A Program Evaluation Of Job-Embedded Professional Development In An Urban School District

Brian Metcalf

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A PROGRAM EVALUATION OF JOB-EMBEEDED PROFESSIONAL DEVELOPMENT

IN AN URBAN SCHOOL DISTRICT

National Louis University

Educational Leadership Doctoral Program
This document was created as one part of the three-part dissertation requirement of the National Louis University (NLU) Educational Leadership (EDL) Doctoral Program. The National Louis Educational Leadership EdD is a professional practice degree program (Shulman et al., 2006).

For the dissertation requirement, doctoral candidates are required to plan, research, and implement three major projects, one each year, within their school or district with a focus on professional practice. The three projects are:

- Program Evaluation
- Change Leadership Plan
- Policy Advocacy Document

For the Program Evaluation candidates are required to identify and evaluate a program or practice within their school or district. The “program” can be a current initiative; a grant project; a common practice; or a movement. Focused on utilization, the evaluation can be formative, summative, or developmental (Patton, 2008). The candidate must demonstrate how the evaluation directly relates to student learning.

In the Change Leadership Plan candidates develop a plan that considers organizational possibilities for renewal. The plan for organizational change may be at the building or district level. It must be related to an area in need of improvement, and have a clear target in mind. The candidate must be able to identify noticeable and feasible differences that should exist as a result of the change plan (Wagner et al., 2006).

In the Policy Advocacy Document candidates develop and advocate for a policy at the local, state or national level using reflective practice and research as a means for supporting and promoting reforms in education. Policy advocacy dissertations use critical theory to address moral and ethical issues of policy formation and administrative decision making (i.e., what ought to be). The purpose is to develop reflective, humane and social critics, moral leaders, and competent professionals, guided by a critical practical rational model (Browder, 1995).

Works Cited


A THREE-PART DISSERTATION:

A PROGRAM EVALUATION OF JOB-EMBEEDED PROFESSIONAL DEVELOPMENT IN AN URBAN SCHOOL DISTRICT

AN EXAMINATION OF PRINCIPALS' UNDERSTANDING OF BEST PRACTICES IN PROFESSIONAL DEVELOPMENT AND ITS IMPACT ON TEACHER PEDAGOGY:
A CHANGE LEADERSHIP PLAN

THE UTILIZATION OF CYCLES OF INQUIRY AS A PROFESSIONAL DEVELOPMENT MODEL FOR TEACHERS: A POLICY ADVOCACY DOCUMENT

Brian L. Metcalf

Educational Leadership Doctoral Program

Approved:

Chair, Dissertation Committee

Member, Dissertation Committee

Dean's Representative

Director, EDL Doctoral Program

Dean, National College of Education

Date Approved
ABSTRACT

With the achievement gap African American and Latinx and their White peers widening rather than closing in Bullock County Public Schools and the overall proficiency level of students in both English Language Arts and Math at less than 15%, it’s apparent that quality teaching and learning is a concern. This coupled with teachers’ perception that professional development is ineffective made it evident that adopting a research based professional development model was necessary. This plan examines the current professional development model with an emphasis on Cycles of Inquiry. Since this requires a change in not only teachers’ belief systems but also school leaders’ ability to design and deliver professional development that improves teaching and learning, I am using Wagner’s (2006) 4 C’s model to examine the current model and develop a vision for the new model. After an in-depth analysis of qualitative data, strategies and actions and a research-based model was developed.
Preface

As a lifelong educator with more than 20 years and an extensive background in teaching and learning, I often wondered why is it that some urban schools drastically improve outcomes for students while others still fail to make adequate gains. In my role as Chief of Schools, one of my primary functions is to ensure that teachers receive the professional development needed to consistently improve academic outcomes for all students they serve. I began this incredible process by thinking about all the things necessary for supporting teachers. I concluded that in order to effectively impact teacher practice and improve academic outcomes, job-embedded professional development was at the center. I began this journey reading, researching, interviewing the current state of professional development in a school district in Alabama.

The immediate impact this program evaluation has had on me is ironically a greater understanding of the characteristics of job-embedded professional development, as well as, how teacher’s perception is vitally important. I can not only design quality professional development, but I can also observe PD and know what I should see from the environment, delivery and implementation. As many states have shifted to a set of rigorous standards and as employers are looking for a workforce that can think critically, PD is virtually the cornerstone of every great school. With the demands of accountability and standardized testing, the type of job embedded professional development is critical.

In addition to gaining knowledge and skills from an in-depth review of best practices in professional development, this program evaluation reinforced my belief that quality job-embedded professional development is the key to any school improvement plan. Through analysis of electronic survey results from teachers and principals and interviewing the superintendent, I was reminded that teachers’ belief in professional development would lead into
greater buy-in and this concept must be the focal point. How do we get teachers to buy-into professional development? It must be created with teachers and be differentiated based on what teachers need along with a safe environment that allows teachers to implement new learning while reflecting and receiving consistent feedback.
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SECTION ONE: INTRODUCTION

Introduction

As an educator with more than 20 years of experience in the field of education, I’ve observed what happens when professional development is transformational; changing the practice and mindsets of teachers while improving student outcomes. The few times that I was able to witness this was in part to teachers having ownership of what they were learning and engaging in thought provoking discussions. As a teacher, I distinctly remember changing my practice as I was able to engage in learning that was relevant to me and when I was able to use my peers as thought partners. Yet many states and school districts struggle to identify what characteristics of professional development teachers need in order to make those pedagogical shifts and as a result, we see the achievement gap amongst minority students continuing to widen. Factor in a set of rigorous learning standards and state assessments, how school districts support teacher development is a crucial component of any district’s success. I intended to examine what are the characteristics of job-embedded professional development needed to support teacher practice.

Purpose

The program I evaluated was quality job-embedded professional development specifically in an urban school district and the impact it had on teacher practice and conversely student achievement. Professional development strategies that succeed in improving teacher learning have distinct characteristics (Darling-Hammond & McLaughlin, 1995). These approaches shift from these old models of "teacher training" or in servicing to a model in which teachers confront research and theory directly are regularly engaged in evaluating their practice and use their colleagues for mutual assistance. (Darling-Hammond & McLaughlin, 1995).
believe that the most critical factor in teacher development is the professional learning that teachers engage in and how those learnings are used in their daily practice.

A new superintendent in an Alabama school district with historically low performing schools was tasked with improving academic outcomes for students. Teachers across the district consistently rated the quality of professional development as ineffective during the new superintendents listening tour. Additionally, during formal and informal observations by school administrators and teacher teams, there was little to no evidence of teacher practice improving, leaving the district one of Alabama’s lowest performing as it relates to standardized assessments. The school district’s current professional development structure is not organized and focuses heavily on using the sit and get model. Teachers reported there is no structured way of ensuring collaboration with teachers and more importantly, adult learning theory is absent.

Newmann (1996) noted that schools interested in implementing this reform must begin to shift the organization and structure of their professional development efforts toward integrating teacher learning into communities of practice with the goal of meeting the educational needs of their students through collaboratively examining their day-to-day practice. Through this program evaluation, I wanted to advocate for change in how professional development is created within urban school districts who are struggling to create learning structures that support the drastic improvement of teacher pedagogy to improve learning outcomes for all students.

**Rationale**

At its core, the concept of professional development rests on the premise of improving student learning by improving teaching practice. The definition of professional development is "the process of improving staff skills and competencies needed to produce outstanding educational results for students” (Hassel, 1999, p. 24). One constant finding in the research
literature is those notable improvements in education seldom take place in the absence of professional development (Guskey 2000). Professional development is key to meeting today’s educational demands.

High-quality professional development strategies are essential to schools. The days of teacher staff development sessions consisting of “sit-and-get” workshops and expert-delivered awareness campaigns are long gone. We are now moving toward more effective and more engaging professional development models. Research supporting quality professional development and experience help us recognize that high-quality ongoing professional development that deepens teachers’ content knowledge and pedagogical skills; provides opportunities for practice, research, and reflection; and includes efforts that are job-embedded, sustained, and collaborative will assist in the goal to remain up-to-date (Sparks, 2002). Seminal research by Joyce and Showers (1988) concludes that levels of teacher learning, and strategy use significantly increase when coaching, study teams and peer support is provided.

During district-wide professional development days, this school district has an average of 20% to 30% of teachers who take sick or personal business days. (Alabama Department of Education, 2019) Teacher feedback and survey data report that staff perception is the district’s professional development is low quality and it's done to teachers and not with and for teachers' and significantly decreases buy-in to strategies and following through with implementation. (Alabama Department of Education, 2019) Research has repeatedly shown that the most important variable in student achievement is the quality of the teacher in the classroom (Block, 2000; Darling-Hammond, 2000; Haycock, Jerald, & Huang, 2001).

Improving professional development is important to teachers, students, community and school leadership for many reasons: as state and district level accountability increases with a new
set of rigorous standards and standardized assessments, so has the expectation for teachers and school leaders to improve outcomes for students. Lastly, students must be able to be taught to think critically and have more open-ended testing items. According to Teacher Effectiveness rubric (Alabama’s evaluation tool), which is comprised of three categories; Professional Commitment, Professional Practice and Engagement and Learning, 52% of teachers fall in the categories of unsatisfactory or basic according to the professional practice rubric. Additionally, 65% are rated unsatisfactory or basic in Engagement and Learning. (Alabama Department of Education, 2019) District and statewide assessments show that 67% of students below the national average. (Alabama Department of Education, 2019) As a result, the school board and school community are concerned about student performance and enrollment. The school board tasked the new superintendent to include in his entry plan a focus on teacher development as a goal. With a district of just over 1500 students across; an elementary, middle, high and technical school, the new superintendent is dedicated to addressing teacher gaps through examining and redesigning professional development.

Goals

Research has shown that teachers who participate in well-designed professional development activities get better results from their students (Hammond, Block, & Haycock, 2000). Since accountability and the development of more rigorous common core state standards and the demand for schools to prepare students to think critically, I have selected to evaluate how this particular districts' professional development influences teacher pedagogy. Primarily, the goal is to reimagine how the districts' current structures can become key levers to increasing teacher pedagogical skills and deepen content knowledge. The school district has taken action to create a professional development committee, which includes various stakeholders. Secondly,
they are learning about andragogy, the study of adult learning theory to guide their thinking in creating professional development. Lastly, the team is the voice of many to ensure that the superintendent considers everyone’s needs and interest. We can categorize those goals into two distinct categories; how are they selecting their learning series and how does the district monitor them with fidelity to measure the significant change in teacher practice.

**Research Questions**

I believe that well-designed professional development is the key to drastically improving teacher pedagogy. Keeping that as the focus of my program evaluation, the primary question is what critical elements of professional development is needed to support teacher pedagogy? Based on the primary question, consideration of four secondary questions need to occur to execute my research and exploration fully:

- What are staff members’ beliefs about professional development?
- How should urban school districts structure professional development for teachers?
- What culture and climate do teachers need to make the necessary pedagogical shifts in urban education?
- What are the critical next steps when implementing new learning for an urban teacher?

The goal was to assist the new superintendent by creating well-designed professional development within his school district. My change plan along with my primary and secondary research questions can be used as a guide to assist other districts, schools and networks to reimagine designing quality professional development for teachers that will drastically improve teacher pedagogy.
SECTION TWO: REVIEW OF LITERATURE

Literature Review

Professional development of educators has been a hot topic for many years. The importance of professional development has been recognized by the willingness of the U.S. government to fund such programs through major financial support. However, it is important to identify not only what professional development is actually effective, but also how to measure that effectiveness. This literature review will consider the best practices of professional development, especially pertaining to the education setting. It will also discuss key topics of andragogy and adult learning theory, and how these can properly augment professional development for educators. This will be followed by a consideration of the literature regarding principal coaching, coaching for leaders, and coaching for teachers. Evidence will be considered regarding the impact of school leadership on educational outcomes. Finally, the important aspects of skills, values, understanding, cultural concepts related to coaching/mentoring, and coaching/mentoring in a variety of contexts will be considered.

Best Practices in Professional Development

For professional development to be effective, it must be well designed and properly measured. In discussing the distinction between effective and ineffective professional development programs, Guskey (2000) notes: “evaluation is the key, not only to making those distinctions but also to explain how and why they occurred” (p. ix). For teachers and administrators to teach at a high level, they must be learning continually as well. One of the reasons noted that professional development could be ineffective particularly in education is the fact that it often is relegated to a few times a year or a set number of hours that must be reached to fulfill specific job requirements or certifications. Professional development can be effective
once people can shift from the mentality of ‘getting in hours’ to asking themselves what they need to improve their practice, and how can they best achieve that goal. Based on Guskey’s (2000) observations, the first mark of successful professional development is a system that is focused on the results to be achieved, rather than the time to be logged.

In a deeper analysis of 13 lists of characteristics of effective professional development from professional education sources, Guskey (2003) found that there is a tremendous amount of conflict and disagreement within the profession regarding what constitutes effective professional development. The author even noted that when the research was used, it often was used in an inconsistent way or contradicted research used by other sources. Effective professional development occurs when there is a clear idea of the expectations and outcomes of the program. This may include specifics like student achievement, measured in grades and scores from standardized assessments. However, it is also important to note other outcomes, such as dropout rates, attendance rates, students’ attitudes, and how much they participate in school activities. Much of the effectiveness of a program is dependent upon the context. For example, for schools in a low-socioeconomic area that has difficulty attracting qualified teachers, there may be a high number of teachers who are teaching outside of their areas of certification. In such areas, professional development specific to content and pedagogical knowledge would be appropriate. In comparison, schools in affluent areas that have an abundance of teachers that are well-qualified with advanced training in their subjects would benefit little from the same program. The real-world context of those being trained should largely dictate the content and approach of professional development in order for it to be effective.

While professional development does build specific skills, it also has certain benefits to organizations that are intangible, yet important. As Lee and Bruvold (2003) noted, social
exchange theory posits that when employees believe that the organization that they work for has a commitment to making sure that they have the skills and abilities needed to remain employable and do quality work, this can cause a reciprocity effect, where the employees demonstrate attitudes and behaviors that are in line with the amount of commitment they feel. The opposite of this theory suggests that when employees feel that their employers have a low commitment to them, they will respond by having a low commitment to their employers. Therefore, professional development provides a secondary benefit to organizations by strengthening employee loyalty and commitment.

When considering professional development in the educational context, the measure of the effectiveness of a program should be clearly linked to the objectives that the school is trying to achieve. Rhodes (2012) noted that developing and engaging high-quality school leaders has been linked in much of the research to schools that perform well when compared to state and national educational measurements. Coaching and mentoring have been particularly identified as being effective methods whereby more experienced administrators can build and foster collaborative attitudes in school leaders. Coaching and mentoring schemes can be effective when the learner acknowledges their need to learn, and a plan of personal development is put into place that is developed through the cooperation of the coach or mentor and the recipient of such developmental services. The coaching and mentoring approach is an especially suitable approach with school leaders because it creates an environment where the learner is self-directed, is encouraged to set appropriate goals, and is given a program that is flexible enough to meet their specific needs, both developmentally and in consideration of the work that they must do daily.
When evaluating whether a professional development program is effective, Guskey (2000) recommends that the program is evaluated on the five critical levels illustrated in Figure 1. The initial area of evaluating participants’ reactions is important because it provides an early indicator of whether the development activity was effectively delivered. Measuring this can help the developers of the professional development activity to continually improve their programs to better meet the needs of the participants. The second area, participants’ learning, measures what the participants took away from the learning experience. This may be approached in a pre- and post-learning assessment. The third area of measurement is organizational support and change. If participants are educated in collaborative learning, for example, but a school focuses on recognizing students based on individual performance, this can lead to a situation where collaborative learning is ineffective due to a poor organizational fit. The fourth area, participants’ use of new knowledge and skills is important because it demonstrates whether the
actual value was received from the professional development activity. If new skills were learned but not used, the professional development program might be considered a waste of time and resources. Finally, student learning outcomes are the bottom line for determining professional development effectiveness. For example, professional development on improving writing could overly focus teachers on writing and could cause a drop in other scores such as math, as teaching time is diverted to the new writing program. This is why the overall assessment of student outcomes is important in measuring professional development programs because it can detect unintended consequences such as those illustrated here.

**Andragogy and Adult Learning Theory**

When providing professional development for adults, it is important to understand that a different educational approach must be taken. This approach has been referred to as andragogy. As Merriam (2001) explains, andragogy is “the art and science of helping adults learn,” which stands in contrast to pedagogy, which is defined as “the art and science of helping children learn” (p. 5). There are specific underlying assumptions that differentiate the adult learner from child learners. First of all, adult learners already have a well-defined self-concept and are capable of directing their own learning. Adult learners also have a substantial body of life experience that can be used as a resource for learning. The learning needs of adult learners are closely connected to their own changing social roles. Effective adult learning needs to be connected to problems that the learner either is experiencing or will experience and that they can immediately apply their new learning to. Finally, adult learners are intrinsically motivated, rather than needing to be extrinsically motivated. Because of the difference between adult learners and children, the adult learning environment needs to be more of a collaborative environment, where there is a “spirit of mutuality between teachers and students as joint inquirers” (Merriam, 2001, p. 5). While
Merriam (2001) notes that there has been a vigorous debate as to whether the aspects of andragogy could be applied to some younger students who are highly self-directed, the author concludes that andragogy has become inextricably linked with the practice of adult education.

There are certain challenges that can arise when professional development is put in place especially in the education environment and an andragogical approach. Smith (2017) notes that in teacher education programs, social constructivism holds that knowledge is built socially through a combination of dialogue and experiential learning. In this model, practices, attitudes, and values are learned, not only by being told or studying but are enculturated through the process of interaction with human role models. This creates a challenge when a teacher education program is taught from an approach of andragogy alone. The challenge created is that teacher education is oriented towards teaching individuals to become teachers using pedagogy. Since much of the learning occurs experientially if a teacher is educated in a purely andragogical approach, then they are not experiencing what they are being taught, they are merely being told the information. This is a foundering in social learning. Therefore, Smith (2017) asserts that to effectively educate future educators, a combination of the andragogical approach with a more constructivist, learner-centered approach is more effective and will achieve the goals of teacher education better than a strict application of andragogy.

Certain adult learning practices are more effective than others that achieve optimal educator and student outcomes. Dunst and Hamby (2015) noted six specific characteristics in their meta-synthesis of in-service professional development (IPD) reviews. They specifically noted that IPD was most effective when job-embedded learning opportunities were present. Educator learning experiences that were active and authentic were also important. Coaching or mentor support that provided performance feedback during the IPD was noted as well. Extended
follow-up was also noted as a key lever to success as well. Finally, it was determined that to have the maximum effect from IPD, in-service training, and support to follow up that was sufficiently long and in-depth to have discernable effects was important. Four different adult learning approaches were then considered in detail, namely coaching, guided design, just-in-time training, and accelerated learning. The latter characteristic of successful IPD programs, that of having follow-up support for IPD that was both enough in length and intensity is illustrated in Table 1. Having a low amount of extended support (20 hours or less) made accelerated learning have almost little to no effect, whereas adding ample follow-up (20+ hours) added considerably to the impact of the IPD program. It is noted that in the studies, that coaching, which almost always happens in an embedded situation was by far the adult educational approach that was most effective for IPD, and that having the support of more than 20 hours made it even more effective.

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*Figure 2. The four adult learning practices and study outcomes (Dunst & Hamby, 2015).*

In the study by Zepeda, Parylo, and Bengtson (2014), the authors specifically researched the application of adult learning theory to professional development for school leaders. They
concurred largely with Dunst and Hamby (2015), finding that job-embedded training for school teachers made the professional development much more relevant and action based, and was much more effective than traditional ‘sit and get’ methods of professional development. A specific area from adult learning theory that was emphasized in this study was the need for teachers and school leaders to be allowed more autonomy in directing their own professional development. By having an understanding that individuals learn and grow within their own systems, this can lead to a situation where personal and professional needs intersect, resulting in professional learning opportunities that are more responsive to the collective.

**Skills, Values, and Understanding**

In order for coaching to be an effective form of professional development in the school setting, certain skills, values, and understandings must be present in the participants. As Leat, Lofthouse, and Towler (2012) outlined, while a coach and the one being coached may not necessarily need to be friends, the coach, in particular, should be cognizant of the intricate linkage between cognitive and emotional systems, and how both are linked to action. The best coaching model for the particular situation must be utilized. While technical coaching teaches specific skills, like literacy coaching mentioned earlier in this review, collegial coaching is more of a professional dialogue between professionals that stresses reflection and works to improve practice and challenge organizational norms if these are considered to be blocking quality education. Finally, Challenge coaching is a hybrid of the two that is generally utilized to target specific areas of growth for which the educator is being coached.

With the increasing demands on educators’ time and schedules, in-person coaching, or mentoring may not be practical. With the spread of chat tools and video streaming technologies such as Skype, this may provide avenues where coaching could take place where it would not
otherwise be possible. However, Fletcher (2012) notes that several caveats must be taken into consideration. For e-mentoring to be effective, both parties in the transaction must be equally comfortable using the tools needed for remote collaboration. Part of this may entail assuaging fears that information that is expected to be confidential will remain confidential, despite the lack of physical presence. It is noted that there is currently a paucity of evidence on the effectiveness of mentoring and coaching via web technologies, so this must be taken into consideration when evaluating whether or not web-based tools will be used as part of the coaching process.

Figure 2. The phases of mentoring relationships (Mullen & Schunk, 2012).

In any coaching or mentoring relationship, there are certain predictable phases that the relationship must progress through in order to succeed. As noted by Mullen and Schunk (2012) and illustrated in Figure 2, the initiation phase of the process is where both parties assess their skills as well as what they hope to accomplish. Once these are clear, beginning work in the relationship starts, with both parties becoming familiar with one another so that the coach/mentor will know what strengths the mentor possesses. The next phase, the cultivation phase, is the longest part of the relationship and may last two to five years. It is during this time that the coach/mentor will work with the teacher to build on agreed-upon goals and develop a sense of self-efficacy in the teacher. The separation phase occurs when there is no longer a need for the coach/mentoring relationship. By keeping a positive attitude, separation can be handled in a constructive way for both parties. Finally, the redefinition phase is where the relationship
changes between the mentor-teacher relationship to one of either being a peer or maybe a friend, who keeps in occasional supportive contact.

**Culturally-based Concepts**

In a world that continues to be increasingly more diverse, it is critical to address issues highlighting the effects of race and how it can impact the dynamics on mentoring. As Johnson-Bailey (2012) notes, positionality is important. More concretely, “who we are and who we are perceived to be in society – are important matters that affect mentoring relationships” (Johnson-Bailey, 2012, p. 155). Because of systemic factors, many teachers in urban education are white. There is a need for recruiting more teachers of color. This means that there is a high likelihood that some cross-cultural mentoring will need to be done. Because of historical biases and inequalities, it is crucial in such situations to develop trust – even more necessary in same-race coaching or mentoring context. While establishing trust may seem simple, it must be present in both the mentor and mentee in equal degrees. Both parties in the coaching environment may need to acknowledge that there are racial tensions, historical biases, and societal norms that must be acknowledged before the trusting relationship is formed. A few simple steps can ensure that the mentor-mentee relationship will be strong. Firstly, the mentor should always act in the best interests of their mentee, regardless of any racial differences between the two. The second important point is to recognize the individuality and skills of the mentee, not trying to shape them into the likeness of the mentor. Devoting the time, it takes to really get to know the mentee also will build caring and trust between the mentor and mentee, which builds a solid foundation for the mentoring relationship. Finally, after a solid foundation and relationship is set, the mentor must work with the mentee to understand how their biases influences their beliefs and
feelings then help the mentee to craft a strategy to navigate the system without needlessly denigrating it.

Culture also has a large bearing on who we are as individuals. Kochan and Pascarelli (2012) note that at times having a mentor and mentee of the same culture can be advantageous, noted this is not always the case. At times, having a mentor and mentee of different cultural backgrounds can be advantageous in helping both the mentor and mentee gaining new insights and correcting misconceptions while broadening their understanding of other cultures. It is important for the mentor to have a good overall understanding of the cultural context that the mentee comes from to attenuate their approach to one needed by the recipient of the mentoring. One danger noted by Kochan and Pascarelli (2012) is if the mentee is made to feel that they must lose their identity and adopt their mentor’s culture and perspective on all things. There should remain high respect for the mentee’s individuality, which will significantly decrease this problem from arising.

**School Contexts**

As was noted earlier in this literature review, the context of the school has much to do with the professional development approaches pursued. This section will touch on the differences between coaching and mentoring in teacher education programs, early education context, K-12 schools, in addition to the unique needs of coaching and mentoring school leaders.

As Sorenson (2012) outlines, in the process of initial teacher education and initiation, mentorship or coaching may be provided to help the new teacher to bridge the gap between study and practice in the classroom. Mentoring in this situation generally focuses on the mentor establishing an environment where the mentee is given support for questioning and reflecting on
their learning. One of the most effective ways for this to happen is if a collaborative relationship is built between the mentor and mentee.

Watling and Gaspar (2012) suggest that a good approach for PD effectiveness and coaching in the early childhood education (ECE) environment is the use of dialogic mentoring. While a traditional question may ask “when you are doing this, think of these things,” a mentor using the dialogic approach would ask “what do you think would change this situation.” (Watling & Gaspar, 2012, p. 262). By framing the questions in the dialogic process, the answers come from the mentee, allowing them to internalize them as intrinsic to themselves.

Regarding coaching in the K-12 environment, Killion (2012) contends that there are a number of strategies that should be used in order to properly lay the groundwork for coaching. After identifying, what type of coaching will occur, creating a supportive culture, setting clear goals and parameters, and clarifying coach roles should be completed. This should include engaging leadership support at the school and district level, which will be instrumental in removing barriers to coaching. Then coaches can be selected, prepared, placed, supported and evaluated. A supportive environment and removing barriers are particularly important in this process because a toxic environment or impediment could cancel out all the hard work done in the coaching process.

When practicing coaching and mentoring in the leadership context, it is critical to aid the mentee in gaining the needed skills and practices for leadership. As Crow (2012) outlines, the successful mentor will engage their mentee to enable them to become a more inquiring, reflective professional. While there is a power relationship in mentoring leaders, a bidirectional relationship is utilized to negotiate and create knowledge. When knowledge is co-constructed in
this fashion, it is important to have a multidimensional relationship that is reciprocal. This type of coaching/mentoring practice will result in a more distributed form of leadership.

**Conclusion**

As this review of the literature has demonstrated, the use of mentoring and coaching as a form of professional development provides many sustained advantages to participants in the process. Rather than the ‘one and done’ approach of workshop or conferences, which have been largely demonstrated to be ineffective, mentoring and coaching build a relationship between the mentor and mentee that is sustained over a long period of time, enabling the mentor to gain a full assessment of the mentee and their capabilities, then work collaboratively to aid the them to achieve their full potential with the skills that they already have. The mentor should not try to shape the mentee into a mini-me version of themselves, but rather enables them to develop into the best they can be, whether they are a teacher or school leader. School leadership has a critical role both in creating and developing professional development and school environments that lead to better educational outcomes, as well as forging relationships with parents and the community to optimize learning conditions for their students. By building an effective coaching model and formulating relationships based on trust, PD can drastically begin to build competencies in the teacher that lead to high levels of student learning. This can only be done when districts and school understand how to design professional development that meets the needs of every teacher. This change in delivery can assist teachers to develop reflective practice. Elena Aguilar describes this as transformational coaching.
SECTION THREE: METHODOLOGY

Research Design Overview:

Method decisions, like decisions about focus and priority issues, are guided and informed by our evaluation goal: intended use by intended users (Patton, 2008). Collecting the right types of data is critical to ensuring that the study is improvement oriented. The goal was to identify characteristics of job embedded are need to improve professional development in this school district. Improvement-oriented forms of evaluation included formative evaluation, quality enhancement; learning organization approaches and continuous quality improvement (CQI) this approach aims at making things better (Patton, 2008). I intend on gathering data by using qualitative methodology approach. Qualitative research is primarily exploratory research. It is used to gain an understanding of underlying reasons, opinions, and motivations. It provides insights into the problem or helps to develop ideas or hypotheses for potential improvement to the way professional development is implemented.

If the study included student pre and post assessments, then I would have used a mixed methodology that would have included both quantitative and qualitative techniques. All mixed methods design combines qualitative and quantitative data in some way (Patton, 2008). A breakthrough is an end of the qualitative-quantitative debate. Evaluators increasingly recognize that mixed methods have much to offer and that the primary methodological issue is determining what methods are appropriate based on the particular evaluation situation and the needs of those who will use the findings. Quantitative and qualitative methods do different things. Each, however, is valuable. Moreover, each set of methods continues to develop (Patton, 2008).

I believed the qualitative methodology approach; specifically, grounded theory would guarantee that during the study, that I was collecting right forms of data to support the
recommendations that would be made to improve professional development at the school, as well as, school communities at large through the creation and refinement of theory. Grounded theory is a research method that will enables you to; develop a theory which offers and explanation about the main concern of the population of your area and how that concern is resolved and processed (Nelson, 2009).

**Participants**

Since professional development is about drastically influencing teacher practice, the participants in the proposed study was a group of 8 teachers that volunteered to participate within each school. The proposition behind allowing teachers to self-select into the study will minimize the validity of results. If teachers are forced to participate, feedback may not be honest and fear of it being included in their formal observation or forced might skew the data. Every teacher received the same survey via survey monkey along with a consent form; attached as appendix A.

To test my hypothesis, I considered having students taking a pre-assessment on the next unit to determine baseline performance. To ensure no harm occurs to the students, they could be assigned a number to match his or her assessment. Students were in the classes of the teachers participating could be asked to participate with parental consent, solely for the release of interim assessment scores to be included in the data set. If I wanted to prove that quality professional development in urban schools do impact student achievement, then I had to include the achievement of students who those teachers served. However, I determined with the district, in the interest of time and completion of the entry plan, they would incorporate achievement data later.
Data Gathering Techniques

As previously mentioned, I conducted an interview with the Superintendent to better assess his knowledge of what teachers’ perception was about the current professional development structure. Additionally, I used a survey to gather responses from two schools. In each school, 8 teachers opted to take the survey. Mixed-method design expands the research in a way that a single approach cannot. The process of offering a statistical analysis, along with observation, makes the research more comprehensive. Academics glean information from other academics and mixed methodologies offer a broader landscape. There is more information from which to develop more hypotheses. Mixed methodology research may advance the timeline of a debate by providing more data for future discussions and research.

Surveys attached as appendix B that asked the participants to answer a mixture of open and closed-ended questions about professional development. Open-ended questions often provide respondents with the opportunity include more information, including their feelings, attitudes and understanding of a subject. This method allows the researcher to better access the respondents' true perceptions on an issue. The benefit of closed-ended questions allows the researcher to identify patterns and themes that emerge and statistical interpretation can be assessed.

Evidence of teacher belief on professional development and conditions for optimal learning will take place through a written survey provided to teachers. However, the survey results can be used by the district, over time, draw conclusions documented through learning walks, and informal observations. Data was collected through a survey that asked both closed and open-ended questions. I envisioned using a tool to capture the characteristics and conditions needed to facilitate change in teacher behaviors. I proposed looking at aligning the questions to
the district two components that teachers are rated the lowest; professional practice and engagement and learning. Specific look for according the rubric and used a qualitative study to see if my hypothesis of are aligned with what interim assessments are showing us. Qualitative studies are used when looking at a small sample of data, extracted from a larger population, from which the Participatory Action Research researcher draws some conclusions and attempts to highlight correlation. (James, Milenkiewicz, & Bucknan, 2008).

**Data Analysis Techniques:**

Credibility and use are important factors in ensuring the right data analysis technique is enacted. Credibility includes the perceived accuracy and fairness, and believability of the evaluation and the evaluator (Patton, 2008). Based on teacher surveys, I sought to highlight or surface trends. I coded the surveys that allowed me to look for themes and descriptive statistics, which are numbers that are used to summarize and describe data from the survey. Patton states “claims are based on more than ok kind of evidence or data” this is known as triangulation of data (Patton, 2008).

The purpose of using grounded theory looked at teachers’ beliefs and responses to a set of closed and open-ended questions to determine to what extent professional development impacts teacher practice. If I focused more on the closed-ended questions this is considered the constructivist design model.

Grounded theory aims or assists in researches being able to analyze and separate data through qualitative codes. Coding is merely attaching labels to data and it tells what each data set is. According to Kathy Charmz (2006), our analytical categories and the relationships we draw between provides a conceptual handle on the experience studied. In other words, I was able to meaning and examine the desired results of the research. I began with open coding as the initial
process to code the results. The categories were formulated based on the survey and interview questions which were driven by the question that the study sought to answer. This was achieved by the use of SPS—a qualitative software program. Once multiple open an axial coding events, I created charts was created to represent the connectedness of the categories.

**Systematic Design**

Chong and Yeo (2015) state the systematic design generally consists of three coding stages: *open*, *axial*, and *selective*. *Open coding* aids in the establishment of initial information categories regarding the subjects of a study through the organization of data that is collected. *Axial coding* aids in establishing connections between open categories and other categories that are based on causal conditions, interventions, environmental factors, and outcomes, and *selective coding* aids in the generation of a theory (or theories) via the interpretation of emerging interrelationships amongst the categories that were established in the axial coding stage (Chong & Yeo, 2015). In terms of information processing, the systematic design essentially begins with specificity and becomes more conceptual, ending with practical explanations of the findings.

**Theoretical Frameworks**

The purpose of this section is to describe the framework used in the current study. Grounded Theory which is inductive in nature and heavily relied upon on qualitative studies has three frameworks with in it. In this section, I will talk about Emerging design which is open to new ideas or concepts in addition to research findings. This was an integral next step as I looked to provide this district with next steps. The other framework is constructivist, in this framework, the researcher is actively involved with the experiences and interpret the meaning of those
Grounded Theory

Grounded theory is based on the qualitative approach to scientific research regarding various social sciences. As Rosenbaum, More, and Steane (2016) state, qualitative research has dualistic qualities in which it aims to discover realistic ideas about the world while also determining how the realities of these ideas have come into existence. Representing a key method of qualitative research, a grounded theory further aims to identify a spectrum of critical elements that establish a functional framework once all of the elements have been combined (Rosenbaum et al., 2016). Grounded theory is an inductive approach that asks one or more questions. There are several designs grounded theory supports, such as systematic, emerging, or constructivist designs, all which aid in collecting, measuring, and analyzing qualitative data.

Emergent Design

The adaptation to new ideas or concepts in addition to research findings is a key feature of the emergent design, which uses theoretical sampling and is welcoming of information that is unanticipated unlike research designs that are more structured; this unanticipated information adds to the richness of the collected data (Taber, 2013; Pailthorpe, 2017). Pailthorpe (2017) also argues even though the characteristics of the emergent design are critical to grounded theory, the design itself is not limited in terms of the collection and analysis of data and is embedded throughout each and every phase of a qualitative study, from the initial conceptualization to the final publication. The emergent design is extremely flexible, however, depending on the type of research questions and hypotheses, this flexibility can be seen as either a strength or weakness.
Constructivist Design

As Lauckner, Paterson, and Krupa (2012) point out, the constructivist design is known for acknowledging a subjective point of view regarding researchers that construct grounded theories via past and present experiences with other people, diverse perspectives, and common research practices. A significant strength of the constructivist design is that it recognizes that researchers are actively involved with experiences and consistently interpret the purpose and/or meanings of these experiences (Lauckner et al., 2012). Andrew, Pedersen, and McEvoy (2011) also reiterate on the importance of these characteristics, which help researchers focus on one concept at a time while also incorporating personal values within a study. This design examines subject settings or contexts and helps in validating the accuracy of research findings (Andrew et al., 2011).

Since the constructivist design aligns researchers with the settings or contexts of subjects to better comprehend subject generated meanings, thus, providing researchers with the opportunity to collaborate with subjects, it is highly suitable for qualitative interviews that consist of open-ended questions (Andrew et al., 2011). Lauckner et al. (2012) emphasize the usefulness of this particular design regarding open-ended interviews, stating the design focuses on connecting prominent features of circumstances, interpretations, and research problems. Each time the data was new nodes emerged and were included. The research ultimately produced nine nodes and four themes emerged in order to effectively answer the research questions: What are the critical elements of professional development need for urban school teachers; What are teachers belief about professional development, How should school districts structure professional development for teacher; What culture and climate is needed for teachers to make pedagogical shifts, and What are the critical next steps for implementing new learning.
SECTION FOUR: FINDINGS

The purpose of this section is to describe the findings of the qualitative investigation. This study sought to identify the critical elements of job embedded professional development needed in order to support teacher pedagogy. To date there are a number of studies that identify the characteristics needed to improve teaching and learning, however, there aren’t many that are from the perspective of the practitioners themselves. As Linda Darling-Hammond (2002) asserts, professional development that improves teaching and learning has distinct characteristics. The seven characteristics; data informed, content specific, job embedded, collaborative, sustained, with feedback and reflection must all be present in order for teaching and learning to be improved.

Sanders and Rivers (1996, p. 6) found, “the single most dominant factor affecting student academic gain is the teacher effect.” This impact is so profound that the results of their study was found to be additive and cumulative. During the analysis, there were four themes that emerged from teacher responses that directly aligned to the primary and secondary research questions. The first theme; teacher and student growth examined teacher’s belief about the impact of the professional development and the correlation of its impact on teaching and learning. The second theme uncovered was the exploration of professional development effectiveness. This theme is aligned with research question two which is about the characteristics of effective professional development design and to what extent are they present in the way the district designs PD for teachers. The third theme is related to culture and climate or the environment needed in order for teachers to begin to implement the learning from professional development. The fourth and final theme examined was what Dunst and Hambry (2010) describe in their meta-analysis was as reflection and feedback. In this study this theme is implementation of learning.
Research Question 1

How does the delivery of professional development affect the growth of teacher and their students?

Teacher and Student Growth

School 1 Themes for Questions 2, 4, 5, 6, 7

The outstanding theme in school 1 is that professional development sessions lacked effectiveness in delivery and implementation. In a group of 8 teachers, an average of 5 was unaware of the benefits of professional development to themselves and to their students. Those that attended meetings that involved professional development gave feedback that suggested that the teachers were dissatisfied with how professional development was being offered in various meetings. This theme of dissatisfaction suggested that little was being done to improve the teaching techniques of educators or the learning strategies of students.

School 2 Themes for Questions 2, 4, 5, 6, 7

School 2 has a consistent theme of satisfaction in their professional development techniques. According to statistics, an average of 6 out of 8 teachers found their professional development sessions productive. The teachers also participated in such sessions in multiple occasions. The data presented showed that most of the teachers in school 2 were open to learning through professional development and their superiors offered support where they found fit. For this reason, the teachers did not find it difficult to adjust to new methods of teaching and their students were positively impacted by the methods of education used by their teachers. The schools did not only rely on professional development, but also on the distribution and management of knowledge attained in professional development programs.
Superintendent Themes for Questions 2, 4, 5, 6, 7

The Superintendent reported during the interview that professional development in its current state has failed to improve teaching and learning in the district. The Superintendent noted that he understood that when designed well, professional development is the single most important factor in improving teaching and learning. He also noted that due to the way that teachers continuously rate the overall quality of professional development, this is a direct correlation to the lack of improvement and it is often sit and get and delivered in whole group format and is not differentiated to meet the specific needs of teachers. Finally, the Superintendent admits that professional development is as a result of state of district mandates and not related to what teachers need.

Research Question 2

How should urban school district structure professional development for teachers?

Effective Professional Development

School 1 Theme for Questions 3, 8, 9

The theme in this school 1 is majoring on improving programs for professional development in urban schools. To counter the negative effects of dissatisfaction, education boards need to capitalize on improved professional development programs in urban school districts. For an education institution to effectively remain relevant in a constantly changing environment, the teachers have to constantly learn and retain new information. Future plans on education development rely on the flexibility of the Board of Education (Postholm, 2012). According to research, knowledge accumulated in the past is likely to be vulnerable to retention. Given this argument, professional development for teachers should not be a problem for an education body since there is a lot to learn in the future for teachers.
Professional development in urban school districts should be approached using the capacity of teachers to learn. An education institution could employ individuals that are looking for their own knowledge development rather than just the financial benefit of being part of a school. If a school settles for this model, they can allocate an employee that is transitioning into progressive professional development to act as mentors. In the process an educator gets to create acquire and create their own knowledge. With time, the initiated work force could distribute their knowledge through different channels to other employees. This approach is grounded on the assumption that an institution’s growth is dependent on the learning capacity of its teachers. There is truth in this assumption since learning gives room for innovativeness. The more knowledge that teachers accumulate, the more successful and intellectually developed students and modes of learning becomes.

School 2 Theme for Questions 3, 8,9

The common theme in this school 2 is the significance of distributing knowledge. Distribution of knowledge plays a vital role in the position of an institution in the urban school districts. Distribution of knowledge in this case allowed the teachers to attain intrinsic rewards through personal and professional development. This concept investigates how commonality and diversity of knowledge will lead to coordination and new ways of handling problems respectively. With knowledge distribution comes knowledge management (KM).

According to research, KM has become a primary cause of urban school districts success alongside fundamental aspects such as capital (Chesñevar et al. 2005). Despite its importance, a majority of leaders are skeptical where to get knowledge values lie within an organization and how that knowledge can be distributed to form a knowledge organization. This fact explains why professional development programs becomes a scary process for leaders since they are unaware
of ways through which knowledge best mastered by a few people can be distributed throughout the rest of the institution (Ale et al 2005. P 356). KM can be approached using a descriptive or perspective framework. The descriptive framework focuses on the nature of KM while the perspective framework focuses on methodologies used in KM. The perspective framework weighs the advantages presented by intangible assets.

Superintendent Theme for Questions 3,8,9

The major theme is that the Superintendent understands that in order for professional development to be effective principals and school leaders must first understand adult learning theory and the principles of andragogy must be present all the time, but this is not the current state of the district. Professional development may encompass one aspect, but never does it include all seven principles and as a result doesn’t meet the needs of teachers. Lastly that knowledge management is not equally distributed throughout the district evenly resulting in mixed understanding.

Research Question 3

What culture and climate do teachers needed to make the pedagogical shifts?

Culture and Climate

School 1 Theme for Questions 10, 11

The major theme in this school is to comprehending well the building of climate and culture. Culture and climate building should be handled using a more cognitive perspective. Culture and climate is dictated by the capacity of an institution to process, analyze, and effectively react to its macro and micro environment. The culture and climate that is needed is one that fosters continued learning and implementation of new information by teachers.

Cognitive knowledge is closely related to knowledge acquisition. Knowledge acquisition is about sharing of information among individuals and within the organization based on trust or
purchasing information from the external environment. Consequently, this form of knowledge can be captured from different forms of experts and stored using manifestations of expert databases. Using this method allows for an organization to not only create skill in younger employees but also, to develop those skills by integrating concepts with which they are already familiar to learned concepts. For instance, requesting for student feedback and analyzing student comprehension and development to find a competitive advantage is a form of knowledge acquisition.

**School 2 Theme for Questions 10, 11**

School 2 has an outstanding theme of the most basic resource in creating knowledge on climate and culture. In its case, a proper understanding of KM should be a fundamental resource in creating a culture and climate of knowledge retention and distribution. Using this approach, leadership have the advantage of identifying knowledge resources and characterize them as tactic or explicit (Chadwick & Raver, 2015). Tactic knowledge is that teachers only gather through experience while explicit knowledge is the knowledge that can be communicated in code or any language that promotes communication among professionals. School 2 is rich in tactic knowledge since all teachers have experience gathered over 10 years of experience. Consequently, it will be relatively easy for school 2 to make pedagogical shift in urban education since knowledge distribution is well managed in all sectors.

**Superintendent Theme for Questions 10,11**

While the Superintendent has an in-depth understanding of KM and how it is used in order to create a culture and climate of knowledge retention and distribution, the principals and teachers do not possess this understanding and therefore it adversely affects the trust levels and teacher’s willingness to engage in collaboration consistently. While this isn’t the case in every
school, when he examined the district as a whole via survey data or observations, it is evident that it is absent.

**Research Question 4**

What are the critical next steps for implementing new learning for urban school teachers?

**Implementing Learning**

**School 1 Theme for Questions 12**

The theme this school 1 is implementation of new learning. Implementing new learning for teachers is propelled by the culture and climate. Once a teacher is in touch with these elements, learning and implementing new information becomes easy. In the case for school 1, creating and retaining internal knowledge is insignificant in giving a school a competitive advantage. For this reason, holding on to passive methods of professional development instead of investing in networking for knowledge acquisition for educators is non-strategic. Ensuring that all employees are constantly learning on the job will increase the existing levels of knowledge while stimulating a culture of organizational learning among the teachers.

**School 2 Theme for Questions 12**

The theme in this school 1, is accounting for lost knowledge. Implementing new learning for the urban teacher can only be achieved through teaching plans are a fundamental part of the institution when countering the possibility of lost knowledge. A school must have an aspect of continuity. Education continuity ensures that an institution has qualified employees at bay to handle plethora of job functions. Teaching planning becomes essential especially when an organization has a large population of students that is transitioning from the results of different professional development programs. Essentially, teaching planning is the process through which an organization promotes continued development of education to ensure key factors do not face a deficit in skill stability.
There are strategic ways of handling teaching. First, the educators need to identify key factors whose discontinuity could cripple the continuity of student learning and the integrity of the school. Those replacing norm in key position must have equal or better qualifications to fit the position. The vetting in this case goes beyond content validity (Berke, 2005). Secondly teachers need to be trained on skills such as communication and decision making. Once candidates are identified, they are prepared for the role they are yet to play. The preparation process gauges competency gaps against available skills. Based on the results of the preparation process, the institution should provide developmental opportunities that cover talent gaps. Lastly, leadership should monitor the progress made by teachers and use reward systems that will foster further development of talent of the viable candidates.

Superintendent Theme for Question 12

Knowledge Management of implementation of learning must come in the aspect of reflection and feedback. The Superintendent highlighted that while some schools engage in feedback on occasion, it is inconsistent at best and is the district nor schools have a formalized process to give informal feedback outside of the teacher evaluation tool that occurs twice a year. This gap makes it difficult to streamline how and when feedback should be given. He also noted that professional development doesn’t have a space other than surveys to reflect on what was learned and how to scale it in their daily practice. Dunst and Hambry (2002) that feedback and reflection are essential in improving teaching and learning and absent them, those improvements seldom happen.

Comparison of the Two Schools and Superintendent

The two schools and Superintendent have different themes that are related to each other in some ways. The data collected suggests that lost knowledge is a huge problem. Many schools
are heavily dependent on the traditional professional development programs since they offer standards that have been used for generations. Such reasons describe the dissatisfaction in school 1. There is little flexibility in how professional development is handled, thus little improvement in the position of the educators and their students.

The scenario is different in school 2 since the primary focus is on retention and distribution of knowledge. This fact allows them to have a sophisticated understanding of what works and what fails in an organization. Consequently, very few institutions invest in organizational learning or KM until it is too late. Alternatives are such as ignoring the necessity of professional development and allowing teachers to run their institutions on traditional methods of teaching. Since school 2 has fostered professional development and teaching planning, they have the advantage of having a prepared work force. In the absence of key players in an organization, business continues to flow as usual because gaps that could lead to a failure are well handled in advance. Lastly, the information from teachers in school 1 suggests that learning in an organization has become a complex task for their institution to handle. Even when professional development is implemented, some teachers cannot use these concepts to the advantage of the school.

The Superintendent understands that knowledge management is overall missing in the district. This absence seemingly has eroded the ability to increase teacher buy-in to professional development. Additionally, as a district, while some schools use KM when designing professional development, the implementation is scant and scare at best resulting in ineffective professional development design. As mentioned in both schools 1 and 2, the Superintendent agrees that the culture and climate is inconsistent and doesn’t support KM and thus not allowing teachers the opportunities to consistently implement and share knowledge. Finally, how schools
approached providing feedback and reflection of KM is unevenly applied throughout the district in particular schools 1 and 2. This provided insight that there is a need for a uniformed process for feedback and reflection.

**Summary of Discussion**

Knowledge is the primary driver of a company’s success. All departments need knowledge before they can take up a task. Teachers provide an institution with an archive of knowledge. The experience they have within an organization allow them to be reliable resources in decision making and problem-solving processes. For this reason, they are considered intangible assets that will generate financial success due to their knowledge. For example, National Aeronautics and Space Administration (NASA) confesses that if they were to go back to the moon they could. However, that knowledge has been lost hence a need to start from scratch if they intended to go back to the moon. Further, the current job market is being plagued by the shortage of necessary skills and teacher mobility. For this reason, institutions have found it more profitable to hold on to traditional professional development strategies. In this case, these teachers are often exhausted of learning due to the lack of progressive learning in several programs. Given these facts, leaders need to understand that there will always be knowledge flux in an organization. New knowledge will always come in while some exists. This knowledge can also be distributed within an institution since it serves the purpose of a strategic resource. Conclusively, rather than focusing on knowledge retention, organizations should focus more on knowledge acquisition and distribution to balance out the negative effect lost knowledge.
SECTION FIVE: JUDGEMENT AND RECOMMENDATIONS

Examining the primary question for this study; what critical elements of professional development is needed to support teacher pedagogy, there are both positive and negative findings? Guskey (2000) contends, the first mark of successful professional development is a system that is focused on results to be achieved, rather than the time logged. Teacher professional learning is of increasing interest and viewed as a critical way to support the changing instructional demands in education. Students are increasingly asked to demonstrate complex skills to succeed in the 21st century. Teachers therefore must learn and adopt various forms of teaching to develop student competencies such as deep mastery of challenging content, critical thinking, complex problem solving, effective communication and collaboration, and self-direction. Darling-Hammond (2017) In turn, effective professional development (PD) is needed to help teachers learn and refine the instructional strategies required to teach these skills. However, research has noted that many professional development initiatives appear ineffective in supporting changes in teachers’ practices and student learning.

In school 1, while professional development was occurring, teachers’ responses highlighted that professional development sessions were often driven by district mandates and teachers had no input. This same school noted a disconnect between the importance of professional development and the impact that it had on pedagogy and student achievement. Research has consistently shown the most important variable in student achievement is quality of the teachers in the classroom (Block, 2000; Darling-Hammond, 2000; Haycock, Jerald & Huang, 2001) Additionally, the teachers cited overwhelmingly, that the delivery and implementation was ineffective and that the school and school district hadn’t focused on improving teacher pedagogy nor student learning strategies. In school 1, teachers also reported that professional development was frequently an isolated event happening once in a given moment. According to Darling-
Hammond & McLaughlin (2012), “professional development strategies that succeed in improving teacher learning have distinct characteristics”; moving from old models of teacher training teachers. This shift is focused on teachers confronting research and directly engaged in evaluating their practice and use their colleagues for mutual assistance. However, in school 2, there is a shared understanding amongst staff on the importance of quality professional development and more importantly the correlation to academic outcomes.

Teachers reported that the professional development they received was highly effective and that it occurred over multiple sessions. Neither school gave examples specifically how professional development content focused. An emerging theme is school 1 was that learning was not embedded into their day to day practice. Dunst and Hamby (2015) when referencing IPD, was most successful when job-embedded learning opportunities were present. This is created when schools have a strong coaching and mentoring framework, that provides teachers with performance-based feedback. In school 2, Knowledge Management was common in six of eight teacher responses and that it was distributed equally and throughout the building.

Teacher beliefs in professional development is an integral component to the success of any professional development program. Teachers’ continuing professional development (CPD) can improve teacher quality and teaching practice, yet teachers differ greatly in the extent to which they engage in CPD. In extensive research into which factors affect teachers’ participation in CPD, the effects of teachers’ beliefs have received limited attention, despite their strong influences on people’s working and learning. Teachers’ beliefs about teaching and learning influence their teaching practices Jansen (2013). In school 1, teachers seemingly are dissatisfied with the current professional development structure in their school and thus there is little change as cited little was being done to improve teaching techniques of educators in this school.
Conversely different, school 2 reported a high level of satisfaction with their professional
development and noted they were open to learning and found it easy to adjust to new methods of
teaching and that their students were positively impacted because of this learning. Two schools
within the same district have contrasting experiences and beliefs of professional development,
underscores perhaps an understanding amongst school leaders on critical elements of quality
professional development. While more research is needed into the impact on student
achievement, both schools’ performance on Scantron, the state’s 3-8 grade assessment showed
both school 1 and school 2 had similar performance. Scantron is an adaptive assessment and
measures growth in two different points in time, could provide a deeper discussion and study
potentially exploring the value add of professional development on student achievement. School
2 seemingly has adopted best practices in professional development; created with teachers, self-
directed, relevant to teacher needs and safe environment. If the research is true, then what else
should the school consider as it looks to improve teacher quality and student outcomes.

According to the literature review, teacher perception impacts change or lack thereof in
teacher practice and student outcomes. (Guskey, 2000) As professional development is becoming
increasingly the cornerstone of improving teacher practice, it is imperative that school district
take an in-depth look into what are the necessary structures for teachers to learn. Highly effective
classrooms can result from highly effective professional development. Recent research (Butler
2004) has shown that effective professional development includes creating classroom content,
modeling techniques for teachers to use in their classrooms, and feedback on lessons (Harris,
Graham and Adkins 2015), school must consider best practices to improve instructional quality.

The quality of any professional development implementation has implications for its
overall effectiveness in enhancing teacher practice and improving student learning. Researchers
have found that willing teachers are sometimes unable to implement professional development practices due to obstacles that are beyond their control. Tony Wagner describes this as conditions. Even the best-designed professional development may fail to yield desired outcomes if it is poorly implemented due to barriers. Teachers in school 1 were able to share what they needed for there to be a change in their pedagogy.

A recursive theme of needing learning to be content specific, teacher driven, and strategies modeled was evident. However, they reported there isn’t a structure that allows teachers to implement and new knowledge. This lack of a vision for what professional development should look like and how it’s supported is a barrier. School 2 has the ideal culture and climate for implementing instructional change within their school. Teachers consistently, reported that they take a team approach and administrators are supportive and encourage risk. Teachers are encouraged to implement new learning. However, teachers also reported that school administrators are there “if you need them”.

Coaching is an essential component of developing teacher practice. High-quality professional learning frequently provides built-in time for teachers to think about, receive input on, and make changes to their practice by facilitating reflection and soliciting feedback. Feedback may be offered as teachers analyze lesson plans, demonstration lessons, or videos of teacher instruction, which also provide opportunities for reflection about what might be refined or retained and reinforced. Coaching doesn’t have to come from feedback from administrators but can also can happen when schools have peer observations as a mechanism to provide timely and relevant feedback. However, for this to be effective schools must have high levels of trust, which seem to be apparent in school 2.
For teacher pedagogy to drastically improve, critical next steps are for schools to have a concrete action plan to, allow teachers time for “safe practice” and be provided a rubric of the instructional “look-for” and finally provided with specific feedback. In school 1, when asked what the next steps are to implement new learning, teacher responses were varied and did not support what researchers taunt as best practices for implementation post learning. Teachers in school 2 overwhelmingly reported that time to practice was an essential next step and while encouraged by school leadership, the hardest to implement due to competing priorities.

Recommendations

Professional development that improves teaching and learning has distinct characteristics (Darling-Hammond 2000). As the new superintendent looks to improve professional development for teachers, he must first jointly create a vision for teaching and learning. Teacher perception impacts change or lack thereof in teacher practice and student outcomes (Guskey 2000). This allows the superintendent, principals and teachers to assess each schools’ strengths and opportunities against this vision. Secondly, the district should train principals and teachers on the elements of designing high-quality professional development. Butler (2004) cited that effective professional development includes creating classroom content, modeling techniques for teachers to use in their classrooms, and feedback on lesson (Harris, Graham and Adkins 2015), schools must consider best practices in order to improve instructional quality. As principals and teachers look to launch professional learning for staff, they would have a shared framework to guide their thinking. Having an agreed upon framework can generate buy-in from not only principals but teachers. This would also allow schools and classrooms to serve as model schools or classrooms. As Dunst and Hamby noted in their Meta-Analysis, the seven characteristics of quality professional development must be present; data driven, focused on the classroom, job
embedded, collaborative, sustained, feedback and reflection. However, this same study found that teachers who engaged more than 20 hours and received feedback were more successful in making the necessary shifts in pedagogy. There is a gap in understanding of what quality PD should look like in both schools. This understanding or lack thereof, is the reason why teachers in the district have made little improvement on teacher practice that led to student learning on the state assessment. Finally, the district needs to adopt a post-professional development strategy. Ideally a Cycles of Inquiry or another framework that encompasses data review, lesson planning, observation and feedback to not only improve the quality of teaching but to engage in a process that is informed by student data.
References


doi:10.1177/2158244016679209


Retrieved from http://hdl.handle.net/2436/620520


Appendix A

Informed Consent

My name is Brian Metcalf, and I am a doctoral student at National Louis University. I am asking you to participate in this study, “How Does Quality Professional Development Impact Student Achievement in Urban Schools”, occurring from 01-2019 to 02-2019. The purpose of this study is to assist school districts with examining their current practices for supporting teachers and what adjustments they might consider. This study will help researchers develop a deeper understanding of the characteristics of professional development that drive student and contribute to the body of professional development literature. This form outlines the purpose of the study and provides a description of your involvement and rights as a participant.

By signing below, you are providing consent to participate in a research project conducted by Brian Metcalf, student, at National Louis University, Chicago.

Please understand that the purpose of the study is to explore the characteristics of professional development that drives student achievement in urban school districts. Participation in this study will include:

- One survey to be completed scheduled at your convenience in January and February of the 2018-19 academic year.
  - Survey will take up to 45 min. and include approximately 10 questions to understand what critical elements of professional development is needed to support teacher pedagogy?
  - Survey’s will be administered through survey monkey and are anonymous

Your participation is voluntary and can be discontinued at any time without penalty or bias. The results of this study may be published or otherwise reported at conferences, and employed to inform professional development practices in school districts but participants’ identities will in no way be revealed (data will be reported anonymously and bear no identifiers that could connect data to individual participants). To ensure confidentiality the researcher will secure surveys in a locked cabinet in his home office. Only Brian Metcalf will have access to data.

There are no anticipated risks or benefits, no greater than that encountered in daily life. Further, the information gained from this study could be useful to your school and other schools and school districts looking to initiate or refine how professional development is delivered.

Upon request you may receive summary results from this study and copies of any publications that may occur. Please email the researcher, Brian Metcalf at bmetcalf@my.nl.edu to request results from this study.
In the event that you have questions or require additional information, please contact the researcher, Brian Metcalf, bmetcalf@my.nl.edu or, 312-285-3587.

If you have any concerns or questions before or during participation that has not been addressed by the researcher, you may contact Dr. Gloria- McDaniel-Hall at gmcdanielhall@nl.edu he co-chairs of NLU’s Institutional Research Board: Dr. Shaunti Kauth; email: Shaunti.Kauth@nl.edu; phone: (312) 261-3526; or Dr. Carol Burg; email: CBurg@nl.edu; phone: (813) 397-2109. Co-chairs are located at National Louis University, 122 South Michigan Avenue, Chicago, IL.

Thank you for your consideration.

Consent: I understand that by signing below, I am agreeing to participate in the study (STUDY NAME). My participation will consist of the activities below during XX time period:

(briefly list participation activities as in example below):

• 3 Interviews lasting approximately 45 minutes each
• 1 ninety-minute observation of my classroom

_________________________  _______________________
Participant’s Signature       Date

_________________________  _______________________
Researcher’s Signature       Date
Appendix B

Surveys

Teacher Questionnaire 2
QUALITY PROFESSIONAL DEVELOPMENT AND IMPACT ON STUDENT ACHIEVEMENT

Questionnaire Schedule

1. How many full school years have you been teaching? ______________
2. Do you feel that professional development has directly influenced your pedagogy? _____
3. Please rate your overall experience with professional development in your school?
   a. Highly Effective
   b. Somewhat Effective
   c. Neutral
   d. Not Effective
4. Please explain your answer to question
   __________________________________________________
   _________________________________________________________________________
5. What factors do you believe your leaders consider when designing professional development?
   __________________________________________________
6. Do you think professional development is directly related to student achievement? _____
7. How has professional the professional development you received impacted students achievement?
   __________________________________________________
8. What was the last professional development session that you attended? What was the format? What did you find useful? What was missing?
   __________________________________________________
9. If you had professional development that really, affected your teaching in a positive way, what were the characteristics? Please describe.
   __________________________________________________
10. Please describe the ideal environment in order for you to implement new learnings.
    __________________________________________________
11. At your school, what does professional development typically look like for teachers? Please describe.
    __________________________________________________
12. What changes should be made to the way you experience professional development?
    __________________________________________________
Principal Questionnaire

Questionnaire Schedule
1. How long have you been a principal? _______
2. Who decides what professional development is offered to your teachers?
   __________________________________________________________
3. Do you feel professional development for teachers has a direct impact on student achievement? Elaborate on the correlation between professional development and student achievement.
   __________________________________________________________
4. What was the last professional development session for teachers? Was this the first time you delivered this topic? Was it a continuation? Please describe.
   __________________________________________________________
5. Is professional development differentiated or the same for teachers? _______
   a. How often do teachers engage in professional development in your school?
   b. Do you engage in peer learning walks as a part of professional development?
6. When you create professional development for teachers, what is the process? What factors do you consider?
   __________________________________________________________
   __________________________________________________________
What do you feel is the greatest influence on your decision for professional development topics?
   a. District mandates
   b. Funding and resources
   c. Your skills and expertise
   d. Teachers learning styles
   e. Students achievement data
   f. Collective Bargaining Agreement
   g. Improvement plan
   h. Planning Preparation
   i. New Initiatives
7. Based on your answer to question eight, please explain why you chose your answer.
8. Do you allow teachers to go away for professional development? _______
   a. If so, what is the process for going?
   b. What do teachers do once they return?
9. What is your understanding of adult learning theory? How do you incorporate these principles when you design professional development?
What happens once professional development is provided?

10. Describe your level of confidence to implement professional development that influences student achievement.

Superintendent Questionnaire

PROFESSIONAL DEVELOPMENT FOR TEACHER

Questionnaire Schedule

1. How long have you been a Superintendent? _______

2. Who decides what professional development is offered to your teachers?

________________________________________________________________________

3. Do you feel professional development for teachers has a direct impact on student achievement? Elaborate on the correlation between professional development and student achievement.

________________________________________________________________________

________________________________________________________________________

4. What was the last professional development session for teachers? Was this the first this topic was presented? Was it a continuation? Please describe.

________________________________________________________________________

________________________________________________________________________

5. Is professional development differentiated or the same for teachers? _______
   a. How often do teachers engage in professional development in your school?
   b. Do you engage in peer learning walks as a part of professional development?

6. When district and principals create professional development for teachers, what is the process? What factors do you consider?

________________________________________________________________________

________________________________________________________________________

7. What do you feel is the greatest influence on your decision for professional development topics?
   a. District mandates
   b. Funding and resources
   c. Your skills and expertise
   d. Teachers learning styles
   e. Students achievement data
   f. Collective Bargaining Agreement
   g. Improvement plan
   h. Planning Preparation
   i. New Initiatives

8. Based on your answer to question eight, please explain why you chose your answer.

9. Do you allow teachers to go away for professional development? _________
   a. If so, what is the process for going?
b. What do teachers do once they return?

10. What is your understanding of adult learning theory? How do you incorporate these principles when you design professional development?

11. What happens once professional development is provided?

12. Describe your level of confidence to implement professional development that influences student achievement.
Appendix C

Bar Graphs

Research Question 1

No of teachers perceiving oblivious of the benefits of professional development

Fig. Bar graph indicating the number of teachers perceiving beliefs in the benefits of the professional development

Research Question 2

Perception on how to reduce teacher's dissatisfaction

School 1 Theme for Questions 3, 8, 9
School 2 Theme for Questions 3, 8, 9
Fig. Bar graph indicating the differences in the perceptions on how to reduce teacher’s dissatisfaction for school 1 and 2

Research Question 3

**Perception on Creating knowledge on climate and culture**

- School 1 Theme for Questions 10, 11: 7.8
- School 2 Theme for Questions 10, 11: 8.8

Fig. Bar graph showing the perception on the creation of knowledge on climate and culture theme
Question Four

**Fig. Perceptions on question four themes**

Change Leadership Style

**allowance of peer learning walks as part of professional development**

**Fig. Bar graph indicating the level of allowance of the peer learning as part of the professional development.**
Appendix D

Superintendents’ Responses

1. I have been in the current role of Superintendent for 1 year and 8 months, but when you started this study I was in the role for 4 months.
   a. How long have you been in education? I’ve been in the field of education for 21 years total.
   b. What other roles have you had? I’ve held various positions from classroom teacher, assistant principal, principal, and Chief Academic Officer.

2. Currently, principals decide what supports teachers should receive at the school level. There are times when the district directs professional development based on data trends or mandates by the state. The majority are local level decisions.

3. I believe that professional development has an impact on student achievement if done well. I am not sure that this is happening in this district based on data and teacher survey results. The idea that if teachers are provided the right types of professional development that is informed by data and teacher needs, then it would lead to student achievement. The theory is there but the practice or to what extent we do this is not evident.
   a. Do you think your teachers and principals feel the same way? I believe that most teachers would agree that professional development is having little impact on student achievement so therefore they don’t believe it. Some teachers would say yes and they see it in their specific classroom results, not looking at the whole district. Principals would say largely that the professional development is having some impact on student achievement.

4. The last professional development session for teachers, I am not sure as it’s different for each school because we have only one school of its kind. I am not sure if the topics where the first time being presented or a continuation. It’s been difficult since we have one school per grade band and not framework for professional development to really keep an accurate record of this. This is something we are moving towards by having schools create PD plans so we will know what’s being learned and when.

5. Professional development here is typically the same for all teachers. That’s what I’ve generally noticed when I do visit or hear from teachers. It something we are trying to address and find a solution. This is also due to principals understanding about professional development design.
   a. Teachers engage in professional development on district improvement days and sometimes during teacher grade level meetings.
   b. We do not have a formalized process for peer learning walks and the culture and climate is not conducive in every school to make this happen. We are working on the culture and climate and building trust in order to do this.

6. We generally at the district office will direct PD based on state requirement and will try and give schools some direction based on school needs. So we will use data such as assessment results. We try and consider the time of the year, things such as is state testing
approaching, we try and consider teacher voice most times or individualizing it for schools.

7. I think it’s a combination of district, student achievement data, new initiatives.

8. I chose district as an option because there are some required topics based on state or federal law that drives professional development, like mandatory reporting or teacher evaluation. We also think about student achievement data, when we look end of the year assessment data and action plan on how do we support students in demonstrating mastery in order to improve their growth and proficiency. Finally, like most district’s we are rolling out new initiatives that we try and support teachers through professional development when we think about how we support our staff and to gain buy-in.

9. Schools will allow teachers to go away for professional development, however it is not often due to its controlled by budgets and principals have to approve and pay for it. There is not a formalized process for sharing learning once teachers go away. That is dependent on the school and principal and teacher. I know this is an area of growth for us.

10. I did research on adult learning principles and have a deep understanding and recognize that it is lacking in our current professional development design. I think that some school incorporate some of the principles. Like choice, or data informed but there are some components that are never present like sustained or consistent feedback and coaching.

11. Once professional development has been provided, what happens next depends on the school. I will say that most times than not there isn’t much that happens or it’s not well thought out and therefore has little to no impact.

12. I can design professional development that would impact teacher practice, however, I am looking at ways to support and grow principals in this practice so that they along with their staff can begin to design and implement professional development that is aligned to adult learning theory.