study did not generate enough data to support or debunk this claim. This is most likely due to the fact that only one of the on-site offerings included a job-embedded component.

As stated earlier in Chapter IV, teachers reported that while, under the current model, they have experienced some professional development that was authentically connected to their classrooms, they do not believe that they have been provided with enough authentic or job-embedded professional development. Furthermore the consensus of the focus group participants was that this is very important and in fact is something that teachers want more of. Authentically connecting the professional development to the classroom or embedding it in the classroom setting allows teachers to experience a more immediate and greater sense of connectivity between what they are learning and how they are applying it.
The benefits of administrators supporting professional development. It must be stated again that “although no principal can “do it all,” the principal is the *point of convergence* for all that the school is and does” (Zepeda, 2008, p. 1-2). Multiple authors/researchers write about the important role that the principal plays in regards to professional development. Darling-Hammond (2003), Fullan (2008), and Whitaker (2003) discuss the importance of creating a nurturing school environment, providing direction, fostering effective peer relations, and remembering that people, not programs make a successful organization. Yager, Pederson and Yager (2010) write that “Principals play a key role in supporting and encouraging teachers’ professional development needs. Successful Principals establish the work conditions that enable teachers to be better teachers” (p.1).

As highlighted earlier, while it is important to note that an overwhelming percentage of faculty members felt that the professional development efforts were well supported by their Principal, it is more important to know what types of supports teacher find to be impactful and necessary. Overall, teachers believe that a principal should provide support for professional development by planning financially, providing sufficient time, creating a collegial/supportive environment, and setting over-arching goals or a vision.

**Limitations and Future Studies**

The ability to generalize the findings of this study will be limited due to the fact that this study utilized a relatively small and purposeful participant sample. The participants were all faculty members of the same school, therefore the results may not be representative of teachers in other parts of the state, country, or world. Additionally, the researcher himself is the Principal of the school where the study was conducted. Due to the fact that he designed the survey,
facilitated the focus group, and is the primary evaluator, it is possible that participants could have tempered their answers accordingly and as such created additional generalization concerns.

While wide generalizations cannot be concluded from this study, the results are very positive in that they have not only allowed this particular school to learn and grow from their experiences, but have also provided definitive answers to all three research questions as well as identified four major components that should exist in a successful professional development model.

The following list represents recommendations for further study that would begin to address the generalization of the findings and the transferability of this type of professional development model.

- Repeat the study in a variety of settings including, at elementary and high school levels, in rural and urban communities, and in Massachusetts and out of state.
- Repeat the study as part of a program review at Littleton Middle School after a second or third year of program implementation.

Significance of the Study

This study is important to the field of education because it reports the benefits of connecting a differentiated professional development model with school improvement plans. There has been substantial research done relative to professional development, while there is an ever growing body of current literature related to school improvement planning. In recent years, many in education have begun to recognize the logical and important connection between these components of education.

This study was conducted to collect and analyze participants’ perceptions of the professional development model as aligned with the school improvement plan. Additionally, the
experiences of the participants and the analysis of said experiences, were used to not only answer the research questions, but also to document the process and outcomes of this particular program implementation in an effort to strengthen future programming and design a transferable professional development model. While this was a small study conducted in a suburban middle class school district, the findings may be representative of similar communities within Massachusetts, the nation, and the world.

This study revealed that this type of professional development model is useful in that it should lead to organizational improvement and capacity building by focusing on a limited number of PD areas/topics, providing multiple opportunities to study or revisit each area/topic, and including an assessment component. Additionally, this type of model can effectively contribute to the professional growth of teachers when it includes the following four components: (1) teachers participating in the design of their own professional development, (2) differentiated delivery methods, (3) authentic/job-embedded experiences, and (4) administrative (Principal) support.

This study has resulted in the development of a transferable professional development model that is framed within a collaboratively developed Site-Based Professional Development Plan (See Appendix F). This plan includes structures and strategies related to funding, differentiated delivery methods, choice, authentic and embedded experiences, capacity building, clear connections to the school improvement plan, and a program evaluation component. This plan may be customized to meet the unique needs of individual schools.

Next Steps

Unfortunately, during the school year after this study was done, 2012-2013, many federal, state, and local mandates/initiatives such as Web-based curriculum mapping, Common
Core Standards implementation, Educator Evaluation, and the district’s implementation of a new Student Information System once again drove the bulk of the professional development. This resulted in very little of the research from this study having any type of immediate impact.

However, at the time that this dissertation was completed, the results of this study have begun to positively impact the Littleton Public School District in multiple ways. The most recent teacher contract allows for money to be reimbursed for conferences as well as graduate and post-graduate courses. Additionally, the contract calls for site-based Professional Development Committees (PDC) to be formed at each school and for those teams to have representative membership on the district PDC which is chaired by the Director of Curriculum.

While each school’s School Council has been developing the new two year School Improvement Plan, the site-based PDCs have been developing their site-based Professional Development Plans which will be deliberately aligned with the SIPs. Additionally, the researcher and Director of Curriculum have been developing a draft Site-Based Professional Development Plan Faculty Led PD Proposal Form (See Appendix G) that will be collaboratively finalized by the district PDC and then used to recruit teachers who are interested in developing and/or leading in-house professional development sessions at their building level next year. This proposal form is modeled after a form used in a prior professional development model within the district.

The researcher is optimistic that during the 2013-2014 school year, teachers at all four schools within the district will be provided with professional development that is aligned with school and district goals, relies on teacher involvement, provides differentiated delivery methods, is in most cases authentically connected to their classrooms, when appropriate is embedded in their work environment, and is supported by building and district level administrators.
The researcher hopes to be able to share the findings of this study as well as the over-all model concept and draft documents with local educators in an effort to have a broader impact on the educational community.

Conclusion

This program evaluation study investigated three research questions focused on: the perceptions of teachers regarding the usefulness of professional development that is aligned with the school improvement plan, the extent to which teachers perceive components of such a program to be effective in contributing to their individual professional growth as connected to the goals of the school improvement plan, and the extent to which teachers perceive that this type of professional development structure can positively impact school improvement.

Data from the end of year faculty survey and end of year focus group was analyzed to determine the range of participants’ perspectives related to these questions as well as to evaluate the effectiveness of the current professional development model. As discussed in the beginning of this chapter, the feedback from both the survey respondents and the focus group participants led to clear answers to each of the three research questions. These answers not only supported the literature and validated the concept of professional development being differentiated and aligned with the school improvement plan, but also highlighted the importance of four major components that should be built in to any successful professional development model.

Additionally, this study has substantiated the fact that executing a program evaluation is an extremely important step in the over-all programmatic process. This program evaluation provided the faculty with multiple ways to participate in the evaluation and will lead to them being more effectively involved in all aspects of the model as it moves forward.
This study has also helped to cement the researcher’s personal belief in the importance of being a scholar leader. Data alone does not affect change. As Pfeffer (2007) states, “people have built quite successful careers describing the hill, measuring the hill, walking around the hill, taking pictures of the hill, and so forth. Sooner or later, somebody needs to actually climb the hill” (p. 137). It is hoped that in some way this study will not only help the educators in the Littleton Public School district climb their hill, but also will inform and assist other educators in successfully reaching their own summit, as well.
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Letter to Superintendent of Schools

Kelly Clenchy
Superintendent of Schools
Littleton Public School District
33 Shattuck St.
Littleton, MA 01460-4486

Dear Mr. Clenchy,

As part of my doctoral studies at Northeastern University, I am required to conduct a research study that addresses an identified problem of practice in education and contributes to the field of study. I am writing to request permission to conduct a program evaluation study at Littleton Middle School. This letter outlines my intentions and presents the context for the study.

The problem of practice that I seek to address is two-fold. Firstly, research and practical experience has shown that more often than not, the professional development opportunities that are provided for teachers are not intentionally structured to meet their individual needs, nor do they have a systemic impact on the knowledge base and skill sets of an entire faculty. Secondly, the continuous pressure that schools face to raise standards and improve performance requires educational leaders to develop and implement school improvement strategies that will lead to increased student achievement. I propose to address this problem of practice through a research project that studies the development and implementation of a site-based professional development model that is aligned with school improvement goals as documented in the School Improvement Plan.

This program evaluation study will focus on the implementation process, the perceived impact of the program, and improvement goals for the next professional development cycle. The authentic, practical nature of this methodology lends itself nicely to the desired outcomes of this study. Data will be collected through an end of year survey, focus groups, the Principal’s program development and implementation log, and the analysis of artifacts.

It is my contention that the research reveals four components that, when successfully addressed, can be combined to create a transferable framework for professional development that can be applied in a variety of school settings regardless of content or discipline. I believe that the results of this study will make an immediate positive impact at Littleton Middle School. It is my hope that this study, in some small way, will make a positive contribution to the field of education.

If you have any questions regarding this study, please contact me directly at (978)852-6650 or via e-mail at mbranco@littletonps.org, or the chairperson of my committee, Dr. Christopher Unger at Northeastern University, (617) 909-1360. Thank your continued support. I look forward to hearing from you regarding this request for permission.

Sincerely,

Mark W. Branco
Appendix B

Faculty Interest Letter: e-mail

Dear Colleagues,

As many of you know, I am currently pursuing my doctorate degree in Educational Leadership at Northeastern University. As part of this pursuit, I will be conducting a research study this spring. The problem of practice that I seek to address is two-fold. Firstly, research and practical experience has shown that more often than not, the professional development opportunities that are provided for teachers are not intentionally structured to meet their individual needs, nor do they have a systemic impact on the knowledge base and skill sets of an entire faculty. Secondly, the continuous pressure that schools face to raise standards and improve performance requires educational leaders to develop and implement school improvement strategies that will lead to increased student achievement. I propose to address this problem of practice through a research project that studies the development and implementation of a site-based professional development model that is aligned with school improvement goals as documented in the School Improvement Plan.

At this time I am looking for faculty members who would be interested in participating in this study. This program evaluation study will focus on the implementation process, the perceived impact of the program, and improvement goals for the next professional development cycle. The authentic, practical nature of this methodology lends itself nicely to the desired outcomes of this study. Participating in this study would entail the completion of a survey, participating in focus groups, and giving the researcher permission to record field notes during face-to-face meetings as well as on-line or phone communications related to the study.

It is my contention that the research reveals four components that, when successfully addressed, can be combined to create a transferable framework for professional development that can be applied in a variety of school settings regardless of content or discipline. I believe that the results of this study will make an immediate positive impact at Littleton Middle School. It is my hope that this study, in some small way, will make a positive contribution to the field of education.

Upon receiving approval from Northeastern University, I will formally request your participation. At this time, I am simply looking to find out who may be interested in participating. Please be aware that agreeing or not agreeing to participate in this study will have no reflection on your work as a teacher at LMS or on your individual evaluation process and/or reports. Any participation in this study will be completely confidential; names and other personal information will not be used.

Please respond via e-mail to mbranco@littletonps.org if you are interested in participating or would like to meet with me to discuss the study. I thank you for your continued support and for the time and work that you may put into this study.

Respectfully yours,

Mark W. Branco
Northeastern University, College of Professional Studies

Investigator Name: Mark W. Branco

Title of project: Connecting Differentiated Professional Development to School Improvement Goals

Informed Consent to Participate in a Research Study
You have been invited to take part in a research study. This form will tell you about the study, but the researcher will explain it to you first. You may ask this person any questions that you have. When you are ready to make a decision, you may tell the researcher if you want to participate or not. You do not have to participate if you do not want to. If you decide to participate, the researcher will ask you to sign this statement and will give you a copy to keep.

Why am I being asked to take part in this research study?
You have been asked to participate due to the fact that you are a faculty member at the research site, Littleton Middle School, and expressed an initial interest in the study after receiving an informational letter seeking interested individuals.

Why is this research being done?
The purpose of this study is to complete a program evaluation of a differentiated professional development program that is aligned with school improvement goals. This program evaluation study will focus on the implementation process, the perceived impact of the program, and improvement goals for the next professional development cycle.

What will I be asked to do?
The researcher will be looking for you to participate in the following ways:

- Complete a survey with the understanding that the results of the survey will be used as data.
- Participate in a focus group with the understanding that the information gathered in the focus group will be used as data.
- Give the researcher permission to record field notes during face-to-face meetings as well as online or phone communications related to the study with the understanding that the information contained within said field notes will be used as data.
Where will this take place and how much of my time will it take?
This study will take place at Littleton Middle School. The study will take place over two to three months. The survey will take approximately twenty to thirty minutes to complete. The focus group session will last approximately one to two hours. The e-learning journal will be updated minimally once a week.

Will there be any risk or discomfort to me?
There are no significant risks involved in being a participant in this study.

Will I benefit by being in this research?
Benefits will include the opportunity to reflect on your own professional growth as it is impacted by the professional development opportunities afforded to you this year by the Littleton Public School District, as well as the opportunity to aid in refining the program for future participants, benefiting yourself, your middle school colleagues, and the school district at large.

Who will see the information about me?
Due to the nature of program evaluation, the other participants will know your identity and be privy to data that you provide a result of face-to-face meetings, focus group interactions, and a final overview of the results of the study. With the exception of the other participants, your part in this study will be completely confidential. Pseudonyms will be used for all study participants. No reports or publications will use information that can identify you other than as a teacher within your department at LMS.

If I do not want to take part in the study, what choices do I have?
You are not required to take part in this study. If you do not wish to participate, do not sign this form.

What will happen if I suffer any harm from this research?
There are no significant risks involved in being a participant in this study.

Can I stop my participation in this study?
Your participation in this research is completely voluntary. You do not have to participate if you do not want to. Even if you begin the study, you may discontinue your participation at any time. Agreeing or not agreeing to participate in this study will have no reflection on your work as a teacher at LMS or on your individual evaluation process and/or reports.

Who can I contact if I have questions or problems?
Mark Branco
Littleton Middle School
55 Russell St.
Littleton, MA 01460
Cell #: 978-852-6650
Work # 978-486-8938
e-mail: mbranco@littletonps.org

Christopher Unger, Ed. D.
College of Professional Studies
50 Nightingale Hall
Northeastern University, Boston
Campus # (617) 373-2400
E-mail: c.unger@neu.edu
Who can I contact about my rights as a participant?
If you have any questions about your rights as a participant, you may contact_____________.
You may call anonymously if you wish.

Will I be paid for my participation?
There is no compensation for participation in this study.

Will it cost me anything to participate?
There is no cost to participate in this study.

I have read, understood and had the opportunity to ask questions regarding this consent form. I fully understand the nature and character of my involvement in this research program as a participant and the potential risks. Should I be selected, I agree to participate in this study on a voluntary basis.

_______________________________________
Research Participant (Signature)

_______________________________________   _____________
Research Participant (Printed Name)     Date

_______________________________________
Researcher (Signature)

_______________________________________   _____________
Researcher (Printed Name)     Date
Appendix D
Faculty Survey

A literature review related to professional development and school improvement gives way to the following four emerging themes:

1. Teachers benefit from participating in the design of/or choosing the type of their own professional development.
2. Effective professional development must include differentiated delivery methods with the intent of aligning the PD with school, district, or state goals.
3. Effective professional development must be authentic or job-embedded.
4. Professional development must be supported by administrators.

Please keep these themes in mind when answering the questions in this survey.

Section A

1. How many years have you been teaching in the Littleton Public Schools?
   1-5          6-10          11-15          16-20          21-25          26-30          30+

2. How many years have you been teaching overall as a certified teacher?
   1-5          6-10          11-15          16-20          21-25          26-30          30+

3. Prior to this school year, to what extent have you been involved in designing or choosing the type of PD that you have participated in?
   1 = not at all          2 = very little          3 = more often than not          4 = almost always

4. Prior to this school year, to what extent have your PD experiences, which have been supported by your school district, provided you with differentiated delivery methods? (ex: graduate/post graduate courses, attending workshops/conferences, sessions led by in-district or out-of-district professionals)
   1 = not at all          2 = very little          3 = more often than not          4 = almost always

5. Prior to this school year, to what extent have your PD experiences been deliberately and clearly aligned with school, district, or state goals?
   1 = not at all          2 = very little          3 = more often than not          4 = almost always

6. Prior to this school year, to what extent have your PD experiences been authentically connected to or embedded in your classroom or work environment?
   1 = not at all          2 = very little          3 = more often than not          4 = almost always

7. Prior to this school year, to what extent have your professional development experiences been supported by your Principal?
   1 = not at all          2 = very little          3 = more often than not          4 = almost always

Comments:
Section B
This year’s LMS Site-Based Professional Development Plan includes a variety of experiences and delivery methods such as: supporting teachers’ enrollment in graduate/post-graduate courses, sending teachers to workshops/conferences, bringing in consultants, and empowering in-house experts to share their knowledge with their colleagues. Please complete the following survey based on your involvement in one or more of these experiences.

8. This year I have participated in the following professional development opportunities. (check all that apply)

_____ I have taken one or more graduate or post-graduate courses that LPS has reimbursed me for (in-part or in-full) as part of the district’s tuition reimbursement plan.

Please explain:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

_____ I have attended one or more off-site workshops/conferences that LPS has either reimbursed me for or has paid the registration fee for (in-part or in-full) (ex: NELMS, Blue Ribbon, Professional Organizations, State/National Affiliations).

Please explain:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

_____ I have participated in professional development that has been led by a LPS contracted consultant. (ex: Mathematics program, SMART notebook training, Co-Teaching, iPad, Atlas Curriculum Mapping)

Please explain:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

_____ I have participated in professional development that has been led by an LPS/LMS faculty member. (ex: Second Step training, Introduction to the iPad, Atlas Curriculum Mapping)

Please explain:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
9. To what extent have the PD offerings that you listed above been deliberately and clearly aligned with school, district, or state goals?
   1 = not at all   2 = very little   3 = more often than not   4 = almost always

   Please explain:
   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________

10. To what extent have the PD experiences listed above been authentically connected to or embedded in your classroom or work environment?
    1 = not at all   2 = very little   3 = more often than not   4 = almost always

    Please explain:
    __________________________________________________________________________
    __________________________________________________________________________
    __________________________________________________________________________

11. To what extent have the PD experiences listed above been supported by your Principal?
    1 = not at all   2 = very little   3 = more often than not   4 = almost always

    Please explain:
    __________________________________________________________________________
    __________________________________________________________________________
    __________________________________________________________________________
Focus Group Protocol and Questions

Welcome & Introductions

A literature review related to professional development and school improvement gives way to the following four emerging themes:

1. Teachers benefit from participating in the design of/or choosing the type of their own professional development.
2. Effective professional development must include differentiated delivery methods with the intent of aligning the PD with school, district, or state goals.
3. Effective professional development must be authentic or job-embedded.
4. Professional development must be supported by administrators.

Please keep these themes in mind when responding to the questions in today’s focus group.

This year’s LMS Site-Based Professional Development Plan includes a variety of experiences and delivery methods such as: supporting teachers’ enrollment in graduate/post-graduate courses, sending teachers to workshops/conferences, bringing in consultants, and empowering in-house experts to share their knowledge with their colleagues.

Purpose Statement
To find out from participants what components they believe should be part of an effective professional development experience, their perceptions of this year’s professional development opportunities, and the degree to which these opportunities and experiences effectively supported their professional growth and contributed to the school’s improvement goals.

Questions

1. (10 min.) Please comment on the value of professional development as it relates to individual professional growth, organizational growth, and student performance. Use the following scale:
   a. Very valuable   b. Somewhat valuable   c. Of little value   d. Of no value

2. (20 min.) Keeping in mind the above themes and site-based plan, what are some specific areas of strength or things that have gone well with this year’s PD model that should definitely be continued?

3. (20 min.) Keeping in mind the above themes and site-based plan, what are some specific areas of weakness or things about this year’s PD model that should be improved?

4. (20 min.) What are the major barriers to making these improvements?

5. (20 min.) Please comment on the above themes and explain to what extent and why do you agree or disagree with each one.
Appendix F

LMS Site-Based Professional Development Plan
2011-2012

The LMS Site-Based Professional Development Plan is intended to benefit both the individual development of teachers and school-wide improvement efforts by connecting meaningful, differentiated professional development with school improvement goals. This plan is intended to serve as an outline of the professional development efforts that will take place this year as related to the LMS School Improvement Plan. This plan highlights the various differentiated delivery methods that are supported and/or provided in an effort to meet the individual and collective needs of the faculty.

<table>
<thead>
<tr>
<th>PD DELIVERY METHOD</th>
<th>CONNECTION TO THE SIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Funded Graduate/Post Graduate Courses</td>
<td>Any and all goal areas as specified on tuition reimbursement form</td>
</tr>
<tr>
<td>(tuition contractually reimbursed up to $2,000.00 per year)</td>
<td></td>
</tr>
<tr>
<td>District Funded Conferences and Workshops</td>
<td>Any and all goal areas based on session/workshop descriptions</td>
</tr>
<tr>
<td>• Blue Ribbon Conference: 4 faculty</td>
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<td>• New England League of Middle Schools Conference: 7 faculty</td>
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<td>• Others as individually applied for</td>
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<tr>
<td>On-site PD led by LPS contracted consultant</td>
<td>Strategic Goals</td>
</tr>
<tr>
<td>• Mathematics program</td>
<td>• Curriculum/Instruction/Assessment</td>
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<tr>
<td>• SMART notebook training</td>
<td>• Professional Development</td>
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<tr>
<td>• Co-Teaching</td>
<td>• Technology</td>
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<tr>
<td>• iPad</td>
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<tr>
<td>• Atlas Curriculum Mapping</td>
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</tr>
<tr>
<td>On-site PD led by LPS Faculty</td>
<td>Strategic Goals</td>
</tr>
<tr>
<td>• Second Step training</td>
<td>• Curriculum/Instruction/Assessment</td>
</tr>
<tr>
<td>• Introduction to the iPad</td>
<td>• Professional Development</td>
</tr>
<tr>
<td>• Atlas Curriculum Mapping</td>
<td>• Climate/Culture</td>
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<tr>
<td>• iPad</td>
<td>• Technology</td>
</tr>
<tr>
<td>• Atlas Curriculum Mapping</td>
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</table>

PROGRAM EVALUATION METHODS
- Ongoing PDC Meetings
- Session Feedback Forms
- End of Year Survey
Appendix G

LMS Site-Based Professional Development Plan
Faculty Led PD Proposal Form 2013-2014

The LMS Site-Based Professional Development Plan is intended to benefit both the individual development of teachers and school-wide improvement efforts by connecting meaningful, differentiated professional development with school improvement goals.

The 2013-2014 Strategic Goal areas for District and School Improvement Plans are:
- Curriculum, Instruction, Assessment
- Professional Development
- Community and Communication
- Climate and Culture
- Technology

Each Strategic Goal includes Strategic Objectives and Action Steps that are intended to frame the improvement efforts of the individual school.

Each PD Session must directly connect the School Improvement Plan.

When designing a session, the current knowledge-base and skill level of the targeted participants should be considered.

**Session Time Frame/ PDPs Earned:** Site-Based PD Session offerings are conducted over six (6) three-hour Early Release Wednesdays from February through May. Participants receive 12 PDPs

**Role of Facilitator:** Facilitators take attendance, organize and submit Session documents to Director of Curriculum, serve as a contact person between Curriculum office and Session participants.

**Role of Presenter/Instructor:** Presenters/Instructors receive double PDPs for their role. Presenters plan lessons and activities for session participants by presenting information and/or demonstrating/modeling procedures.

**Target Participants:**
- Teachers from one subject area/department or a combination of content areas.
- Teachers from a single or multiple grade levels.

**Examples of Module Activities:**
- Professional Book Club, Study Group, Literature Review or Action Research
- Planning School-wide initiatives
- Vertical planning within a content area
- Looking –At-Student work
- Interdisciplinary units
- Planning a new course
- Technology integration
<table>
<thead>
<tr>
<th>NAME(S):</th>
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<tbody>
<tr>
<td>SESSION TITLE:</td>
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<tr>
<td>CONNECTION TO SIP (be specific):</td>
</tr>
<tr>
<td>SESSION OVERVIEW (format, intended outcomes, product/evidence of impact):</td>
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<tr>
<td>FACILITATOR(S):</td>
</tr>
<tr>
<td>TARGET PARTICIPANTS:</td>
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<tr>
<td>DESIRED # OF PARTICIPANTS:  minimum: maximum:</td>
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